No. 71348
IN THE SUPREME COURT OF THE STATE OF Electronjcally Filed號 201.15 p.m.
Elizabeth A. Brown Clerk of Supreme Court

EMILIA GARCIA,
Appellant,
v.

ANDREA AWERBACH,
Respondent.

## Appellant's Appendix

## Volume XX, Bates Numbers 4751 to 5000

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Q. And that's because the scar tissue impinges upon the nerve roots; right?
A. Yes.
Q. And there's nothing that surgeons can do to prevent that scar tissue; right?
A. No.
Q. That's right, isn't it?
A. That is correct. There's nothing they can do that I know of.
Q. And is there anything that rehabilitation physicians, such as yourself, can do to somehow break that adhesion of the scar tissue to the nerve roots in patients who have undergone spinal fusion surgery comparable to hers?
A. No. If it's established, no. We can try to prevent it with exercises prior to that happening, but there's nothing we can do about it once it's formed.
Q. Now, you were asked whether spondylolisthesis can result from a collision, an automobile accident.

Do you remember that --
A. Yes.
Q. -- cross-examination by Mr. Roberts?
A. Yes.
Q. And I wanted to ask you, is the possibility that an automobile collision makes a spondylolisthesis
comparable to Ms. Garcia's worse, does that not depend upon the magnitude of the physical forces that are brought to bear on that location of the spine by the forces of the collision?
A. Yes.
Q. And if the -- if the patient is pain-free, if the patient with a preexisting spondylolisthesis comparable to Ms. Garcia's is pain-free for 30-odd years prior to a motor vehicle accident and the magnitude of the forces from the collision are less than the forces that her spine was subjected to for all those years before the collision, would you agree that it's just pure speculation --

MR. ROBERTS: Objection.
BY MR. STRASSBURG:
Q. -- to blame it all on the accident?

MR. ROBERTS: Objection. No foundation.
THE COURT: Sustained.
BY MR. STRASSBURG:
Q. Well, do you have any experience in treating patients who have spondylolisthesis after auto accidents?
A. Yes.
Q. And in connection with your legal work, do you have experience in -- in spondylolisthesis-type
A. Yes.
Q. And in those -- in that experience, do you have experience in determining whether the accident presented the kind of forces that could reasonably be causative of the spondylolisthesis you're treating getting worse?
A. I have experienced that, yes, in -- in those cases, yes.
Q. And you had to treat patients based upon a determination you made that the physical forces of the collision were large enough to displace the L5-S1 vertebra of a spondylolisthesis in increased amount, say 30 percent?

MR. ROBERTS: Objection. Foundation. Calls for speculation.

THE COURT: I'm going to allow it.
Go ahead.
THE WITNESS: I might have forgotten the
question, but I --
BY MR. STRASSBURG:
Q. Do you have experience with those kind of cases?
A. I do have experience with those cases, yes. And I have seen those cases and I've treated those
cases.
Q. All right. And based upon your experience in treating cases of spondylolisthesis and making determinations that the aggravation of a spondylolisthesis condition in the lumbar spine is related to a motor vehicle accident, would you agree that, whether the forces of a collision can make a spondylolisthesis at L5-S1 worse, it depends upon the magnitude, how great those physical forces are that result from the collision?
A. Yes.
Q. Okay. And if you consider the condition of the -- I'm sorry. Let me ask you this.

In those cases, do you have occasion to consider the physical condition and activities that the patient engaged in before they came to see you?
A. Yes.
Q. And that's because it's important to you to determine what kind of daily activities the patient engaged in before the pain so you can have some assessment of her degree of functioning in the activities she does afterwards; is that right?
A. Well, I want as much information as possible with -- and I ask a lot of questions and try to gather information to see what is going on with the patient
and how the pain is affecting her, when the pain started, and how her level of functioning may or may not have gone down and what she can and can't do.
Q. And based upon your training and education and clinical experience in performing these kind of functional assessments of the activities of daily living that your own patients are engaging in, do you have a familiarity with the magnitude of the forces that the activities of daily living your patients engage in can bring to bear upon the levels of the lumbar spine?
A. Yes.
Q. Okay. And have you had occasion -- in making your determinations of causation for your casework and your medical-legal work, have you ever had occasion in trying to figure out whether you can give an opinion that the forces of an accident had the magnitude necessary to aggravate or cause a spondylolisthesis at L5-S1? Have you ever had occasion to compare the magnitude of the forces on that spine area from the patient's activities of daily living to the magnitude of the forces that, based upon your history and your assessment, you determined resulted directly from the collision?
A. Yes. I have to deal with those things and
those situations.
Q. Do you have an opinion to a reasonable medical probability whether the forces brought to bear on Ms. Garcia's L5-S1 and lumbar spine areas, the forces from her activities of daily living that she conducted for 30 years without pain prior to the motor vehicle accident, that those forces must have been greater than the forces that this collision brought to bear on that location of her lumbar spine?

MR. ROBERTS: Objection. No foundation as to the forces involved in Ms. Garcia's collision.

MR. STRASSBURG: He does this all the time, Judge, in his prior clinical work. It's Clinical 101 medicine.

THE COURT: Sorry. Objection sustained. BY MR. STRASSBURG:
Q. Have you ever had to do an assessment in your clinical practice to compare the history that a particular patient from an automobile accident gives you of how fast the vehicles were going, the nature of the accident, the configuration of the vehicles afterwards, whether that history is medically consistent with the injuries that are presented to you for therapy?
A. I have addressed that hundreds of thousands
of times.
Q. And -- and have you ever had to compare the -- the types of injury and the types of pain presented by the patient with the physical forces that must have resulted from the accident described in the plaintiff's history that you took and reviewed?

MR. ROBERTS: Objection. No foundation. Calls for speculation. 48.035.

THE COURT: Come on up for a minute, guys.
(A discussion was held at the bench, not reported.)

THE COURT: Objection sustained.
BY MR. STRASSBURG:
Q. In -- in your clinical practice, have you ever had occasion to compare -- for patients of yours that you are treating who have been involved in motor vehicle collisions, have you ever had occasion to compare the history they give you on initial presentation of what happened in the accident and compare that history to the symptoms that they're asking you to treat?
A. All throughout my practice I do that. Yes, I've encountered that.
Q. And is that an important comparison for you to make clinically in deciding upon a plan of care when
you first assess one of your patients?
A. It's very important to know the degree of symptoms, the type of symptoms they have, what they do at home, what they do at work, if they drive a car or drive a truck. Can you -- can you mow your yard? What kind of job activities do you have to participate in? Are they heavy? Light? Medium?

We have to take into account all those things that might lead to a problem and/or how to treat a problem and improve that situation. But we have to take into account what they're able to do. And if they're able to do a high level of activities, then that's an objective finding that they can -- that they're able to do a whole lot more even with their pain.
Q. My question is, as part of your clinical practice, have you ever had to perform a comparison in devising a treatment plan as to comparing the history the plaintiff gives you of the accident and how it happened with the symptoms presented by the plaintiff for your treatment?
A. Yes.

MR. ROBERTS: Objection. Beyond the scope of his report. Beyond the scope of cross.

THE COURT: I'm going to allow this.

THE WITNESS: Yes. And it may change the treatment plan depending on if things don't correlate well with what occurred, what they're experiencing, or how they continue to experience it.

BY MR. STRASSBURG:
Q. And why is it important for you, in your clinical practice, to perform this comparison to check the description by the patient of how the accident happened against the symptoms that the plaintiff is present -- I'm sorry -- that the patient is presenting to you for treatment?
A. Because I strive to make sure they're consistent and -- as we're going through our treatment plan. And as we're making progress -- expected progress or lack of expected progress, I want to make sure things are consistent.
Q. All right. And what do you base your determination of consistency on in your clinical practice?
A. Information I've gained before -- before I saw them or during the time I first see them and information I gain each time when I see them either from them, from an $X$ ray, from therapy, and then when I examine them if things are changing appropriately.
Q. Do you have any education, training,
experience in physics?
A. I have taken physics before in school. But I don't have a training in physics, no.
Q. Okay. Fair enough. Fair enough. And did you perform this comparison that you do in your clinical practice that we've been talking about comparing Ms. Garcia's rendition of the events of the accident to, you know, Gulitz, Lemper, Kidwell, Gross against the -- the symptoms that she presented for treatment and that Dr. Kidwell had her chart and the other physicians recorded in their records?
A. Did I compare that?
Q. Yeah.
A. Yes, I did look at all those issues.
Q. And based upon your comparison, was the description of the traffic accident that Ms. Garcia gave to those treaters -- was that consistent, in your mind, with the symptoms that she reported throughout the course of treatment?
A. It was not. And I point out in my report and today that she's had a lot of inconsistencies comparing to the date of injury, three or four days later, and then the list of complaints that became longer and went up and down and could not be explained objectively.
Q. And in offering your opinion that the
accident she described did not, to a reasonable medical probability, cause a condition for which the spinal fusion surgery and -- and the injections were necessary, did that form part of the basis for your conclusion that this accident didn't cause all of her pain?
A. I stated that she -- she already had a preexisting spondylolisthesis. It was not caused by the accident. It was not worsened by the accident. There was not a traumatic event to that level of her spine. There's no evidence that -- she went for three days without seeing anyone. She didn't have -- the ER doctor stated that she had no pain until then. There was no basis for the multiple injections. There was no basis for the fusion surgery. And she should not have had that in relation to even her spondylolisthesis or anything related to the accident.
Q. And -- and was part of the basis for those conclusions this comparison that we've talked about between the accident that she described and the symptoms she presented over and over and over?

MR. ROBERTS: Objection. Beyond the scope of cross. Leading.

THE COURT: Overruled. I'm going to allow it.

THE WITNESS: Sorry. I don't remember exactly how you worded that.
(Record read by the reporter.)
THE WITNESS: Yes. And the lack of an acute event that initially occurred.

MR. MAZZEO: I missed the last part.
THE WITNESS: The lack of an acute event that occurred initially.

MR. STRASSBURG: Judge, may I have a sidebar? THE COURT: Sure.
(A discussion was held at the bench, not reported.)

MR. STRASSBURG: Thank you for your time,
Doctor.
THE WITNESS: Thank you.
THE COURT: Any more, Mr. Roberts?
MR. ROBERTS: Yes, Your Honor.
CROSS-EXAMINATION
BY MR. ROBERTS:
Q. Talked to Mr. Strassburg about EMG.
A. Yes.
Q. Okay. And is that painful?
A. It has a little bit of pain associated with it, but it's temporary.
Q. And would you personally perform that type of
a test on someone that two spine surgeons had already said needed spine surgery?
A. If I saw the patient, yes, if they had a concern for a radiculopathy.
Q. Counsel talked to you about nonfusion and whether that could cause pain following the lumbar fusion.
A. Yes.
Q. Okay. Your reports do not give the opinion that there was nonfusion in this case, do they?
A. They do not.
Q. And you've reviewed all of the other expert reports?
A. I -- yes.
Q. Significant number of those anyway?
A. Yes.
Q. I understand you might know if you've seen all of them, but you got a bunch them?
A. Yes.
Q. And isn't it correct that not a single physician opines that Ms. Garcia had nonfusion following her lumbar fusion?
A. I did not see that, correct.

MR. ROBERTS: Audra, do you have the ability to put up 19, page 14?

BY MR. ROBERTS:
Q. And this is the November of 2012 MRI report that you reviewed with Mr. Strassburg. And if you could -- let's see -- the second paragraph from the bottom.

And Mr. Strassburg asked you about the foraminal narrowing; right?
A. Yes.
Q. And you drew the -- a distinction between narrowing and encroachment.

How do you read those terms differently when you're reviewing an MRI report?

Could we enter the last paragraph, Audra?
This is just to refresh your recollection here.
A. I just stated, when he was asking me a question, there was a reference to an encroachment.
Q. There it is.
A. I thought he was referring to that.
Q. Okay. And -- and you said there's a difference between an encroachment and a narrowing?
A. I did not say that.
Q. Okay. Can you have a narrowing without encroachment?
A. No. They're pretty much synonymous terms.

Encroachment on the foramen means narrowing or something making it smaller.
Q. Okay. Doesn't a reference to foraminal encroachment means the foramen is encroaching on the nerve root?
A. It's the same -- same synonymous terms. Essentially is narrowing, something encroaching on the space that's there.
Q. Thank you.

And the radiologist didn't say that there's brand-new encroachment; he said there's increasing encroachment; right?
A. He did, yes.
Q. And counsel suggested to you that the comparison that he was making for the slippage between 7.5 millimeters and 1.02 centimeters was the August of 2011 MRI. And do you remember agreeing with him?
A. I don't think it was the August of 2011.

That was the first one.
Q. You think it was the first one.
A. I think that was -- I don't think it was August 20 he was referring to. I think it was a later MRI scan.
Q. You think it was a later MRI scan?
A. I think so. And I got -- on questioning.
Q. Okay. When -- when -- when you answered Mr. Strassburg's questions, did you have any idea what the prior MRI scan the radiologist was referring to?
A. I'm sorry. Again? Ask that question again.
Q. Did you have any idea of the date of the prior MRI scan that the radiologist is referring to when he notes an increase in the slippage and an increase in the encroachment?
A. This is either the second or third MRI scan in comparison to the first MRI scan.
Q. Okay. Do you know which -- if this is the third, is he comparing to the second or to the first? Or do you know?
A. I don't see a date on here. I can't remember exactly which -- which one was compared as compared to the prior MRI scan they obtained prior.
Q. So you don't know as you sit here?
A. I don't remember the exact date, no.
Q. Okay.

And, Audra, could you go to page 13.
And if you could look at "Comparison."
What's the prior MRI scan that Dr. Hake is referring to?
A. $1 / 27 / 11$.
Q. The very first one done after the collision;
A. Yes, sir.

MR. ROBERTS: Thank you, Doctor.
THE COURT: Mr. Mazzeo.
MR. MAZZEO: Yes, Your Honor.
REDIRECT EXAMINATION
BY MR. MAZZEO:
Q. Dr. Poindexter, does -- with the term "foraminal encroachment," is -- is -- does that mean -refer narrowing of the foramen or something else?
A. It refers to a narrowing of the space, which is the foramen. It's narrowing, encroachment, some kind of making it smaller.
Q. Okay. Now, does that -- does that term
"foraminal encroachment" necessarily mean an impingement on a nerve or just a -- a reduction of -of the space of the foramen?
A. Refers to narrowing or reduction. Doesn't -doesn't guarantee impingement on a nerve.

MR. MAZZEO: Thank you.
Nothing further, Judge.
THE COURT: Mr. Strassburg.
RECROSS-EXAMINATION
BY MR. STRASSBURG:
Q. Doctor, in your clinical experience, I
suspect you've reviewed a lot of radiological reports on MRI films?
A. Thousands.
Q. Including ones by this Dr. Hake?
A. Um, Las Vegas Radiology where this is done, I've reviewed many of them. I can't remember -- I think I've seen his name before. But I can't remember the names of the radiologists right now, the reports I reviewed.
Q. Have you ever had the experience that a radiological report that you've reviewed from a qualified radiologist, later, upon further analysis, turns out to have been inaccurate?
A. Yes. And that occurred recently. I just called a radiologist back up to ask them to reread a report because what I saw, they didn't have in their report.

MR. STRASSBURG: Thank you, sir.
THE COURT: Any more?
RECROSS-EXAMINATION
BY MR. ROBERTS:
Q. And when you say that you've determined that the report is inaccurate, is that when you got out your -- your desk ruler and looked at the millimeter marks on it?
A. Not on that particular one, no.
Q. Just in general, is that how you determine that reports are inaccurate from radiologists?
A. If there's a listhesis.
Q. Does -- does Dr. Hake get out a ruler and lay it up against a film? Or does he have specialized equipment that allows him to make measurements on the computer that's much more exact than what you can do with a ruler?

MR. MAZZEO: Objection. Speculation.
MR. STRASSBURG: Foundation, Judge.
THE COURT: Sustained. I don't know that he knows that.

BY MR. ROBERTS:
Q. Do you know what type of radiological equipment --
A. They have computerized equipment. They can make markers and measure, yes.
Q. And is that technique more accurate than a school ruler?
A. It can be more accurate, yes. But in general life, I've been very appropriate in my measurements. And if I had a problem, I call somebody back.

MR. ROBERTS: Thank you, Doctor.

FURTHER REDIRECT EXAMINATION
BY MR. MAZZEO:
Q. Doctor, after reviewing the -- the actual imaging studies -- study of November 19th of 2012, are your opinions the same as they were as when -- when you reviewed the findings by the impressions by Hake that he put into his MRI reports with regard to the progression of slippage?
A. I did not see a 25 --

MR. ROBERTS: Objection, Your Honor. He can say yes or no to this question.

MR. MAZZEO: I think his answer was appropriate, Your Honor -- Your Honor. He's not limited to yes or no.

THE COURT: Well, based on the fact that the actual imaging studies were seen later, I think he is. BY MR. MAZZEO:
Q. Okay. Yes or no?
A. Please ask me the question again. I'm sorry. MR. MAZZEO: No, that's fine.

Kristy, would you read that back.
(Record read by the reporter.)
THE WITNESS: I don't agree with that finding of progression the way he described it.

MR. ROBERTS: Objection, Your Honor. Move to
strike.
THE COURT: It will be stricken. It's inappropriate. BY MR. MAZZEO:
Q. Okay. So -- so I guess what I'm eliciting from you is a yes or a no. You had reviewed the report -- in conjunction with your medical record review, you reviewed the report by Hake from the November 19th, 2012, MRI; correct?
A. Yes.
Q. And then after reviewing the actual film that Dr. Hake had performed on Ms. Garcia on November 19th of 2012, are the opinions that were expressed in the report -- are the -- are the -- are your opinions with regard to the findings that Dr. Hake identified in his report the same or different from what you reviewed on the MRI imaging study?
A. Different.

MR. ROBERTS: Objection. Move to strike, Your Honor. May we --

THE COURT: Come on up.
(A discussion was held at the bench, not reported.)

THE COURT: Objection sustained. The answer will be stricken.

MR. MAZZEO: No further questions, Judge. FURTHER RECROSS-EXAMINATION

BY MR. STRASSBURG:
Q. Dr. Poindexter, this report by Dr. Hake on November 19th, 2012, the MRI study, from looking at that report, could you tell whether that radiologist actually employed his super-duper computerized ruler to measure this stuff or whether he eyeballed it?
A. I don't know how he did it.

MR. STRASSBURG: Thank you.
THE COURT: Any more?
MR. ROBERTS: Nothing further, Your Honor.
THE COURT: No?
MR. MAZZEO: No.
THE COURT: Any questions, ladies and gentlemen?

Not seeing any hands.
Thank you, Doctor. You're excused.
THE WITNESS: Thank you, Your Honor.
THE COURT: Appreciate your time.
It's 1:30. Do we have something for a half hour or do you want to end early?

MR. ROBERTS: I will leave it up to Your Honor and the wedding plans. We could show video clips, which we have agreed to, from Jared Awerbach.

THE COURT: How long are those?
MR. ROBERTS: 20 to 25 minutes is our --
THE COURT: Let's do that. So the
plaintiff's calling --
MR. MAZZEO: -- Jared Awerbach by deposition testimony.

THE COURT: Do you guys want Kristy to report it or just show that video was played?

MR. ROBERTS: Just show that video was played.

THE COURT: Just make sure that a copy of what is played is mark as a court exhibit.

MR. ROBERTS: We'll do that, Your Honor.
Would you like to include the video, mark it
as a disk?
THE COURT: Just whatever is played, just make sure that that is either on a flash drive or a disk or something.
(Whereupon video deposition was played.)
THE COURT: That it on this one?
MR. ROBERTS: Does that complete the
designations?
MS. BONNEY: Yes. Yes, it does.
THE COURT: Want to end here?
MR. ROBERTS: Yes, Your Honor. That would be
good with us.
THE COURT: All right, folks. This is really going to hurt your feelings, I'm sure. We don't have any witnesses on Monday. So I'm going to give you a three-day weekend, have you come back on Tuesday at 10:00 o'clock. Okay? Hopefully, we still get through the trial this next week. But be here Tuesday at 10:00.

During our break over the weekend, you're instructed not to talk with each other or with anyone else about any subject or issue connected with this trial. You are not to read, watch, or listen to any report of or commentary on the trial by any person connected with this case or by any medium of information, including, without limitation, newspapers, television, the Internet, or radio.

You are not to conduct any research on your own, which means you cannot talk with others, Tweet others, text others, Google issues, or conduct any other kind of book or computer research with regard to any issue, party, witness, or attorney involved in this case.

You're not to form or express any opinion on any subject connected with this trial until the case is finally submitted to you.

See you Tuesday at 10:00.
(The following proceedings were held outside the presence of the jury.)

THE COURT: All right. We're outside the presence. Anything you guys want to put on the record? MR. MAZZEO: Yes, Your Honor. Just briefly. When I was redirecting Dr. Poindexter on the stand, I -- I went to ask him about spasms. Mr. Roberts, in cross-examination, elicited that testimony, opened the door for me to question him about the nature -- the nature of spasms. And I was precluded, and I think that I was wrongfully precluded because the door was opened and that was a topic that was brought out on cross-examination.

MR. ROBERTS: And --
THE COURT: Go ahead.
MR. ROBERTS: Thank you, Your Honor.
I tried to be very careful when I asked him about it. The only thing I asked him to confirm was that he did not mention spasms in either his reports or his deposition, just to confirm that he hadn't addressed that issue. I did not ask him -- open the door, ask him to go beyond his reports.

THE COURT: I don't recall the issue had been opened. That's why I didn't let -- let you get into it
because the objection was it was beyond the scope of his reports and his deposition. I think it was.

MR. MAZZEO: You think it was open?
THE COURT: No, I think it was beyond the scope of what -- what had been opened and what had been disclosed.

MR. MAZZEO: Okay.
MR. ROBERTS: Your Honor, just because so much of the objections were with regard to the scope of his reports and deposition, I would just like to offer his report dated October 13th, 2014; his report dated November 10th, 2014; and both volumes of his deposition as court exhibits.

THE COURT: That's fine.
MR. MAZZEO: What's the basis for that?
MR. ROBERTS: As court's exhibits?
MR. MAZZEO: No, I know. Your explanation as to you're offering it as court exhibits.

MR. ROBERTS: In case you appeal the judge's rulings.

MR. MAZZEO: Oh.
MR. ROBERTS: So the appellate court can determine what was beyond the scope of his reports.

THE CLERK: They're going to be listed under the deposition list and not the court exhibit list --

MR. ROBERTS: That's fine.
THE CLERK: -- just to let you know.
MR. ROBERTS: As long as they're part of the record, I'm good with it. Thank you so much.

THE COURT: Anything else, guys?
MR. MAZZEO: No, Judge.
THE COURT: All right. Off the record.
We'll see you Tuesday.
(Thereupon, the proceedings
concluded at 1:47 p.m.)

STATE OF NEVADA ) COUNTY OF CLARK )

I, Kristy L. Clark, a duly commissioned Notary Public, Clark County, State of Nevada, do hereby certify: That I reported the proceedings commencing on Friday, February 26, 2016, at 8:34 o'clock a.m.

That I thereafter transcribed my said shorthand notes into typewriting and that the typewritten transcript is a complete, true and accurate transcription of my said shorthand notes.

I further certify that $I$ am not a relative or employee of counsel of any of the parties, nor a relative or employee of the parties involved in said action, nor a person financially interested in the action.

IN WITNESS WHEREOF, I have set my hand in my office in the County of Clark, State of Nevada, this 26th day of February, 2016.


KRISTY L. CORK, CCR \#708

|  | 156/23 157/15 157/19 | 187/19 187/23 188/1 |
| :---: | :---: | :---: |
| BY MR. MAZZEO: [26] | 158/7 $161 / 14164 / 4$ | 189/3 189/15 189/23 |
| $\begin{array}{llll}\text { 9/15 } & 17 / 22 \quad 23 / 10 & 26 / 12\end{array}$ | $164 / 17$ 166/13 166/16 | 190/3 190/13 191/4 191/6 |
| $\begin{array}{llllll}\text { 28/20 } & 34 / 8 & 44 / 25 & 46 / 4\end{array}$ | $\begin{array}{lll}167 / 14 & 170 / 9 & 171 / 6 \\ 172 / 22 & 175 / 21 & 176 / 16\end{array}$ | THE MARSHAL: [6] 7/16 |
| $\begin{array}{lllll}\text { 48/2 } & 49 / 24 & 53 / 5 & 54 / 17\end{array}$ | 172/22 175/21 176/16 | 7/19 61/8 61/11 152/19 |
| 61/24 65/21 71/24 74/13 | $\begin{array}{lll}177 / 23 & 181 / 2 & 183 / 23\end{array}$ | 153/2 |
| 77/7 154/21 155/12 | $\begin{array}{lll}184 / 9 & 184 / 24 & 185 / 18\end{array}$ | THE WITNESS: [30] 9/1 |
| $\begin{array}{llllll}156 / 11 & 157 / 9 & 158 / 2 & 181 / 6\end{array}$ | 187/8 187/12 187/20 | $22 / 22 \quad 25 / 23 \quad 28 / 16 \quad 52 / 6$ |
| 184/1 184/16 185/3 | 187/24 189/14 189/16 | 61/21 65/6 65/8 74/9 |
| BY MR. ROBERTS: [15] | 190/7 190/15 190/18 | 98/12 121/2 136/17 140/3 |
| 122/17 124/21 127/23 | 190/21 190/25 191/2 | $\begin{array}{lllll}153 / 12 & 153 / 14 & 154 / 3\end{array}$ |
| $\begin{array}{llll}128 / 10 & 130 / 18 & 136 / 19 \\ 140 / 8 & 140 / 24 & 149 / 1\end{array}$ | MR. SMITH: [3] 4/17 | 154/12 158/15 167/18 |
| $\begin{array}{lll}140 / 8 & 140 / 24 & 149 \\ 153 / 19 & 154 / 5 & 176\end{array}$ | 59/7 151/6 | 172/25 175/25 176/3 |
| 177/25 182/20 183/13 | MR. STRASSBURG: [37] | $176 / 6 ~ 176 / 14 ~ 184 / 22 ~$ |
| BY MR. STRASSBURG: [26] | 4/10 8/3 58/9 89/15 | 186/18 |
| 89/21 93/24 95/20 98/13 | 89/18 93/18 93/20 98/9 99/25 100/12 103/20 | \$ |
| 100/2 100/16 104/13 | 103/24 104/22 114/15 | \$2,000 [1] 20/15 |
| 105/1 113/1 114/19 $115 / 9$ | $\begin{array}{lllll}115 / 5 & 115 / 7 & 120 / 2 & 120 / 5\end{array}$ | \$3,500 [1] 20/25 |
| $\begin{array}{llll}120 / 7 & 121 / 5 & 158 / 21\end{array}$ | 120/16 120/25 121/3 | \$700 [1] 20/17 |
| 161/10 161/22 164/7 | 121/24 122/11 122/14 | \$8,000 [1] 127/8 |
| 164/20 166/14 166/18 | 151/23 152/9 152/14 | \$800 [1] 20/17 |
| 173/4 181/23 186/2 | 153/9 158/19 161/8 | ' |
| JUROR NO. 1: [1] 98/8 | 161/16 170/11 176/8 |  |
| MR. MAZZEO: [82] 6/14 | $176 / 12$ $186 / 9$ | $\begin{array}{lrl} \text { '11 [1] } & 30 / 11 & \\ \text { '90s [2] } & 13 / 3 & 13 / 9 \end{array}$ |
| 7/13 8/2 8/20 9/11 17/7 | MS. BONNEY: [1] 187/22 |  |
| 17/15 17/20 22/17 22/21 | THE CLERK: [4] 9/2 9/7 | 1 |
| $\begin{array}{lllll}44 / 24 & 45 / 23 & 46 / 1 & 46 / 3\end{array}$ | 190/23 191/1 | 1.02 [2] 159/15 179/16 |
| $\begin{array}{lllll}47 / 23 & 48 / 1 & 49 / 17 & 49 / 21\end{array}$ | THE COURT: [133] 4/4 | 1.02-centimeters [2] |
| 49/23 $52 / 5$ 54/16 $56 / 11$ | $\begin{array}{lllll}4 / 14 & 6 / 13 & 6 / 20 & 7 / 10 & 7 / 12\end{array}$ | 139/17 159/13 |
| $\begin{array}{llll}58 / 5 & 60 / 16 & 60 / 22 & 60 / 25\end{array}$ | $7 / 14$ $7 / 20$ $8 / 4$ $8 / 22$ <br> 1712    | 1/26 [1] 30/11 |
| $\begin{array}{llll}61 / 3 & 61 / 18 & 61 / 23 & 65 / 2\end{array}$ | $\begin{array}{lllll}17 / 10 & 17 / 13 & 17 / 18 & 22 / 19\end{array}$ | 1/27/11 [1] 180/24 |
| 65/7 71/23 77/6 89/13 | $\begin{array}{llll}17 / 101 & 28 / 14 & 34 / 6 & 44 / 22\end{array}$ | $\begin{array}{llllll}10 & \text { [11] } & 4 / 13 & 57 / 11 & 103 / 4\end{array}$ |
| 99/22 104/6 104/9 104/20 | $\begin{array}{lllll} \\ 45 / 24 & 46 / 2 & 47 / 25 & 49 / 16\end{array}$ | $\begin{array}{ccccccl}103 / 9 & 103 / 9 & 105 / 6 & 105 / 7\end{array}$ |
| 114/14 114/17 115/3 | 49/20 49/22 52/3 52/23 | 122/7 151/2 159/12 |
| 115/6 120/14 124/18 | 53/2 54/15 $56 / 13$ 56/16 | 159/16 |
| $\begin{array}{llll}127 / 21 & 127 / 25 & 130 / 11\end{array}$ | 57/16 58/8 60/15 60/17 | 10 degrees [6] 42/23 |
| 136/15 140/1 140/19 | 60/23 61/1 61/6 61/12 | 43/5 43/19 44/3 44/20 |
| 152/4 152/22 153/8 | 61/19 61/22 65/5 71/21 | 45/18 |
| 153/25 154/9 154/17 | 74/7 77/4 89/14 95/18 | 10-degree [1] 47/3 |
| 154/19 155/8 155/10 | 99/21 100/1 100/10 | 10.2 [1] 160/22 |
| 156/25 157/6 157/17 | 100/13 104/8 104/12 | $10.2 \text { millimeter }$ |
| 157/21 158/5 158/8 | $\begin{array}{llll} 112 / 18 & 112 / 23 & 119 / 22 \end{array}$ | 159/16 |
| 158/11 176/5 $181 / 4$ | 119/25 120/3 120/18 | 10.2millimeters [1] |
| 181/19 183/9 184/11 | $\begin{array}{llll}120 / 21 & 122 / 1 & 122 / 4\end{array}$ | 139/18 |
| 184/19 185/25 186/13 | $\begin{array}{llll}124 / 20 & 128 / 2 & 128 / 7\end{array}$ | 100 [1] 58/10 |
| 187/4 189/5 190/2 190/6 | $\begin{array}{llll}130 / 14 & 136 / 16 & 140 / 2\end{array}$ | 101 [1] 170/13 |
| 190/14 190/16 190/20 | $\begin{array}{llllll}140 / 21 & 150 / 4 & 150 / 7 & 151 / 4\end{array}$ | 10:00 [2] 188/8 189/1 |
| 191/5 | 151/22 152/12 152/16 | 10:00 o'clock [1] 188/6 |
| MR. MOTT: [2] 6/23 7/11 | $152 / 23$ 153/3 153/10 | 10th [2] 2/15 190/12 |
|  | 153/13 153/15 154/2 | 11 [2] 4/13 180/24 |
| $\begin{array}{llllll}17 / 11 & 22 / 16 & 25 / 19 & 28 / 13\end{array}$ | 154/11 154/16 154/18 | 11/19 [1] 30/12 |
| $\begin{array}{lllll}34 / 4 & 44 / 21 & 45 / 22 & 47 / 21\end{array}$ | 155/7 155/9 155/11 | 12 [3] 132/7 151/10 |
| $\begin{array}{llllll}49 / 11 & 52 / 1 & 52 / 21 & 54 / 13 \\ 56 / 8 & 59 / 2 & 59 / 8 & 60 / 8 & 61 / 4\end{array}$ | 156/10 157/2 157/8 | 151/11 |
| $\begin{array}{llllll}56 / 8 & 59 / 2 & 59 / 8 & 60 / 8 & 61 / 4 \\ 61 / 17 & 64 / 25 & 71 / 19 & 71 / 22\end{array}$ | 157/23 158/9 158/14 | 12/26/2012 [1] 72/16 |
| 61/17 $64 / 25 \quad 71 / 19$ 71/22 $74 / 5 \quad 77 / 2 \quad 89 / 17$ $93 / 16$ | 158/17 161/19 164/6 | 122 [1] 3/6 |
| $74 / 5$ <br> $93 / 19 / 2$ <br> $95 / 16$ <br> $10 / 17$ <br> $9 / 19$ | 164/19 166/17 167/16 | 12th [4] 39/15 66/16 |
| 93/19 95/16 99/19 100/8 $103 / 18$ $103 / 21 ~ 104 / 3$ | 170/14 171/8 171/11 | 99/1 147/3 |
| $\begin{array}{lll}103 / 18 & 103 / 21 & 104 / 3 \\ 112 / 16 & 112 / 20 & 119 / 20\end{array}$ | 172/24 175/23 176/9 | 13 [2] 33/12 180/20 |
| $\begin{array}{llll}112 / 16 & 112 / 20 & 119 / 20 \\ 120 / 12 & 122 / 3 & 122 / 8\end{array}$ | 176/15 181/3 181/21 | 13529 [1] 1/24 |
| $\begin{array}{llll}122 / 13 & 122 / 15 & 128 / 1\end{array}$ | 182/18 183/11 184/14 | 13th [4] 18/14 76/9 |
| $\begin{array}{lllll}128 / 4 & 128 / 9 & 130 / 13\end{array}$ | 185/1 185/20 185/23 | 76/17 190/11 |
| $\begin{array}{llll}130 / 17 & 148 / 24 & 150 / 2\end{array}$ | 186/10 186/12 186/14 | 14 [2] 139/10 177/25 |
| 150/6 153/7 153/16 | 186/19 186/25 187/2 | 15 [5] 39/19 57/11 99/11 |
| 154/14 155/6 156/6 | 187/6 187/10 187/15 | 122/7 151/2 |


| 1 | 20th [1] 99/2 | 702 [4] 2/5 2/11 2/16 |
| :---: | :---: | :---: |
| 15 percent [1] 15/16 | 22 [2] 7/3 12/18 | 2/21 |
| 1500 [1] 2/5 | 23 [3] $42 / 8 \quad 42 / 8$ 67/4 | 708 [2] $1 / 24192 / 22$ |
| 154 [1] 3/7 | 24 [6] 26/18 119/11 | 7th [2] 76/2 76/16 |
| 15th [3] 104/1 105/5 | 129/25 | 8 |
| 108/18 | 25 [2] 184/9 187/2 | 8/19 [1] 30/11 |
| $\left\lvert\, \begin{array}{cccc} 16[4] \\ 99 / 3 \end{array} \quad 44 / 12 \quad 47 / 1 \quad 67 / 6\right.$ | 25 percent [4] 22/2 | 80 [1] 21/7 |
| 17th [2] 99/ | 140/12 140/14 160/17 | 80 percent [4] 125/5 |
|  | 25th [3] 4/22 103/17 | 129/19 134/10 134/17 |
| 159/10 | 104/16 | 85 percent [2] 15/14 |
| 181 [1] 3/8 | 26 [7] 1/22 4/1 7/3 | 21/7 |
| 182 [1] 3/9 | $\begin{array}{cccccl}30 / 11 & 30 / 16 & 76 / 1 & 192 / 7\end{array}$ | 89 [1] 3/5 |
| 184 [1] 3/10 | 26th [3] 31/2 80/9 | 89101 [1] 2/16 |
| 186 [1] 3/12 | 192/19 | 89118 [2] 2/10 2/21 |
| 18th [2] 104/3 110/1 | 27th [1] 62/25 | 89147 [1] 2/4 |
| $\begin{array}{llllll}19 & \text { [7] } & 30 / 11 & 30 / 12 & 31 / 3\end{array}$ | 29 [1] 59/5 | 8:34 [2] 4/2 192/7 |
| 33/11 139/3 159/21 | 29th [1] <br> 2:00 [1] <br> 2n/14  | 9 |
| 177/25 | 2nd [5] 37/12 132/18 | 90 degrees [1] 43/11 |
| 1991 [1] 13/16 | $\begin{array}{rrrr}\text { 133/15 } & 134 / 22 & 154 / 9\end{array}$ | 938-3838 [1] 2/11 |
| 1993 [1] 11/5 | 133/15 134/22 154/9 |  |
| 19th [6] 33/11 139/5 | 3 | 997-3800 |
| 159/5 184/4 185/12 186/5 | 30 [4] 1/2 59/5 83/7 | $9 \mathrm{th} \mathrm{[1]} \mathrm{108/19}$ |
| 1:30 [1] 186/21 | 170/6 |  |
| 1:47 [1] 191/10 | 30 percent [1] 167/14 | A |
| 2 | 30-odd [1] 166/8 | A-11-637772-C [1] 1/1 |
| 2-millimeters [1] 30/21 | 30 th [1] 51/18 | a.m [2] 4/2 192/7 |
| 2.2-millimeter [1] 95/8 | 31st [1] 67/22 | A637772 [4] 4/8 7/24 |
| 2.7-millimeters [2] | $\begin{aligned} & 36 \text { percent [2] 160/14 } \\ & 160 / 20 \end{aligned}$ | $\begin{array}{\|cc\|} 61 / 15 & 153 / 5 \\ \text { AAPM [1] } 14 / 1 \end{array}$ |
| 159/22 160/13 | 3636 [1] 2/16 | abdominal [1] 102/14 |
| 2/16 [2] 44/12 67/6 | 3800 [1] 2/21 | abide [1] 152/15 |
| $2 / 16$ of [1] 42/5 [1] | 382-3636 [1] 2/16 | $\begin{array}{llll}\text { ability [4] } & 17 / 3 & 27 / 16\end{array}$ |
| 20 [5] $22 / 2$ $43 / 14$ <br> $179 / 22$ $187 / 2$   | 3838 [1] 2/11 | 44/2 177/24 |
| 179/22 187/2 |  | able [19] 27/18 27/18 |
| 20 degrees [7] 40/19 | 4 | 27/19 43/21 44/17 45/21 |
| $\begin{array}{llll} 41 / 4 & 42 / 23 & 43 / 6 & 44 / 3 \\ 44 / 20 \quad 45 / 18 \end{array}$ | 40 [4] $13 / 22$ 79/25 80/3 | 46/20 $47 / 6$ 47/10 $47 / 11$ |
| 20 percent [2] 15/16 | 83/8 | 60/15 91/8 94/11 111/16 |
| 134/12 | 40 percent [3] 99/5 99/8 | 142/15 147/21 172/11 |
| 20-degree [1] 47/3 | 109/6 | 172/12 172/14 |
| 2011 [37] 30/12 30/16 |  | abnormal [1] 96/22 |
| $\begin{array}{llll}31 / 3 & 37 / 12 & 37 / 16 & 39 / 16\end{array}$ | $\begin{gathered} 45 \mathrm{deg} \\ 41 / 5 \end{gathered}$ | abnormality <br> [1] $162 / 15$ |
| $\begin{array}{lllllllll} & 42 / 5 & 44 / 12 & 47 / 1 & 51 / 15\end{array}$ | 4795 [1] 2/4 | abnormality $[1]$ $162 / 15$ <br> about $[100]$ $9 / 4$ $11 / 4$ |
| $\begin{array}{llll}51 / 19 & 66 / 13 & 66 / 17 & 67 / 6\end{array}$ | 48.035 [1] 171/8 | $\begin{array}{llll}12 / 21 & 14 / 3 & 14 / 23 & 14 / 25\end{array}$ |
| 67/22 68/19 80/10 85/19 |  | $\begin{array}{lllll}15 / 14 & 15 / 15 & 16 / 15 & 24 / 14\end{array}$ |
| 85/21 99/1 99/2 103/17 | 5 | 24/15 25/16 26/1 33/13 |
| $\begin{array}{llll}104 / 16 & 110 / 1 & 132 / 18\end{array}$ | 50 [1] 145/14 | 36/25 37/20 $42 / 13$ 44/1 |
| 133/15 134/22 139/25 | 50 percent [3] 126/13 | 44/11 $44 / 24 \quad 44 / 24 \quad 46 / 12$ |
| $\begin{array}{lllll}147 / 3 & 154 / 9 & 156 / 1 & 156 / 1 \\ 159 / 10 & 159 / 21 & 160 / 20\end{array}$ | 145/21 145/21 | 48/9 56/20 57/11 70/24 |
| 159/10 159/21 160/20 179/17 179/18 | 5940 [1] 2/20 | 70/25 76/18 76/23 77/10 |
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IAAS VEGAS, NEVADA, TUESDAY, MARCH 1, 2016;
10:00 A.M.
PROCEEDINGS

THE COURT: All right. We are back on the record, Case No. A63772. We're outside the presence. What do you got?

MR. SMITH: So before Dr. Klein takes the stand, we were going to address some foundation questions while he was on the stand, but we got -- or some -- his experience essentially.

But we got 58 slides from the defense last night that leads us to believe that he is going to testify outside the scope of his experience and outside the scope of his report. And I'd like to address those before he takes the stand to try and see if we can streamline things today.

And I want to address the experience first. And after we talk about the experience, depending on what you say, we can talk about the scope of his opinions outside his report. But that may become moot, so I'm going to leave that alone until I hear from you on the experience.

In terms of his experience, there are a few things he's going -- or I think the defense intends for him to testify about that he's not qualified to talk about.

The first is his qualifications as a spine surgeon. The second is pain management opinions. And the last is radiology opinions.

As far as qualifications as a spine surgeon -- and this is all undisputed and from Dr. Klein's testimony in this case -- he has essentially no experience in the last 30 years as a spine surgeon. The last spine surgery that he was a part of was in the late '80s. Prior to that, he was really a hip, knee, and shoulder doctor. He was never really a spine surgeon.

He has been involved in five or less -- he said less than five fusion surgeries. Those were in the late '80s. He's never placed a cage in a person; he's never placed a pedicle screw. In the less than five fusion surgeries that he was involved in, those were not as the primary surgeon.

He's only been the primary surgeon to fix a spondylolisthesis 10 to 12 times. And, again, the last time was in the late '80s. He has agreed that his experience in the '70s and '80s doing the limited
amount of spine work that he did -- because, like I said, he was a hip, knee, and shoulder doctor. He's agreed that that experience was with equipment and techniques that are very different from what was done in this case.

In other words, when he was actually acting as a surgeon, the hardware that Dr . Gross implanted in Ms. Garcia did not exist and had not been invented yet.

For those reasons and given the length of time since he's even done that with very different hardware, he should not be permitted to testify as a spine surgeon or about the spine surgery and complications and any -- any of the other things that they intend to talk about.

And there are any number of qualified spine surgeons in Nevada or in California, where Dr. Klein is from, that could have been hired by the defense in this case. And instead they chose to hire a hip, knee, and shoulder doctor who's not qualified to testify.

And, in fact, in this case, they previously had Dr. Elkanich, who is a spine surgeon. And they withdrew him in favor -- in favor of this orthopedic surgeon who has very little experience in spine surgery and no pertinent experience.

He also intends to give opinions on pain
management. He's not a pain management physician. He doesn't hold himself out as a pain management physician. He's never administered pain management injections like were administered to Ms. Garcia. So he shouldn't be allowed to testify about the techniques and the specifics of those injections either.

The last thing is MRI films. Now, last night, we got -- what they gave me this morning was 14 slides on MRI films. I didn't check all the ones last night to count them, but there's at least 14 slides they want him to testify about for MRIs. He is not qualified to read an MRI film or testify about it.

MRIs were not invented when he went to
medical school. He has had very little experience and training in MRIs since then. He's taken a few half-day courses. As he has explained it, he is self-taught by talking to another -- or to a radiologist, and that radiologist admits that MRIs weren't invented when he went to medical school either.

Dr. Klein is not a radiologist. He doesn't hold himself out as a radiologist or a neuroradiologist. And, in fact, in this case, when he said he looked at a couple of the -- of the spine films for Ms. Garcia -- and his reports only talk about him looking at two of them -- he said he actually had to go
and speak to a neuroradiologist in order to verify whether what he was thinking is correct or not. And he can't come into court and parrot the opinions of another neuroradiologist. Again, the defense -- or of a neuroradiologist.

The defense could have hired any number of qualified radiologists or neuroradiologists from Nevada or any state, and they chose not to do that. And they want to have a surgeon -- a former surgeon who had never dealt with these types of MRIs in his clinical practice and is not qualified to read them or to present them to the jury.

So I can talk about some of the specific opinions encompassed in these that are outside the scope of the report. But I think if Your Honor would agree with us on these three topics, then we don't have to get to the specific opinions in these areas.

THE COURT: I think, as far as the orthopedic spine surgeon opinions, if he's an orthopedic doctor and he's done spine surgeries, the fact that it was 30 years ago, I think, goes to weight. So I'm not going to exclude him as it relates to spine surgery or his testimony as an orthopedic surgeon.

As far as the pain management, that's a -- a bigger question. And I don't know what he's going to
be expected to testify to about that. As an orthopedic surgeon, I know a lot of these doctors will refer people out to pain management, and they know what pain management doctors do as it relates to epidural injections and things like that that are necessary before a spine surgery because it's diagnostic and therapeutic.

So I don't know what the -- the scope of the testimony is there. You're going to have to maybe give me some more.

As far as the MRI films, I guess I'm -- at this point, I need to hear a little bit more about what he thinks his qualifications are to look at films.

MR. MAZZEO: And I can tell you, Judge, he's -- he did testify. Mr. Smith took his deposition. So Mr. Smith actually knows his experience. And why he's -- why he's stating contrary is -- is odd to me because he's fully aware of his deposition testimony.

In his deposition on December 18th of 2014, pages 41 through 44, Dr. Klein does talk about his ability to read CT scans and MRIs and that he reads approximately 200 MRIs per year since 1995.

Dr. Gross is not a radiologist, but he was able to testify and say that he reads an MRI scan. Dr. Kidwell -- not Dr. Kidwell -- but Dr. Cash also
read an MRI scan. Dr. Oliveri, who's a physiatrist, read an MRI scan.

You do not have to be a radiologist to be qualified to read MRI imaging studies, certainly not to -- to be able to testify in court either. So he does it all the time in his practice. He does it with regard to the hundreds of forensic evaluations that he performs.

He's a forensic medical examiner. So this is in the course and scope of his work to not just read MRIs but to read all of the medical records and then offer opinions as to the relatedness to an event. So he's done that.

He has the experience. He's a member of the North American Spine Society and -- as well as other societies. He's a professor that teaches at UC -UC Davis. He's a clinical professor of orthopedic surgery at UC Davis.

So Mr. Smith, giving you half the picture, is -- is wholly inaccurate. So he's qualified to testify as an orthopedic surgeon.

And, in addition, Judge --
THE COURT: What are the pain management issues that he's going to testify about?

MR. MAZZEO: Pain management has been -- to
the extent that he testified to it, it's reflected in his reports and testified to in his -- in his deposition because Mr. Smith asked him about it.

So, of course, he has a working knowledge of pain medicine. And he's not going to testify to anything that would be beyond the scope of his expertise or -- or knowledge concerning that.

With regard to -- so he will certainly testify to the -- with regard to -- to the interventional injections, he's going to testify that they were not diagnostic. And so he has a familiarity -- although he didn't perform it, he has a familiarity, as does Dr . Poindexter, with the workings of -- of these procedures and the local anesthetic and -- and the response by patients.

So in that limited fashion, that's what he's going to testify to.

So he's -- he's reviewed the records. It's in his report. They brought a motion in limine to exclude Dr. Klein on December 8th of 2014, and that was denied.

So why we're bringing this up on -- not on the day -- first day of trial but on the -- at a time when Dr . Klein is ready to testify is odd to me. So I -- I would say that everything I -- I anticipate

Dr. Klein testifying today is clearly within the scope of his experience, knowledge, training, what have you.

THE COURT: Okay.
MR. SMITH: First off, the reason we're bringing it up is because we got slides last night that show us he's going to greatly attempt to expand his opinions beyond what the original scope was.

As far as the motion that was previously filed, that motion was regarding bias because, prior to the Rule 35 exam, Dr. Klein had made up his opinions about Emilia's physicians, specifically Dr. Lemper, Dr. Kidwell, and Dr. Gross, and Dr. Cash. And he had made up his opinions about our firm allegedly doing a bunch of things regarding her care that didn't have to do with these issues. It was -- it was to exclude his Rule 35 exam for not being independent. So that issue is separate and apart from what we're talking about.

And briefly I'll address a couple of things that Mr. Mazzeo said. With respect to the MRI films, Dr. Klein hasn't reviewed those in his clinical practice. He decided in the '90s to become an expert. And he decided when he wanted to become an expert, he was going to do spine work, even though that wasn't his expertise, because that's where the expert work is.

So he hasn't reviewed 200 MRIs per year in a
clinical practice. And he hasn't done, for example, what Dr . Gross and Dr . Cash do, which is review those MRIs and use them to do a spine surgery. He never did that.

In addition -- and we can talk about this more in a moment when we get to the specifics of his opinions. But he didn't review most of these MRIs until -- I don't know when, because he has a January 6th, 2016, report that doesn't reference any of these, and none of his prior ones do either.

With respect to the pain management injections, he's going to testify about how they were done. So Mr. Mazzeo said that he's going to testify they're not diagnostic. Well, that's because of how he's claiming Dr. Lemper and/or Dr. Kidwell did them wrong.

And he's not qualified to talk about whether they did the pain management injections wrong. He might be qualified -- I mean, I disagree with this. But what Your Honor's saying is he might be qualified to testify about ordering a pain management injection or interpreting the results of a pain management injection to determine whether surgery is appropriate at a particular level or the diagnostic nature of an injection. But that's not the limits of what he's
going to testify about.
He's going to testify about where Dr. Lemper placed the needle, how he did the specific injections. And those are opinions that are specifically within the purview of a pain management doctor and somebody who's actually done these type of injections.

MR. MAZZEO: Your Honor, if I can respond to that. So how Dr. Lemper and Kidwell did the procedure and that they did it wrong, he's not going to testify to that. I don't know where Mr. Smith is getting his information from.

But he's not going to testify how it was wrong or how he placed the needle. I don't understand where Mr. Smith is coming up with that.

And then he gets some slides that are slides of images that are in evidence. And he reviewed the actual imaging studies, so I don't know what he's referring to about not reviewing the imaging studies. He's reviewed those all along. It's in his report.

And he wants to greatly expand, Mr. Smith says, greatly expand on -- on his opinions. I -- I have a copy of the MRI -- the MRIs that are in evidence.

Greatly expand from looking at the MRIs? How does he -- how does he jump -- make that mental leap?

This is -- this is nonsense. This -- I don't know why he's -- he's putting forth this -- this motion to -- to try to exclude Klein.

I think they had luck last week with
Dr. Scher. So they figured, "Hey, let's push it.
Let's see if we can get Klein out." This is absurd, and it's wasting our time.

THE COURT: From what I'm hearing so far, I think you're going to have to make objections with regard to the specifics as it comes up. So far, everything you've said seems to go to weight and not admissibility.

MR. SMITH: And we will do that. Then I also want to talk about some specific opinions that will be outside the scope of reports, and one of them is what Mr. Mazzeo was just talking about.

If you look at Dr. Klein's reports, he started with an October 9th, 2014, report. And all he reviewed in this report in terms of films are a January 2011 film and an August 2011 film.

He then issued a report on November 15th, 2014, where he says he did not receive any additional films and then another report on January 6th, 2016, of this year, where he again says, "I was not provided any additional diagnostic studies to review."

The slides that we received last night and this morning talk about many other MRIs in addition to the ones that he says he reviewed as of January 6th of this year. That includes pre- and postsurgical MRIs. He's never offered any opinions about any of those MRIs and cannot expand upon the opinions that he gave in his reports.

In addition, many of the slides talk about something called modic changes. And -- and I don't know where they're going with those slides, but none of his reports talk about modic changes or whether there are modic changes on the -- on the two MRIs that he says that he reviewed.

There's a number of other slides that I think we can address as they come up. And -- and, you know, counsel will have to let us know what ones they're going to use because we've gotten conflicting information this morning about which they will or they won't use out of the 58 new slides.

But specifically with respect to the MRIs, he needs to be limited to the two that he reviewed as of January 16th -- or January 6th, 2016.

MR. MAZZEO: Your Honor, Dr. Klein has -- oh, with regard to modic changes, that's been testimony that came up during the course of trial from

Plaintiff's treating physicians. So that's certainly open and out there. So I can certainly ask him about modic changes.

Regarding the review of the films, yes, it's my understanding he did review the January 26th, '11, film; the August -- what is it? -- August 12th, 2011, film; and the November 19th, 2012, film. He's reviewed all of these -- these films way before January of this year.

So there may have been -- oh, during the course of the trial, Plaintiff put forth postoperative X rays showing the hardware that was placed inside. So that's -- that's something that's in evidence. And so that -- I believe that's one of the slides that we have as one of the 14 that we'll be showing Dr. Klein on direct examination.

So -- and that's -- so that's something that he reviewed in the context of -- for -- for trial purposes.

I -- I don't know as I stand here -- and maybe Roger can -- can help me on this -- but I believe that that was -- that may have been reviewed prior, but in any event, it's in evidence. It was discussed by Plaintiff's treating physicians. So it's -- it's something that Dr. Klein will be discussing during his
direct examination.
THE COURT: Well, just because somebody else said something during trial doesn't mean that your expert gets to offer a bunch of new opinions. So ...

MR. MAZZEO: Well, no, it's -- I'm sorry, Judge.

THE COURT: He can offer opinions based on the films that he saw and evaluated prior to his reports or in his deposition, if he was questioned about it. That's fine. But, I mean, you can't have shown him new films and he has new opinions that -that weren't previously disclosed.

MR. MAZZEO: Absolutely, Judge. And -- and, as a matter of fact, $I$ just need a moment to find out where he did talk about -- at his deposition, he did testify that he had reviewed both the -- the January 2011 film and the November 2012 film.

So this was back in -- at least by February of 2015. And Mr. Smith was asking him about this, and he offered an opinion that -- with regard to this alleged progression of the alleged slippage that occurred between the two films. And, in his opinion, after reviewing the film, there was no additional slippage. So he can certainly testify to that on direct examination.

If Mr. Smith wants to cross-examine him about that, he certainly can. But he's within his right to testify about that addition.

THE COURT: If it's an opinion that was previously disclosed in the report or deposition, I'm going to allow it.

MR. MAZZEO: Thank you.
THE COURT: If there's -- if there's additional stuff, just object when we need to.

MR. SMITH: We will.
MR. MAZZEO: Yeah. We would just ask that -I mean, as long as they're legitimate objections, not to the point where it's obstructionist, and -- and interfering with the presentation of the defendants' case.

If -- if there's a legitimate basis for it, I have no problem with any objections from the other side. But if it's just to annoy, harass, and -- and -and impede the -- the presentation of evidence, I would certainly ask the Court to --

THE COURT: I would hope that neither side would be doing that.

MR. MAZZEO: Absolutely, Judge. Thank you.
THE COURT: You ready to go?
MR. SMITH: Yes.

MR. MAZZEO: Yes, Judge.
THE COURT: All right. Let's go.
THE MARSHAL: All rise for the presence of the jury.
(The following proceedings were held in the presence of the jury.)

THE COURT: Go ahead and be seated.
Welcome back, folks. We're back on the record, Case No. A637772.

Do the parties stipulate to the presence of the jury?

MR. MAZZEO: Yes, Your Honor.
MR. SMITH: Yes, Your Honor.
THE COURT: Hopefully, you guys didn't mind having a three-day weekend. I was sick all weekend, so excuse my coughing and sniffing today. Hopefully, Kristy won't have to have people repeat stuff too many times because I coughed over the testimony. That'll happen some, I'm sure.

You folks have met Curt now. He's -- Curt's our regular marshal. Tom was our marshal filling in while Curt was gone. So hopefully you get to know Curt.

You got a little bit longer in the trial. So glad that you all made it back. We are still -- we
still have not completed the plaintiff's case, but we have another defense witness that was scheduled for this morning. So it's going to be taken out of order.

This is just kind of the way the trial works. You folks have figured that out by now.

Mr. Mazzeo, who are you calling?
MR. MAZZEO: Going to call Dr. Michael Klein, Judge.

THE COURT: Good morning, Doctor.
THE WITNESS: Good morning, Your Honor.
THE COURT: I'm going to ask you to step all the way up on the witness stand. And once you get there, can you please remain standing and raise your right hand to be sworn.

THE MARSHAL: Watch your step.
THE CLERK: You do solemnly swear the testimony you're about to give in this action shall be the truth, the whole truth, and nothing but the truth, so help you God.

THE WITNESS: I do.
THE CLERK: Please state your name and spell it for the record, please.

THE WITNESS: Michael Robert Klein Jr.,
K-l-e-i-n.

THE COURT: Go ahead, Counsel.
MR. MAZZEO: Thank you, Judge.

## DIRECT EXAMINATION

BY MR. MAZZEO:
Q. Dr. Klein, thank you for rearranging your schedule and making yourself available to testify in court on this trial today.
A. You're welcome.
Q. Doctor, would you tell the jury what is your profession.
A. I'm an orthopedic surgeon.
Q. And what does the field of orthopedic surgery entail?
A. Orthopedics is a surgical specialty that deals with all aspects of the skeleton, the muscles, the ligaments, the tendons, with the exception of the skull. We don't get training in the skull, the mandible.

We deal with congenital problems -- so from the time a child is born -- such as hip dysplasia, clubbed feet, other deformities.

A large part of orthopedics is trauma, fractures: fractures of the spine, fractures of the arms, the legs.

There's a subspecialty of orthopedics called upper extremity or hand, where you do an extra year of training to learn how to take care of congenital problems, traumatic problems, and things as simple as carpal tunnel syndrome or lumps and bumps like ganglions.

Some orthopedic surgeons deal with tumors, so they're called orthopedic oncologists. Primary tumors of bone fortunately are very, very rare. But we unfortunately see a lot of patients who have metastatic disease to bones, from prostate, from the lung, from the GI tract.

Some orthopedic surgeons choose to do sports medicine, dealing with athletes and weekend warriors. So we do a lot of arthroscopy of the shoulder, the hip, and the knee.

As the skeleton ages, we develop degenerative problems. So that requires replacement of joints, like total hips and total knees.

Another small subspecialty is called foot and ankle, dealing just with problems like bunions or deformation posttrauma or problems, again, of an ankle that wears out either after aging or simply from an injury.

So we deal with all aspects of the skeleton
from birth through the aging process.
Q. Thank you.

And would you tell the jury about your educational background after high school.
A. I graduated from the University of Missouri in 1959 with a bachelor's in biology. My intention at that time was to become a teacher. So I went on to Drexel University where I obtained my master's in anatomy and neuroanatomy. I started my PhD training and decided to go to medical school. I became interested in clinical medicine.

Because I had been teaching anatomy and neuroanatomy and had the whole first-year course schedule, I started as a sophomore in medical school. I finished in 1966 from the University of Miami School of Medicine.

Vietnam was heating up at that time, and all of us ended up in the military. I -- I interned at Scott Air Force Base, which is just north of St. Louis. I finished that in 1967, and I was sent to Germany as a general medical officer, like a primary care physician.

In 1971, I came back to the continental United States and began four years of training in orthopedic surgery at Wilford Hall Medical School -Medical Center -- excuse me.

I finished that in 1975, and I was sent to Mather Air Force Base, which is on the outskirts of Sacramento, where I was a staff orthopedic surgeon for two years. I separated from active duty as lieutenant colonel and stayed in the reserves, went into private practice, and remained in full-time private practice till 1991 when I got activated for Desert Storm. So I was gone for about five months, then returned and resumed my practice.
Q. Thank you.

And would you tell the jury some of the training and experience that you have received in the area of orthopedic surgery since graduating from medical school.
A. Well, my interest has been primarily general orthopedics. When I first started my practice, I did a lot of trauma work, including skeletal trauma, meaning the spine.

And then, because of my interest in teaching, for the past 20 years I've been a professor of orthopedics at the University of California, Davis, where I do clinics on Fridays, seeing general orthopedic problems.

And my surgery now is just limited to upper extremity. I'm no longer acting as primary surgeon on
the spine or total joints or even arthroscopy. I still assist in the operating room to two of my colleagues who do primarily reconstructive total hips and total knees.

I'm the facilitator for the resident journal club. We meet monthly. We pick a topic, and I just sort of guide them along. One of my big fears when I finished training was how to stay current, and residents are very stimulating. They force me to read. And then just the environment is educational.
Q. Thank you.

And are you board-certified?
A. Yes. Since 1976.
Q. In what area?
A. In orthopedic surgery.
Q. What does it mean to be board-certified?
A. After you finish your training, two years after, after you have been in practice, either private practice or academic environment, you submit all the operations you have done to the board. Your professor signs off that you have the training and background to sit for the exam. And the exam is written and oral. And it's written -- it's accumulated -- the questions are compiled by a group of orthopedic surgeons who feel that you need a certain body of knowledge, after all
this training. And you take the exam, and if you're successful, then you call yourself board-certified. About 75 percent of those who take the exam are successful in passing it.
Q. And do you have to be board-certified to practice medicine?
A. You do not.
Q. Thank you.

And what academic appointments have you had or currently have?
A. Well, I have been -- I started off as an instructor at UCD, University of California, Davis. I taught courses called Applied Medical Principles. And then I do the clinical work where I am interacting with medical students, residents, some fellows. And over the years, I -- it's a volunteer; I'm not paid anything. But they -- I'm finally elevated to full professor. So I'm called clinical professor -volunteer clinical professor.
Q. Thank you.

Can you tell the jurors what, if any, presentations you've given in your area of specialty?
A. I have discussed how to examine the shoulder, how to examine the knee, how to examine the spine, both to professional groups and lay groups. I have talked
to individual -- groups about indications for total hips. The group in Sacramento calls themselves The Hipsters. I talk about evaluating an individual to physical therapists.

So usually I'm receptive to talking about almost anything, depending on the interest of the group, as well as how to do an evaluation in the medical-legal arena.
Q. Thank you.

And what academic awards have you received?
A. My most recent was the residents honored me as the teacher of the year, 2012.
Q. Okay. And do you have any consultant positions?
A. I act as consultant primarily for two entities, one here in Las Vegas called Consultants Medical Group and the other in Sacramento called MRK Medical Consultants. MRK are my initials.
Q. Okay. And you mentioned, briefly, a few minutes ago about your continuing medical education.

Is that something that's required for
doctors?
A. It is. The main licensure, both in

California and Nevada, you have to take what we call continuing medical education or CMEs.

So I attend courses, specialty courses. I go to the American Academy of Orthopedic Surgeons. I go -- I'm a member of the North American Spine Society here in Las Vegas. From February 4th to the 6th, I attended the Cedar Sinai -- it's called Current Concepts of Spine Care put on by the Cedar Sinai Medical Center in Los Angeles. It's the 15th annual. And then, in May, I'll attend the University of San Francisco, three-day conference on the spine.

I'm sort of a voracious reader. I read Spine Journal and the Journal of Bone and Joint Surgery, and I'm a reviewer for the Journal of Bone and Joint Surgery.
Q. Thank you.

And what professional affiliations or associations do you belong to?
A. Well, I'm a member of the American Academy of Orthopedic Surgeons. I'm a fellow of the American College of Surgeons. I'm a member of the California Orthopedic Association and the Western Orthopedic Association. Active in my local medical society, which is called the Sacramento Sierra Valley. One time, when I was in active duty, I was active and gave presentations, at the Society of Military Orthopedic Surgeons.
Q. Okay. And do you have any association with the North American Spine Society?
A. I do. I'm on the evidence-based medicine committee, one of probably 200 members of that committee.
Q. Can you explain to the jury what that committee involves?
A. The evidence-based medicine committee picks a topic, like what's the best way to evaluate arthritis of the neck? What's the best way to treat it?

So we start doing what's called meta analysis, which is looking at articles from around the world, and they -- then you decide where do you want -when they ask you which -- where your interest is: diagnostics, treatment, interventional, surgery.

So they send all this out. It's about a two-and-a-half to three-year process. And then they start coming up with questions. What's the best way to do this? What's the data that supports this? What is your criticism? And you start reading articles. And we start compiling the information, determining is it -- is there good evidence? Is there insufficient evidence? Is it something we could recommend to develop guidelines? Not as standard, as a guideline. And we have done it for the neck, for what's
called myopathy and radiculopathy. We've done it -- we published, in 2014, the treatment of spondylolisthesis, the topic of issue in this case. So it takes about two-and-a-half to three years. It's an ultraconservative organization. And we keep sifting and filtering until we come up with what we think some good, salient recommendations.
Q. And how long have you been practicing full-time orthopedics for?
A. 45 years.
Q. Okay. Since 1971?
A. Yes.
Q. And during the 40 year -- 45 years that you have been a full-time orthopedic surgeon, can you tell the jury how often you've dealt with trauma in your practice?
A. The first five years of my private practice, I was in the emergency room every other night. That -that's sort of the way we make a living, initially, until the other physicians develop some confidence in you and start wanting to refer you elective cases. You know, like elective spine cases, arthritic cases that need total joints.

You deal with trauma from the first day you're in training. Just to see -- the professors are
going to learn -- and I do the same thing with my residents -- are you analytical? Can you figure out the problem? Can you narrow down the issues in taking care of the whole patient in severe trauma? And that begins with taking care of broken wrists in kids, open fractures from motorcycle riders, severe polytrauma where there's fractures of the spine and upper and lower extremities from falls off cliffs or falls off ladders. And you develop a philosophy about how to best manage those type of patients.

And, in addition, there's a subspecialty called trauma. An extra year of training for those of us who just are interested in doing that. And a lot of it is taking care of pelvic fractures, a very special area in orthopedics.

So I have been exposed to all of that, and I did it up through 1999. I was chief of surgery at Mercy San Juan Medical Center, and we became a Level II trauma center. But, you know, I did it from '71 to '99, and I think I sort of paid my dues. It was enough -- it's a young man's work. It's hard.
Q. And in your years of practice, approximately how many surgeries would you perform per year?
A. I would say, as primary, around 300. Anywhere from a carpal tunnel decompression, a broken
wrist, or a major reconstructive procedure of a hip or a knee, but each one of those is an elective or emergent procedure. So at least -- some years more than -- but about at least 300 a year.
Q. Okay. So we're talking about several thousand operations during the 45-year career; correct?
A. Well, I also assist on a lot. In other words, there's a lot of major trauma cases or some total joints where there's another orthopedic surgeon. So I would say I probably did another 100, 150 a year or so. I would think it would be 20,000 operations where I was either primary or first assistant.
Q. Thank you.

And during your lengthy career, did you also
take care of patients with spinal problems, both traumatic and degenerative in nature?
A. I did.
Q. Okay. And --
A. I still do.
Q. And you still -- sure.

And -- and you've also acted as primary surgeon on spinal cases, both degenerative and traumatic?
A. Correct.
Q. Have you seen and treated patients, such as
the plaintiff in this case, who had congenital spondylolisthesis?
A. Yes.
Q. Okay. And what experience do you have in correcting spinal deformities surgically?
A. During the second year of my training, I became very interested in scoliosis, curvature of the spine in mostly teenagers but in some adults. So after the second year of training, you have some latitude. You can sort of move into some of the rotations where you get more experience or more exposure to spine.

So my interest then was reconstructive surgery and scoliosis. Every Friday, we would do two scoliosis cases. Where I trained was the scoliosis center for the Air Force. Then I became interested in traumatic spine. And at that time we did not have the instrumentation that's available today.

Once I got into private practice, I teamed up with other orthopedic surgeons and some neurosurgeons, and we did traumatic surgery. Fractures, dislocations of the neck, thoracic spine, and also the lumbar spine. We also did major operations for cancer that had metastasized to the spine. And many times those are what we call a pathologic fracture. So that's a form of a trauma as a result of a tumor.

So I have -- my background and knowledge in -- as an anatomist and neuroanatomist was a familiar area for me, anatomically.
Q. Do you have experience in performing spinal fusions for spondylolisthesis?
A. I do.
Q. And when you performed spinal fusions for spondylolisthesis, did you have available to you the current devices that Dr . Gross used in his surgery?
A. No. Those had not yet been invented.
Q. Have you ever assisted or acted as co-surgeon on cases involving fusions with pedicle screws, connecting rods, interbody spacers -- also referred to as cages -- such as that used by Dr. Gross?
A. Yes.
Q. And tell the jury, what is the nature of your clinical practice?
A. On Fridays, at UCD, I'm one of about six orthopedic surgeons who volunteer. So it's called VCF, volunteer clinical faculty. It's a -- depending on the interest or the background of the orthopedic surgeon, they tailor the type of patients.

Some orthopedic surgeons, they do hand surgeries, so they don't want to see other problems. Some are sports medicine. They don't particularly want
to see other than sports medicine issues. I take an egalitarian approach; I see everybody, whether it's a hand or a spine. And I see patients such as Ms. Garcia. I see patients who have very arthritic joints.

The patients come into the clinic from five outlying primary care physicians called the PCM, primary care network. The university has five large clinics in the Sacramento area. And those patients are seen by their primary care, and then they're sent to our department. And I see them on Fridays.

And I evaluate them, and the most -- I had a patient a few clinics ago like Ms. Garcia, and I take care of that patient, do all the evaluations. If they need interventional treatment, I send them to our interventionalist to the point they have exhausted all conservative treatment, including therapy. And then we send them to our spine team.

That's the way the university training department is -- is set up. So if you have a shoulder problem, you go to the shoulder team; an elbow problem, go to the elbow team; or a spine problem, to our spine team.
Q. Okay. Thank you.

And what percentage of your time is spent
doing clinical orthopedics involving teaching and performing -- and/or performing operations?
A. About 20 percent of my time.
Q. Is -- is done teaching and/or --
A. Or seeing patients.
Q. Okay.
A. Most of the time, I have a resident with me, but sometimes the residents aren't available. They're in the operating room, they're spread thin. So I see the patients by myself, and I'm willing to do the dictation and all the paperwork through the electronic -- the electronic medical record format we use at UCD.
Q. How do you spend the remainder of your time?
A. The other 80 percent of my time is doing med-legal or forensic orthopedics.
Q. Okay. And when -- just so the jury knows, when you talk about med-legal or forensic orthopedics, what are we talking about? If you can describe that for the jury.
A. I receive a call from an attorney who wants to discuss a case or wants to get educated. What's the best way to proceed? Or if he feels he needs a specialist, what's the best type of specialist for that? It would be an orthopedic surgeon, maybe a
physical medicine specialist, maybe a neurologist. So just give them -- educate and send them in the right direction.

I then review records, such as these that I have brought with me today, and just do the record review and, again, discuss -- give my opinion. Sometimes I dictate a report at the request of the attorney. And other times I will examine the patient and give opinions as to, in severe trauma cases, what -- has anything been overlooked? What do I see as the need for future surgery? What can be expected based upon the natural history of the disease process?

And then I spend time -- some of those cases, I -- I get deposed, and about 2 percent go to trial. So I end up in a courtroom, as I am today.
Q. Okay. Thank you.

And would you consider yourself well versed in the anatomy of the spine?
A. Yes.
Q. And, by the way, you mentioned -- you told the jury about the corrective spinal deformity surgery that you performed.

How would you characterize the degree of difficulty between performing a fusion laminectomy, as was done in this case, versus correcting spinal
A. Do you mean in terms of the technical difficulty or the approach?
Q. The technical difficulty.

MR. SMITH: Object to the foundation.
THE COURT: I'm going to sustain that. You need to lay a little bit more, I think. BY MR. MAZZEO:
Q. Doctor, have you -- in the course of your practice, have you performed fusion surgeries and laminectomies?
A. I have.
Q. Okay. And also you -- and you've performed surgeries in correcting spinal deformities?
A. Correct.
Q. Are you -- are you aware or familiar with the degree of difficulty -- technical -- technical difficulty in performing both of these surgeries?
A. Yes. I have in-depth knowledge of the -- the technical difficulties, but the more important thing is the preoperative planning.
Q. Okay. And just tell us what -- in terms of technical difficulty, can you distinguish between -- or explain to the jury the technical difficulty with performing a fusion laminectomy versus a -- correcting
a spinal deformity?
A. Yes. Spinal deformities, such as a teenager with scoliosis or even an adult with scoliosis, is usually an individual who is otherwise healthy. There's no cardiac problems, there's no pulmonary problems, they're neurologically intact, and we know that they're going to have an expected outcome because of their ability to heal.

So we do extensive preoperative planning, including pulmonary function tests, depending on the severity of the curve. And the last time that I do the surgery is when I'm scrubbing my hands at the sink and anticipating all the problems that can occur. Have I planned all the instruments I'm going to need? Do we have adequate amount of blood available? Am I going to do intraoperative neuromonitoring? Anticipating every possible scenario.

And then, the fun part actually is doing the surgery. In some cases, in patients over the age of 50 or postmenopausal females or a severe deformity with slippage, which can occur in either plane -- can I use this?
Q. Certainly. Sure.
A. Sometimes the vertebral bodies develop --
Q. Doctor, I'm sorry. If it would help, because
you are quite a distance away, if you want to walk up to the bar right here so you can show it to the jury.
A. Sure. Maybe this would be better.

As the spine ages, we develop conditions similar to what Ms. Garcia had, which is a congenital spondylolisthesis, but you can also acquire it. And you can acquire it in this area, where the vertebral body goes forward, it can rotate, or it can go laterally. So this vertebral body goes this way.

The most difficult is when it slips, and then you get this deformity, a spondylolytic scoliosis. And that's the biggest challenge for us is to do this in the postmenopausal female whose bone is not of the same quality as a teenager. And the advent of the pedicle screws and the rods has been a terrific boon to us, although there are still occasions where we use something similar to what used to be called the Harrington rods or the Dubousset system. D-u-b-o-s-s-e-t [sic].

The Dubousset system, which is the metal construct that holds things together until the bone fuses. So the adult spine is more challenging than the -- a growing spine or the skeleton of a mature female teenager. Because it occurs mostly in girls, about 8.2 times to boys.

The technical part is all the planning we do ahead of time of what we can expect. And are we going high enough above the area of the curve? What is our anticipated curvature? Is the spinal cord at risk, such as in the thoracic region? And we then do all of the preoperative planning and have an idea of what we want at the end.
Q. So in terms of degree of difficulty, which is more challenging, doing a laminectomy or correcting a spinal --
A. Correcting a spinal deformity.
Q. Okay.
A. The laminectomy and fusion is not as challenging because you are dealing with a much shorter segment of the spine, and the spinal cord is not at risk because you're working below the terminus, the end of the spinal cord.
Q. Okay. Thank you.

What percentage of your medical-legal work is performed or done for the defense as opposed to the plaintiffs bar?
A. 85 to 90 percent is defense work.
Q. And how do you account for that discrepancy?
A. The plaintiff attorneys have the advantage of speaking to the treating physicians. I get a call once
per week, and I'll talk to a plaintiff attorney, and I'll ask who the treaters are. And I'll say those fellows will handle themselves very nicely. They're at depo, at trial. Why do you want to spend a moderate amount of money -- in the thousands -- in order to get me involved? And sometimes the answer is, I want someone who's experienced, I need an apportionment, or, in some cases, the treating physician doesn't want to be involved. They don't want to get involved in the legal aspect of it.

So that's how it's -- it's been that way for many years. The defense doesn't have access to the treater other than through the deposition or person-to-person -- you know, face-to-face meeting.
Q. Thank you, Dr. Klein.

MR. MAZZEO: Your Honor, at this time, I move the Court to recognize Dr . Klein as an expert in the field of orthopedic surgery.

MR. SMITH: We would object to his recognition as spine surgeon and a -- and an expert in spinal fusion, but we would not object to his recognition as a general orthopedic surgeon.

THE COURT: Based on our discussion outside the presence, I'm going to recognize him as requested by defense counsel.

MR. MAZZEO: Thank you, Judge.
BY MR. MAZZEO:
Q. Now, with respect to this case, Dr. Klein, what were you asked to do?
A. Initially, your office asked for review, and then I was asked to evaluate Ms. Garcia in the office here in Las Vegas.
Q. Okay. And -- and then you were -- I believe you were provided records of Ms. Garcia's -- pertaining to Ms. Garcia's medical treatment in this case as well as diagnostic imaging studies for review?
A. Yes. They didn't all come at once. They came incrementally, which is the routine. So I got some of these records -- and I can give you the dates when they arrived -- but I received records, and then I received additional records. And I started looking at them, getting an idea of what the issues were, the treatment. And then Ms. Garcia appeared for the exam. I obtained a -- a history of her symptoms.
Q. And Doctor, we'll get into the --
A. Sure.
Q. -- examination in -- in a minute.

What -- tell the jury, what is the purpose
for a forensic medical examination?
A. Ms. Garcia's accident happened on $1 / 2 / 11$. I
saw her on 9/24/14. Many of the original problems, symptoms, the injuries that occurred, are no longer present. Or sometimes the original -- a group of symptoms were masked.

So the purpose is to determine what are the ongoing symptoms, if any; has the treatment that's been provided appropriate; has something been overlooked or missed, which happens occasionally. What's the patient's current status? In other words, how are they responding in terms of returning to their preinjury functional level? How are they doing, based on the recommendations and treatment to date? And do I agree with that? And do I see -- could I make recommendations of future care, or has there been something significantly overlooked that simply got missed?

And so I look at all this. I don't come with any type of -- I come with an open mind, just to look and determine how can I give an objective opinion based on what we call evidence-based medicine?
Q. And what assumptions do you make prior to doing a medical record review and/or, as you did in this case, also a medical examination and evaluation?
A. I make no assumptions. I -- I'm sometimes given really good records. Sometimes I get records
from -- as -- some physician, we have really bad handwriting. And sometimes I have to try and figure out what it says.

With the advent of electronic medical records, it really has been helpful because at least I don't have to decipher illegible, you know, handwriting. So depending on the quality of the record and the patient's symptoms, is it heading somewhere? Is it making sense? Is it what would be expected, depending on the original diagnosis?

And having that as a basis, then I have the opportunity -- not always, but in this case -- to interview and examine Ms. Garcia and get her opinion. How's she doing? And I always ask, share with me how you're doing the last three or four months. And, actually, that's what's important. What happened a year ago usually is not very significant.
Q. Okay. Now, when you're asked to do an evaluation, do you come with any sort of bias, whether it's for the defense or the plaintiff?
A. No, not at all. It's -- my job is to be honest and objective and, based on the information and the data, to just give an opinion.
Q. What steps do you take to ensure that you're performing an objective evaluation?
A. Utilizing evidence-based medicine guidelines, looking at the medical records. And then I have what I call a 4-C rule.

The first $C$ is credibility. In other words, is -- and I -- part of that is some just subjectivity when I interview and examine, as I did Ms. Garcia. In other words, is she believable? Is she making sense as to what she's saying to me and to others?

The second is consistency. Has there been a change along the way? Are things being added in? Taken out? Embellished upon?

The third is chronicity. Is there evidence this is going on now, in this case, for months and months? Usually things that go on for more than three months, we use the term "chronic" or "chronic pain."

And then the fourth is corroboration, meaning are the objective findings, that which we find on the exam -- measuring, bending, testing -- does it fit with the subjective complaints?

We have the advantage of looking at diagnostic studies -- X rays, MRIs, CT scans -- and then looking at all that data. And does it come to a sensible diagnosis?

And also outcome, in terms of what was done initially, the treatment, did it improve things? Make
it worse? Or did -- at some point did they plateau?
Q. Thank you, Doctor. And, by the way, how much are you being paid for your time to testify here today?
A. Consultants Medical charges $\$ 6,000$ per half day.
Q. And for a full day?
A. Twice that.
Q. 12,000. Okay. And are all of the opinions you'll express today to a reasonable degree of medical probability?
A. Yes.
Q. And would you tell the jury what percentage of spinal care is provided by nonsurgeons?
A. In the United States, 95 percent of spinal care is by nonsurgeons: chiropractors, physical medicine, rehab specialists, physical therapists, acupuncturists, primary care physicians directing care to treaters like physical therapists, therapists who are specialists in things like Pilates, specialized strengthening exercises. Only 5 percent is by surgeons.
Q. And what percentage of people with axial skeletal problems submit to elective reconstructive surgery?
A. For those that are indicated, that fail
conservative treatment, at the most, 5 percent and sometimes 7 percent ever require any type of reconstructive surgery other than trauma.
Q. Okay. And in performing an evaluation, whether of a patient, let's say, in a clinical setting, what is the most critical step in making a diagnosis?
A. The most important is the history.
Q. Why is that?
A. With the proper set of questions -- and the way we're trained is to listen -- or at least hopefully we should -- is -- depending upon the precipitating event, is to ask a series of questions, such as, where is the location of the pain? What's the frequency of the pain? Does it occur on a daily basis? Is it constant? Is to two days out of seven? If you're not moving and you're not weight-bearing, do you have the pain when you're at rest? The quality of the pain, is it -- is it sharp? Dull? Throbbing? Burning? Achy? If you have the sharp pain, does it last for seconds, minutes, or hours?

And then the famous 0 to 10, what we call the visual acuity scale. On your worst day, your best day -- when I say -- the day I'm seeing the patient, what is it today? Does it stay in one area? Does it radiate? Does it go from your back into your buttock
or your leg in terms of spine issues? What makes it better? What makes it worse? What are the aggravating factors?

And as I begin that -- and taking notes. And then I go back again, and -- and sometimes I'll ask a question to remind the patient of something else. How is it affected by just activities of daily living -vacuuming, sweeping, bending, lifting children, grocery shopping -- all the things we do in our lives?

And then does it cause sleep disturbance? Pain that causes sleep disturbance is of concern because sleep is a semicomatose state. And if it wakes you up, we're concerned.

And then, as in Ms. Garcia's case, of all the treatment you've had since the accident, I'm always interested, what seems to have given you some relief? What has worked?

So the history part gives me -- tells me the anatomic area, it tells me the structures that may have been injured, and what would be expected. Because every disease has a history.
Q. Now, in the scope of an evaluation, what is meant by the term "suggestive" and "objective"?
A. Subjective is what you tell us, similar to what I just shared with you. Where is the location of
the pain? How severe is the pain? Does it stay in one area? It's all information I glean from you.

Objective is what I can measure. Measuring how far you can bend. If I lift your leg, check your reflexes, measure circumference of your arms, your thighs, have you lost muscle mass. If you have, that's called atrophy. So objective is measurable things and how do they correlate, how do they mesh with the subjective?
Q. And when a patient comes into your office for an evaluation, what is the most important aspect of evaluating a patient with a complaint?
A. The history.
Q. Okay.
A. Without a doubt, the history.
Q. Okay. And after obtaining a thorough history from a patient, what's the next step in the evaluation?
A. The next step is to watch the patient walk. I ask the patient to walk in the -- there's a long hallway adjacent to the exam room. How does the patient carry themselves? Is there decreased core strength? Watching you turn, how do you handle that? Are you hesitant when you turn? Are you limping?

Ask you to walk forwards and backwards on your toes and heels. That changes weight-bearing
characteristics on the spine as well as on the weight-bearing joints.

Then, depending on many times the weight of the patient or the age of the patient, I'll ask the patient to hop. Some patients are very reluctant. They say, "I'm afraid I'm going to fall."

Well, that gives me more history when I then do another thing, which is called -- it's called abasia-astasia. But basically it's like the highway patrol asks you to do, walk the white line. In other words, how can you walk tandem, heel-toe, and maintain your balance. So that's the first part.

And then just having the patient sit down and look -- have I fatigued the muscles when they're just walking up and down the hall or walking on their heels? Are their muscles quivering, arms or legs?

Like when you get very tired and you get that little twitching around your eye, that's called a fasciculation. Have I irritated a nerve root by asking them to do all those things when they're walking?

And I know some of that because I've already taken the history and the patient's told me, "If I walk for a long time, it really aggravates my low back" or "if I go grocery shopping or driving."

And then after just observing, I start doing
range of motion of the neck, look at the tone of the muscle, measure the thighs and the calfs, see if there's a muscle loss. I check the reflexes. Are the reflexes diminished, or are they hyperactive?

In other words, like when the doctor taps your knee with the little rubber hammer, if it's very fast and brisk, that can be a very abnormal sign. That means a nerve root or the cord is irritated.

Then check sensation, check the ability to feel the tuning fork. Loss of vibratory sensation is very abnormal. We see it a lot in diabetics. But in an individual who doesn't have diabetes or a spinal thoracic cord injury, we're really concerned about loss of sensation.

And how does the patient move in the exam room? Getting on and off the exam table, do they need hand assistance? And then when they're standing, bending, turning, rotating. And then looking at things that could irritate based on the history.
Q. And did you use this methodology on Ms. Garcia when you interviewed and examined her --
A. Yes.
Q. -- on 9/24/14?
A. I did.
Q. Okay. During the -- during the course of
your evaluation, part of your -- actually, part of your evaluation included an interview of Ms. Garcia; is that correct?
A. That's correct.
Q. And did Ms. Garcia share with you anything regarding the motor vehicle accident? And, if so, what?
A. I'm just going to refer to my record.
Q. Just let the Court know so that you can refresh your recollection.
A. Sure.
Q. Let us know after you've read it.
A. As an overview, Ms. Garcia shared with me she was the restrained driver of her Hyundai Santa Fe.
Q. And, Doctor, if you've refreshed your recollection, try not to read from it.
A. Okay.
Q. Yep.
A. She was -- had no preknowledge she was going to get hit. And she got hit on the passenger side of her vehicle.

And so the next thing that I always ask is, did you have enough preknowledge that you could take some evasive action or prepare for the impact?

And as many patients do, they don't always
remember. She said, "I just remember that my body got jerked from side to side." And I didn't pursue it any more than that. And I didn't -- one thing in my evaluation, it's not supposed to be another deposition. I had the deposition. And that was -- had been asked in detail. So I just -- that's all I needed to know, affirming that she was the driver and what happened to her at the time of impact.
Q. And what did Ms. Garcia tell you about her ability to exit her vehicle?
A. I asked her sort of, you know, "As the dust settled, as you were able to regain your composure, could you get out yourself?" And she said yes.

And I said, "I'm going to ask you three questions before you got out. And the answers are 'yes,' 'no,' or 'I don't remember.' Did you have any blurred vision or double vision? 'Yes,' 'no,' 'I don't remember.' Do you have any nausea or vomiting, lose control of your bowel or your bladder?"

If you're concussed, if you're knocked out or even have a mild head injury, you're going to have some of those symptoms. And she -- and the answers were no.

So she then was able to get out. She knew where she was. She wasn't necessarily confused or disoriented spatially.

And I then said, "Knowing that things change with time" -- the common thing is to get adrenalized. That's very normal when you get in an accident. I said, "Did you have any localized pain anyplace?" And she didn't remember having any then at the scene of the accident.

And then I said, "What happened?"
She said, "Well, I exchanged information with the investigating officer." And then because her car was not -- she couldn't drive it, she got home -- the tow truck driver gave her a ride to her house.
Q. During the course of your evaluation, did you -- and record review, did you -- were you provided and did you review the traffic accident report pertaining to this case?
A. I was provided, and I reviewed it. Yes.
Q. Okay. What relevant information did you glean from that report with respect to your evaluation?
A. Just -- it basically, in police terminology, sort of referred to Vehicle 1, Vehicle 2, and from the -- where the impact had been on the passenger side.
Q. Did Ms. Garcia share with you that -- whether she had any localized symptoms in her spine by that evening?
A. My habit is always, after you get home, sort
of do another reassessment. So I said about 10:00 o'clock that night, the accident -- because I remember it happened in the afternoon. Did you have any symptoms anyplace, localized symptoms, onset of a headache, neck pain, mid back pain, low back pain? And she said, "My mind was racing. I was really most concerned about getting my daughters ready for school the next day."
Q. Okay. And did Ms. Garcia represent to you how she felt the following morning on January 3rd of 2011?
A. Yes. And I proceeded after, you know -- you know, I said -- I remember also asking, "How did the night progress? Did you -- you know, was it a fitful night? Were you able to sleep?" She just didn't remember.

And then I said, "Well, how about when you woke up in the morning? Did you have any localized pain that prevented you from doing what you had to do to get your kids ready for school?"

She said, "No, I had no localized symptoms," that she could remember.
Q. And what, if any -- what, if anything, did Ms. Garcia -- actually, withdrawn.

What did Ms. Garcia report to you as to when
the onset of symptoms started?
A. After taking her children to school, she went to her job at the Alicante [sic] Casino.
Q. Aliante?
A. Aliante.

And she -- it's a job where she stands. It's, I think, a cashier's cage, as I remember.

And she had onset. That's when she first noticed that she had some onset of what she returned as numbness and like a shooting, stabbing pain in the center of her low back. That was sometime on the day of the 3 rd .
Q. I'm sorry. Go ahead.
A. And I said, "Were those -- did those symptoms persist all that day at work?" She said they did. And then they continued the same on the 4th. And then on January 5th, which would have been the third day after the accident, she decided to get some professional advice.
Q. Okay. And did you review any records that indicated that the onset of symptoms did not occur until after January 3rd of 2011?
A. She presented to the emergency room at MountainView Hospital, was seen by the emergency room doctor. And that progress note identifies that she
said her symptoms began that day, so a little bit different than what she had told me.
Q. Okay. By the way, did Ms. Garcia, when she met with you, did she know that she was appearing for you in the context of a medical-legal evaluation with respect to her claim?
A. Yes. I explained that your office had asked me to do an evaluation regarding this accident. And then -- in fact, I asked her was she going to be joined by her attorneys. Sometimes the plaintiff attorney will, you know, join the plaintiff for the eval.
Q. Okay. What did Ms. Garcia tell you with respect to whether she lost any time from work following this incident?
A. Other than her physician visits, like the ER or when she started her chiropractic care with Dr. Gulitz, she had not lost any time from work.
Q. And did Ms. Garcia tell you what her current symptoms were as -- at the time of your evaluation on 9/24 of '14?
A. Yes.
Q. What -- what -- what did she tell you?
A. At the time of the evaluation, her symptoms were localized to her low back and her right leg. And I asked her, "Had these areas bothered you prior to the
incident?" She said no, that she had never had any low back pain or the right leg pain prior to January 2nd of 2011.
Q. And what's your understanding as to whether Ms. Garcia was doing any exercises for her low back at the time of your evaluation?
A. She wasn't doing any exercises then. In other words, I -- I said, "I notice that you've been seen by Dr. Gulitz and had seen a therapist." At that time she was not doing any active exercise program.
Q. Did you -- during the course of your interview and evaluation, did you ask Ms. Garcia whether -- of all the treatment that she had received, which had been most helpful to her?
A. Yes.
Q. What did she tell you?
A. I prefaced it by saying, "Of all the treatment you've had since the day of injury," which would be $1 / 2 / 11$, I said -- we went over it. I said, "You've had chiropractic treatment. You'd had therapy, and you'd had some injections. And then you had the surgery."

And her response was that -- she said, "The injections provided absolutely no help." That was her terms. The therapy provided no help. The surgical
fusion that she had had on 12/26/12 by Dr. Gross gave her one year of relief.
Q. Okay. And what did she share with you with regard to her right leg symptoms which you mentioned a moment ago?
A. I mentioned to her, I said, "You shared with me you were having low back pain and right leg pain."

And she -- without a proposed question, she says -- she said, "Well, the leg pain wasn't there before I had the surgery." In other words, that was something she noted after she had the surgery.

And I said, "Well, what's the right leg pain feel like?"

She says, "It's sort of a throbbing. It feels sort of like when you hit your funny bone, when you hit your elbow." And she said, "Most of the time, the symptoms really -- they're sort of more annoying, but they really" -- they didn't go below her knee. They sort of went down the front of the thigh, towards the knee. And sometimes, if she stands too long, they'll go into the calf -- into the back of the calf. And she still had some numbness and tingling in the right foot.
Q. What did she indicate with -- whether the symptoms radiated or not?
A. Well, that was her description. She -- there was -- the radiating pain in the right leg was what we call somewhat atypical and asymmetrical. Sometimes it would start in her groin, go down the front of the thigh. Other times she'd be more noticeable it was in the calf. Sometimes it would go down into the foot.

So it wasn't always the same each time, and it appeared to be somewhat related to her activities.
Q. Did you ask Ms. Garcia whether she was having ongoing neck symptoms as of the time of your evaluation?
A. I did. Because she had been treated for that. And she said no. She says, "My neck hasn't bothered me in a long time."
Q. Okay. And did there come a time when you examined Ms. Garcia during the course of your evaluation?
A. Yes. After -- I went back over the symptoms she shared with me just to make sure it was as thorough as possible. Then I asked -- I said, "I'd like to examine you." And I said, "Before I examine you, I'd like you to just walk in the hallway and" -- which we did.

I wanted to see, did she have a nice, smooth gait? Was she unstable? Any evidence of ataxia? She
walked forwards and backwards on her heels. I left and asked her to change into a paper gown and paper shorts. And then I brought a female chaperone back with me.
Q. Okay. Now tell the jury -- just give a summary of the examination that you performed on Ms. Garcia. And if -- if you have to refresh your memory, you can look at your record --
A. Sure.
Q. -- but then testify without it.
A. After I came back with the chaperone, I said, "Please sit on the exam room table." And I again looked at her arms and legs. Was there any evidence of shaking, quivering? Had I fatigued any of her muscles? Had I irritated any of the nerve roots by asking her to walk in the hall on her heels and her toes, forwards and backwards? Then I did what's called a seated straight leg raise test where I ask her to sit --

Can I demonstrate?
Q. Yeah, please. Certainly.
A. One of the things that is important is, because of her telling me she had the pain in the leg, was there any evidence of irritation of the nerve roots, the lumbar nerve roots.

So I asked her to sit like this (witness indicating) with her hands -- palms flat so that she's
at a 90-degree angle. And then I brought her knees out straight, which is the same as if she's laying on her back. It's called the straight leg test. It's the most sensitive test we do for the lumbar nerve roots.

And when you have those symptoms -- and you
heard the term -- you may have heard the term "sciatica." So that's the first thing I did.

Then I looked at just her body habitus. I look -- checked the reflexes with the rubber hammer that we use. I checked her pulses. I checked the temperature of her skin. I looked at her nail beds. How's the blood supply? I asked her to stand. I asked her to then bend. I noted that she did not have good muscle tone on her back, her tummy area, or her muscles -- spinal muscles. Some of that was apparent when I was watching her walking.

I asked her to bend to the right, to the left, backwards. Attempting -- I was attempting to reproduce the symptoms that she had told me -- in other words, during the examination. I asked her one -- one thing I asked her to do was to -- we call it the simulated axial rotation. I had her put her palms against her upper outer thighs, and I rotated her 15 degrees to the left and 15 degrees right on her hip joints. That motion, which is called simulated, does
not put any motion here at the lumbosacral or at the thoracal lumbar, that 15 degrees each way. There's no motion in the spine. That's why we call it simulated. And I asked her, "Did that bother you?" She said no, that didn't cause her any pain at all. Then I asked her to put her arms out like this. And I said, as I always do, "Pretend you're ten years old and you're playing airplane. These are the wings of your airplane. Dive your airplane to the right. Dive your airplane to the left. Rotate."

So I can look now at the entire spine. Is there any evidence of a scoliosis, a curvature? Does having her do those motions cause a spasm? Does it -is it irritating a nerve root? And she -- she did it very smoothly and she had a very nice, straight spine.

Then I had her lay down on the table, and I did the straight leg raising test again when she's laying down. Then I measured her thigh circumference -- or I looked at her thigh circumference to see if there's any atrophy. And I looked at the scar she had from the previous surgery.

And then I asked her to push my hand away. She's laying flat. I asked her, "Push your hand away. Push against my hand. Pull your toes towards your nose. Does that bother you?"

Anatomically, that can't cause back pain.
And then with her hips and knees flexed, "Pull your big toe up in the air. Did that cause back pain?" And none of those things caused back pain at all.

So then I -- after doing all this, did I irritate anything? I had her stand again. Could I feel spasm? Did I create a spasm by doing any of this? And that was the end of the exam.
Q. Okay. What did you note with respect to Ms. Garcia's height and weight and visual inspection?
A. As that -- on that date in -- September 24th of 2014, Ms. Garcia's 5 feet, 1 inch; and she weighed 186 pounds. Unfortunately, she was at least 40 pounds above an ideal body weight for her age and height. But she didn't have good muscle tone. She was wearing a garment that sort of -- like -- I think the women called it a Spanx, something to hold in the tummy. And, I mean, that's -- I think it was something she had figured out.

She did -- the records -- I asked her if she had a corset to wear. Because at one time, one of her doctors had recommended a brace, but she never did get that brace initially. But she didn't have a -- and sometimes they wear a post-op brace, but she didn't bring that with her to the exam.
Q. Okay. And did you perform a range-of-motion testing of her lumbar spine?
A. Yes, in the standing position.
Q. Okay. And what did you observe or note with respect to her reflexes, whether they were normal or abnormal?
A. She had very smooth, symmetrical reflexes. They were normal reflexes.
Q. And when you say "reflexes," what -- what part of the body are we looking at here?
A. We're looking at the lower extremities. So the two reflexes we check is -- in a non-weight-bearing posture is I touch the front of her knee to see if her knee moved, knee jerked, and then her ankle. The knee reflex tells us about two major nerve roots, L4 and L5. The ankle reflex, where we tap behind your Achilles tendon, tells us about L5 and S1 primarily.
Q. Okay. And what, if anything, did you note with respect to weakness of the muscles of the lower extremities?
A. I would -- I would say that there was no major weakness, but it wasn't good muscle tone in the thighs and the calves.
Q. Okay.
A. In other words, nothing to suggest she'd
been -- at one point -- let's see. Let me just review.
At this point of the exam, she began grunting, so it was -- I think she was getting a little bit tired. Sometimes I'll ask the patients to lift their heels off the exam table just to check their abdominal muscle tone. But I -- I didn't want to do that because I didn't want to cause any more pain.
Q. Okay. And if she did have major weakness of the muscles of the lower extremities, what would that be indicative of?
A. Well, it could be indicative of nerve root irritation with atrophy, but she didn't have any. Her thighs were 19 3/4 inches bilaterally. We measure above and below the kneecap. And the calves were the same at 14 inches. So fortunately she didn't have muscle loss; she just didn't have good muscle tone.
Q. Okay. And what, if any, part of your evaluation included testing her for sensation, and what's the purpose for doing that?
A. Nerve roots -- nerves have two types of fibers: sensory fibers that send information back to your brain and the motor fibers that you send information. If I want to make a fist, I just sent information to the muscles in my forearm to make a fist. Those are called motor fibers.

Most of the sensory fibers are on the outside part of the nerve. So we use a -- either a pinwheel or just a stroking to see if there's any temperature change, sweating change, or loss of sensation. And there wasn't.
Q. Okay. Thank you.

With respect to -- oh.
During your evaluation, you were also provided diagnostic studies for review; is that correct?
A. Many. Yes.
Q. Okay. Well, we'll get to those in a little while.

With respect -- I'm going to go over some of the medical record you reviewed specifically, and if you have the records, you can certainly look at those. Those are in evidence. I want to start with the MountainView record from the emergency room.
A. All right.
Q. I just want to ask you some questions about that.

Can you share with the Court the history of -- that the emergency room physician was told by Ms. Garcia?
A. When -- on the 5th, three days postaccident,
when she was seen by the emergency room doctor, she was complaining of head, neck, and lower back pain. And the word "sacral" is in parenthesis. The doctor said -- asked her, did you have a blow to the head? There wasn't any airbag -- did the airbags deploy? Common questions.

Were you -- did you get out yourself? Yes. Were you ambulatory at the scene? Yes. Did you have any pain immediately after the accident? No. And it says "pain-free after accident. Symptoms started today."

The emergency room doctor did an exam, looking for spasm. Spasm is a protective phenomenon. If you have an early whiplash, you'll protect your neck. And usually it starts peaking 12 to 24 hours after the event. And he noted no spasm, painless range of motion. And it says, "no back tenderness." In other words, where we palpate, where we touch you and say, "Does it hurt to touch?" And no motor or sensory deficit. In other words, the structure that we worry about, the structure at risk, even with a whiplash, is nerve roots.

So the doctor said no motor or sensory deficit based upon the symptoms, the evaluation, at -this is not quite 72 hours after the accident. Low
back strain, secondary to her motor vehicle accident. The doctor ordered a CT of the head, because she complained of some head symptoms, and a chest X ray. There were no X rays done of the neck or the mid back or the low back. And she was given a drug called Lortab, which is a -- has hydrocodone; it's an analgesic. An anti-inflammatory called Naproxen. And a drug named Valium, which is a muscle relaxant.

And then she was advised to go see your primary care physician for follow-up.
Q. And just -- yeah. And, Doctor, with regard to those -- the studies that were ordered, I think there were studies or -- or references to another individual's name in her file.

But, in any event, you -- you weren't given any of -- any reports -- were you given the reports of the diagnostic studies or you just saw reference to the fact that a diagnostic study was performed?
A. I only had the reference.
Q. The reference.
A. Excuse me. The report.
Q. Okay.
A. Not the diagnostic study.
Q. Okay. All right. Well, with respect to the primary findings from the physical examination, what
was the significance of that -- the primary findings from the physical examination that was performed with respect to Ms. Garcia?

MR. SMITH: Objection. Cumulative.
THE COURT: I'm going to allow it for now.
THE WITNESS: Can you --
THE COURT: Don't get into too much.
THE WITNESS: Repeat the question.
BY MR. MAZZEO:
Q. Sure. What was the significance of the primary findings from the physical examination that was performed?
A. In the emergency room?
Q. Right. Correct.
A. The best -- the most important thing was that she's neurologically intact in both lower extremities. And at that time the emergency room physician, nor did anybody else, including Ms. Garcia, know that she had a spondylolisthesis. So she -- she didn't have any symptoms subjective of nerve root irritation, the structure at risk. She had symptoms of a low back, soft tissue injury. Low back strain.
Q. And what, if any, medications were prescribed for Ms. Garcia prior to her being released from the hospital?
A. A muscle relaxant, the Valium; and an anti-inflammatory called Naproxen, which is, you know, a -- a form of Ibuprofen; and an opiate called Lortab.
Q. Did -- and then Ms. Garcia, she subsequently went to see her next primary -- or her next treatment provider was Dr. Gulitz, a chiropractor --
A. Yes.
Q. -- is that correct?

And what were Dr. Gulitz's diagnoses?
MR. SMITH: Objection. Cumulative.
THE COURT: I'm going to allow it for
foundational purposes.
THE WITNESS: Dr. Gulitz obtained a history. He did an examination. Found out she works as a cashier in a cage at a casino. Noted that she had spasm, at that time, in the neck and also in the mid back and then in the low back.

The -- she had positive straight leg raising. I mentioned earlier about lifting the leg, but it was radiating pain. It wasn't radicular pain. There was some limited range of motion in all three areas. And Dr. Gulitz's opinions were those of -- he added in a diagnosis that hadn't been -- was abdominal contusion, which may well have been from the lower portion of the seat belt; muscle spasm; and then cervical, thoracic,
and lumbar sprain/strains, which were causing some dysfunction and some posttraumatic headaches, somewhat corroborating the emergency room physician's evaluation, which had been done nine days -- seven days earlier, on the 5th. This is on the 12th of January. And -- but there had been some increase in the symptoms. This is a normal history you would expect.
Q. A normal history of -- when you -- in respect of --
A. In terms of soft tissue complaints. Cervical, thoracic, and lumbar.
Q. Okay. And -- and then did Dr. Gulitz order diagnostic imaging studies?
A. He ordered $X$ rays of her neck, her mid back, and her low back, but those weren't done until five days later.
Q. Okay. Now, before we review the diagnostic studies that you reviewed in this case, in following your interview -- your examination -- your review of the -- the diagnostic studies, your extensive review of all the medical records, including deposition testimony, were you able to arrive at a -- a diagnosis for the injuries that Ms. Garcia sustained --
A. Yes.
Q. -- from the motor vehicle accident?
A. Based upon my evaluation that day, interview, looking at these plethora of medical records, and some but not all the diagnostic studies up to that point in time, my opinion was that she had sustained acute cervical, thoracic, and lumbar myofascial sprain/strains. Soft tissue events. And then she had come under the care of Dr . Gulitz, had completed about 26 visits through May 20th, and was slowly getting better.

In terms of the treatment, the soft tissue modalities, she wasn't particularly getting any manipulation. In other words, that wasn't a big part of it. But the best part, in my -- in looking at the records, no progressive neurologic deficit. That's paramount that she's not having pressure on nerve roots.
Q. Okay. Thank you.

And in the records that you reviewed -- we're not going through each one. The jurors heard about these records numerously --
A. Yes.
Q. -- repeatedly.

But specifically I just want to call your attention and direct your attention to the MountainView
record. Dr. Cash's record of $2 / 16$ of 2011, Dr. Gulitz's record of $1 / 12$ of 2011 , and then Dr. Gross's report of May 25th or May 31st of 2011. And what did you note with regard to Ms. Garcia's -- and you did review those records that I just mentioned; right?
A. They were provided. I reviewed Dr. Cash, Dr. Gross, and while she was under Dr. Gulitz's care, she saw a physician assistant named McGauran as well.
Q. Okay. Now, specifically, what did you note with respect to Ms. Garcia's reporting of the onset of symptoms to these various medical providers?

MR. SMITH: Objection. Cumulative.
THE COURT: I'm going to allow it.
Overruled.
THE WITNESS: There was a discrepancy between the onset of symptoms with -- with the presentations. In other words, with Dr . Gulitz -- and you asked me that earlier. When she saw Dr. Gulitz, which was seven days afterwards, she had said that the pain began immediately after the collision, a little bit different than seven days earlier when she told the emergency room physician it started that day. A little bit different than when I saw her, when it began when she was in the -- the next day, when she went to work on
the 3rd.
So -- but each one was a little bit different in terms of when the symptoms began. By the time she saw Dr. Gross on -- on the 25th of May, the -- that wasn't an issue. It was because of the -- the -- the symptoms she was having. And when she saw Dr. Cash, which was $2 / 16$, which is about six weeks after the accident, she shared with Dr. Cash the pain -- she said she fought through the pain four days after work because she didn't -- for four days because she didn't want to miss work. So there's a discrepancy between each of those.
Q. And what importance do you make of the -- the inconsistencies in her reporting of the onset of symptoms postaccident to these different medical providers?
A. The importance, by the time I'm involved in the case, is none of the symptoms are consistent with an acute slip at L5-S1.
Q. Okay.
A. That's the most important, but it's the best of all, that, fortunately, she did not sustain an acute slip, because it's so painful. So severely painful.
Q. Okay. We'll talk about that in a little while.

THE COURT: Mr. Mazzeo.
MR. MAZZEO: Yes .
THE COURT: One of our jurors needs a break. I'm going to suggest that maybe we take -- just take an early lunch and go from 11:45 to 12:45 if everybody is okay with that.

Anybody have a problem?
MR. MAZZEO: No, Judge.
THE COURT: All right. During our break, folks, you're instructed not to talk with each other or with anyone else about any subject or issue connected with this trial. You are not to read, watch, or listen to any report or other commentary on the trial by any person connected with this case or by any medium of information, including -- without limitation -newspapers, television, the Internet, or radio.

You are not to conduct any research on your own, which means you cannot talk with others, Tweet others, text others, Google issues, or conduct any other kind of book or computer research with regard to any issue, party, witness, or attorney involved in this case.

You're not to form or express any opinion on any subject connected with this trial until the case is finally submitted to you.

Why don't you go ahead and take till 1:00 o'clock. See you back at 1:00.
(The following proceedings were held the presence of the jury.)

THE COURT: Sorry to interrupt you during that. I know Curt texted me that one of our jurors had made contact with him.

MR. MAZZEO: I was moving on to a new area, so it was perfect.

THE COURT: Okay. Anything we need to put on the record?

MR. MAZZEO: No, Judge.
MR. ROBERTS: No.
THE COURT: Off the record.
(Whereupon a short recess was taken.).
THE COURT: All right. We are we're record on the Case No. A637772. We are outside the presence of the jury.

Go ahead, Mr. Mazzeo.
MR. MAZZEO: Thank you, Judge.
So during the morning, Mr. Smith had made several objections on the grounds of cumulative, and I -- what he's referring to -- and I will just direct the Court's attention it -- he's referring to plaintiff's motion in limine No. 35 to exclude
defendant's expert witness, Dr . Poindexter. And -- and that was -- that motion concerned Dr. Poindexter. Seeking to exclude him because the defense also had Dr. Robert Odell who was an anesthesiologist and pain medicine physician.

It didn't have anything to do with Dr. Klein from my recollection. It was just one or the other plaintiff was seeking -- or asking the Court to allow the defense just to call either Dr. Poindexter, or Dr. Odell. So -- and the -- that was denied by the Court. And -- and then, in the ruling, the Court said that cumulative testimony will not be allowed at trial nor will two physicians be permitted to testify to the same subject matter at trial.

It was referring to two physicians. Mr. Smith, at the time, was arguing that they were essentially the same, the physiatrist and the pain medicine doctor. I argue that they're not. They're actually two different disciplines. So the fact that I'm asking Dr. Poindexter -- Dr. Klein, obviously, is a different specialty. We need to lay foundation for his testimony, with respect to the opinions he's offering, different than Dr. Poindexter's last week, and I would argue that this order does not pertain -- and there's no intent that it pertained to -- to doctors of
different disciplines, such as Dr . Klein and Dr. Poindexter.

So he can keep making that -- that objection, but I would -- I just want to bring this to the Court's attention so that the -- the Court is aware of why -of why he's making this objection and that this motion didn't pertain to Dr. Klein, it pertained to Drs.Poindexter and Odell. So I would continue to ask the Court to sustain or -- or to overrule any objections made by Mr. Smith and continue to allow me to lay the foundation for Dr . Klein's testimony.

MR. SMITH: Well, I wasn't referencing that motion, although the order in that motion is relevant. It says, cumulative testimony will not be allowed at trial nor will two expert physicians be permitted to testify at trial to the same subject matter. And Mr. Mazzeo left out the expert part.

What I'm referring to is just the general rule that the defense can't out on expert after expert to testify about the same thing. Whether he's in a different specialty or not. They cannot put Dr. Poindexter on and have him testify about a subject and then put an expert in a different specialty and have him testify about the same subject. That is cumulative, and that's what the objection is based
upon.
Your Honor has overruled a few of those to allow him to lay some foundation, should he have any opinions that are different than Dr. Poindexter, but to the extent that they continue to go over the same medical records and the same opinions, they cannot bombard the jury with cumulative testimony from different experts.

MR. LASSART: And the Court can see that I'm not going through -- over the same testimony in detail as I did with Dr. Poindexter -- or as I did with plaintiff's treating physicians and experts in cross-examination. So I -- I -- I -- I abbreviated my questions with Dr. Poindexter. I'm doing the same with Dr. Klein; however, part of his role as a -- performing a comprehensive medical evaluation, is to review the relevant medical records. And if I -- if I'm not allowed to elicit that from Dr. Klein, then the jury will assume that he hasn't laid, and they'll -plaintiff will probably argue in closing arguments that Mr. Mazzeo didn't lay the foundation for -- for Dr. Klein's opinions.

We're moving to strike his testimony, after he -- after we rest or during closing arguments. I mean, he can make any argument he wants. So to lay the
foundation, I have to discuss records that Dr . Klein reviewed, I have to discuss records that Dr. Poindexter reviewed. I'm just a little perplexed by Mr. Smith's argument that he can make this objection that I can't ask him questions about the work that he did in this case.

It's not -- and I would argue that it's not cumulative, but it is a foundation for his testimony regarding the opinions he's offering. And also -sorry, Judge. We heard from Drs. Cash, Gross, Lemper, Kidwell, Oliveri, who have all offered cumulative-type testimony with regard to accident-related injuries, causation, mechanism of injury. So we've heard that from plaintiff, and now plaintiff wants to turn around and say, with my second medical expert, cumulative. He can't talk about record. He can't talk about reviewing MountainView or this record or that record. It's hypocritical.

THE COURT: Well, he -- he is a different expert than Dr. Poindexter was. I think he can offer different opinions than Dr. Poindexter's qualified to offer, so as far as the -- the objections so far, I have allowed the things that he said because I think that, primarily, they were foundational in nature for the ultimate opinions that he has.

If there are ultimate opinions that he offers that are the same as another expert has offered, then you can object. I'll rule on them at the time. MR. MAZZEO: Thank you, Judge. That's it. THE COURT: Okay.

Bring our jury back and get going. Are we going to get done with Dr. Klein today, do you think? MR. MAZZEO: I -- that's -- I hope so. You know, there's only so many hours in the day, Judge. So -- and I know you're sick, so I hope -THE COURT: I'm pushing through. I'm fine. MR. MAZZEO: Yeah. Okay. I mean, that's the -- that's the plan.

MR. SMITH: I would say not likely.
THE MARSHAL: All rise for the presence of the jury.
(The following proceedings were held outside the presence of the jury.)

THE COURT: Go ahead and be seated. Welcome back, folks. We're back on the record in Case No. A63772 .

Do the parties stipulate to the presence of
the jury?
MR. MAZZEO: Yes, Your Honor.
MR. SMITH: Yes, Your Honor.

THE COURT: Go ahead, Mr. Mazzeo.
MR. MAZZEO: Thank you, Your Honor.
BY MR. MAZZEO:
Q. All right. Dr. Klein, continuing, there's been references and you've made references to radiating pain and radicular pain.

Are these things -- are these two terms the same thing?
A. No, they're not.
Q. Okay. Tell the jury what radiating pain is, and then tell them what is meant by radiculopathy.
A. Pain radiating, like the branches of a tree or the roots of a tree, means there's an origin of the pain. You could have sprained your neck, slept wrong, wake up, the pain isn't just localized to the side of your neck. It radiates like sunrays to another area. To the top of your shoulder, maybe the top of your shoulder blade. That's very common if you have an inflammatory process around a nerve. So it radiates down the branches of the nerve.

The term "radiculopathy," the suffix "opathy" means an abnormality of. And the word -- the first part of the word, "radical", means the nerve root supplying in this particular area, either the skin or the motor -- the muscles. Radiculopathy, by
definition, means extrinsic pressure. Something is pushing on the outside part of this nerve root causing pain to follow the radical, where that nerve is going to. The sensory fibers or the motor fibers.

So it's an entirely -- but the two terms -in fact, there's three terms that get interposed or used. Radiating pain, radiculitis -- which is -- means inflammation of the nerve, "itis" -- and radiculopathy. But anatomically, they're all different.
Q. Okay. Thank you.

And with respect to -- or following your evaluation of Ms. Garcia in this case, did you -- did you come to any conclusions as to injuries that Ms. Garcia sustained as a result of this accident?
A. Yes.
Q. And what are those opinions?
A. In my opinion, as a result of the accident, Ms. Garcia sustained primarily soft tissue injuries, which we call myofascial, meaning muscle and fascia. The -- I just want to -- just so I don't misquote myself ...
Q. Okay. And you're refreshing your recollection from your report, Doctor?
A. I'm just looking. All three areas of the spine -- the neck, the cervical; the mid back, the
thoracic; and the low back, the lumbar, which is the anatomic terms used: neck, mid back, and low back, or cervical, thoracic, and lumbar. Soft tissue sprain/strains as a result of this accident.
Q. Okay. And also could you clarify for the jury the difference between what's referred to as "acute" and "chronic" when referencing an evaluation in a plaintiff's constellation of symptoms?
A. We reserve the word "acute" when you, as the patient, can identify a specific precipitating event. "I was walking along. I slipped on the ice. I landed on my butt. And I had acute onset of pain immediately." You can relate it to an event.
"Chronic" means, "I don't know, Doctor. It's been going on for a long period of time, maybe three or four months. I'm not sure what caused it. Maybe because I was cleaning the garage, I picked up something heavy. But I've been having this low back pain now for at least three months, maybe four months. It comes and goes."

So "chronicity" means -- term from the Greek "chronos," long term --
Q. Okay.
A. -- time.
Q. Thank you.

What are your responsibilities with the evidence-based committee of the North American Spine Society?
A. They ask me -- first of all, you have to take this 12-hour online course after you -- they give you all this material. You have to answer questions and turn in your answers. And then on the -- we -- it's done through -- you know, on the -- on the Internet.

And you go through -- so it's interactive. You go through each one of the cases. You -- they know who you are. You identify yourself, the questions. And they sort of explain to you where you -- where you made a mistake in terms of is it Evidence 1, 2, or 3 leading to how you come to Evidence Levels 1, 2, 3, 4, and 5.

And then they then ask you to review this. No one reviewer is going to review 2,000 articles. So they sort of get an area which you're interested in. They may send you, over a period of time, 50 articles to read in one particular area, answering a posit, a question they proposed.

For example -- this was the material I handed out in my deposition -- what's the best diagnostic test to prove or prove [sic] instability for spondylolisthesis? That's the question.

You look at the data, and everyone agreed the best test is flexion-extension X rays. Is there evidence to prove that? Is there sufficient or insufficient? So that's how we get there.

And you're assigned one little area. It's too much work for 10 or 20 . There's at least probably 200 guys. We all don't get our name on a document that says you were a reviewer. There's guys that are, you know, responsible. So that's -- that's how the committee works.
Q. Okay. Thank you. And has the committee published its findings and recommendations regarding the treatment of the condition of spondylolisthesis in adults?
A. Yes.
Q. Okay. And when was the data first made available to the North American Spine Society as well as to the world of orthopedic surgeons?
A. In 2014.
Q. Okay. By the way, Dr. Cash testified in this case. Dr. Cash testified that he had performed flexion and extension X rays in both the neck and the lumbar spine.

Are you aware whether Dr. Cash noted any instability to the lumbar spine based on his X rays
that he performed on the lumbar spine?
A. Yes. I've never seen those studies -- those X rays, but I know that he testified there was no evidence of instability.
Q. Okay. And, in your opinion, did Ms. Garcia sustain an acute Grade II spondylolisthesis at the L5-S1 level of her lumbar spine as a result of the accident on $1 / 2$ of 2011?
A. In my opinion, she did not.
Q. And can you tell the jury why that is your opinion.
A. As I shared with you in the morning session, the most important thing is the history. An acute movement of L5 on S1, this vertebral body moving forward, is very similar to a fracture. Moving it --
Q. Doctor, if it would help, because you're kind of a distance away from the jurors --
A. Oh, I'm sorry. I apologize.
Q. That's fine. You can move right up to the bar.
A. For this lumbar segment, L5, to move forward to a Grade I or II position, it's graded -- we draw a line through the middle of the lumbar vertebra. So anything one fourth is Grade I. Grade II is halfway. Grade III is a Grade III. Grade IV, it's very rare.

They almost always call it "occur with fracture dislocations."

So if you have an acute movement of this lumbar vertebra, the pain is so severe because of the contiguous structures. The nerve root's at risk. It's -- the -- the ligament, the fat that moves with it, the vessels, that patients immediately know, "Something's wrong with me."

It's the pain into the -- the buttocks, the legs, which is about 80 percent, 20 percent low back. And patients become fearful because the pain will go around the anus. It'll go to the base of the testicles in men and the severe onset of pain in the lower extremities.

Many patients will not move for fear of what's happened. They don't know what it is anatomically, but it is so severe.
Q. And, Doctor, earlier you've testified that you've treated and cared for patients with this condition, the spondylolisthesis; correct?
A. Both acute and chronic, yes.
Q. Okay. And, in your opinion, do the records that you've reviewed in this case of the treatment that's been provided to Ms. Garcia support the constellation of symptoms that go along with an acute

Grade II spondylolisthesis?
A. No. Those symptoms fortunately are not in the records as an acute event.
Q. And do you have any -- do any cases come to mind of -- of the particular set of symptoms that have occurred regarding evaluations that you've performed as part of your medical-legal practice?

MR. SMITH: Object to the form and
foundation.
What cases?
THE COURT: Yeah, sustained. Why don't you rephrase that.

BY MR. MAZZEO:
Q. Can you describe for the jury the -- the patients that you've evaluated and -- and cases that -that you've evaluated who have suffered a, let's say, an acute Grade II spondylolisthesis.

MR. SMITH: Objection. Outside the scope of his opinions.

MR. MAZZEO: Can we approach, Judge?
THE COURT: Sure.
(A discussion was held at the bench, not reported.)

THE COURT: All right. I'm going to overrule the objection, but the testimony about any other
specific cases are only offered for purposes of establishing foundation for Dr . Klein's ability to testify in this case.

MR. MAZZEO: Thank you, Judge.
BY MR. MAZZEO:
Q. So, Doctor, you can answer that question with regard to your experience with other cases.
A. Two cases come to mind. Three years ago, I evaluated a gentleman in Oakland. The name was Ray Mario Lee, and he drove a garbage truck. And he was headed to -- it was one that had a front-end loader. He was headed to the bins on Livermore Airport. He was approaching the bins, and the hub broke on the left axle and the truck stopped immediately. And he -- he had no symptoms. He felt fine and called the supervisor, got a tow truck, took him back.

Thirty days later, to the date, same truck, the hub on the right axle broke. The truck was heavy or laden that day, and the axle dug into the tarmac. And he moved forward, even though he was in a seat belt, and had immediate pain in his low back that went in towards his anus, around his testicles, and into his legs.

He didn't know he had a Grade II
spondylolisthesis -- asymptomatic, active guy -- and
called his supervisor and said, "There's something wrong with me. Come get me. I'm not moving out of the truck." They came to take him to a medical center.

I examined him. And he had unstable Grade II spondylolisthesis. And I opined that he needed a fusion as a result of that. And I was the defense expert. He had the surgery, but it wasn't the fusion.

He had another surgery to relieve some pressure around the nerve roots, and his dura was torn. So he had that complication. I saw him again. He was worse.

So he had sustained an acute grade subluxation Grade II. He had the classical symptoms. And subsequently he had the operation he needed, which was the fusion.

Last year, I reviewed records here -- a case here in -- in Las Vegas of a gentleman that was coming up the street by the fashion mall where the valet is. And a taxicab made a U-turn right into the side of his car, an acute injury. And he immediately had similar symptoms. Couldn't get out of the vehicle, taken to an emergency room. And his symptoms persisted. And he subsequently already has had a fusion, and he's doing very well.

In each of those cases, the symptoms were
consistent with an acute injury, acute movement. And -- and I opined that the surgery was related to the accident. Those are the two that recently come to mind.

MR. SMITH: I move to strike.
Can we approach, please?
THE COURT: Sure.
(A discussion was held at the bench, not reported.).

THE COURT: Objection's overruled.
MR. MAZZEO: Thank you, Judge.
BY MR. MAZZEO:
Q. Doctor, in what way -- and you may have touched upon this earlier -- in what way does a traumatic injury to a preexisting Grade II spondylolisthesis affect one's functionality?
A. With an acute slip and contusion of the nerve roots --

## May I approach?

Q. Oh, please do. Yeah.
A. The structure at risk with an acute slip of the nerve roots, any type of spinal injury -- fracture, dislocation, large disk herniation -- it's the nerve root that supplies the muscles, the tissue, the skin. So the thing that has to be protected is the nerve
root.
When the acute slip occurs, in addition to the localized severe spasm, which is a protective mechanism -- and there's no model here. But from these major nerve roots, there's thousands of fibers that are going into the muscles that sit in front and behind this area.

With the nerve root being irritated, being bruised -- just appreciate when you hit your funny bone the severe pain in your hand. Imagine that ten times as bad. It causes spasm in this big group of muscles called the hamstrings (witness indicating). So patients have difficulty even standing because of the spasm, the severe pain.

And if you injure both nerve roots severely, you can get what's called a cauda equina syndrome. Because as the nerve roots all come down, it looks like a horse's tail. That's the term we use, cauda equina.

So the cauda equina syndrome, the acute, which tends to usually go away over the next 72 hours, is severe spasm, severe pain, in some cases incontinence of urine and feces. It's a very severe injury.

Patients immediately will present to an urgent care center or emergency room because of the
pain and just the inherent knowledge "something's wrong with a part of me, but I don't know what." That's how it affects function.
Q. Okay. Thank you. And what's your understanding as to how Ms. Garcia's functionality was affected as of this -- or as a result of this accident?
A. Based upon the records I was provided and my opportunity to interview and examine Ms. Garcia, she did not have the symptoms that comport to an acute slip.

She was ambulatory at the scene. She got a ride home with the tow truck driver. Her concern that evening was getting her three daughters ready for school, just the busy things a mom does. And the next morning, getting the kids ready to school and taking them to school.

During the day, as she shared with me, she had some pain and some numbness down into her foot while in the cage -- the cashier's cage. In my opinion, that was radiating pain, not radicular pain.
Q. But also what Ms. Garcia shared with you was in a scope of a medical-legal evaluation, which you had testified was inconsistent with her prior reporting to other providers; is that correct?
A. Yes. That's my -- I noticed those
inconsistencies, and I put that in my report. I'm talking about what -- the records and what she -- she remembered.
Q. Well, what she remembered is what she's reporting to you at the time of your evaluation?
A. Yes. But that's -- you know, this is three years and eight months later.
Q. Right.
A. So -- so my memory can get a little bit blurry, but I -- I reminded her, you know, of what she had reported. I had the records.
Q. Oh, okay. What she reported at MountainView Hospital?
A. Yes. Yes.
Q. Sure.
A. So what she had reported. And then with an acute slip, she would have presented to emergency room, urgent care center that afternoon. So -- and -- and certainly during the night. Some patients have greater tolerance for pain. It would have been difficult to get through the night. So it just doesn't -- the symptoms of an acute slip aren't there.
Q. Okay. And what diagnostic tests are used to confirm whether a patient sustained an acute trauma to a preexisting Grade II spondylolisthesis?
A. With the complaint of severe low back pain and buttock pain, the initial -- the physician might think you've got an acute disk, not a subluxation or a slippage. So the -- it's -- normally, the first X ray is lumbar spine films. Depending upon the neurologic examination, if the physician is concerned, he's not sure what's going on, if there's hamstring spasm, some change in reflexes, either hyperactive or hypoactive, the next would be an MRI study --
Q. Okay.
A. -- of the lumbar spine to look at both bony detail and subtissue.
Q. Thank you.

And in what way do core-strengthening exercises and weight loss assist with a stable -- let me distinguish stable from an unstable -spondylolisthesis?
A. For the patient who has a stable -- meaning it's not moving -- a stable spondylolisthesis, the core strengthening of the deep muscles down inside in front of here -- this -- it's called the iliopsoas. It's actually the muscle that filet mignons are made from.

But the big group of muscles are the ones in the back that you can feel, the ones that you pull when you overexercise or heavy lift or lift wrong or overuse
syndrome.
In addition, it's the abdominal muscles. The spine depends upon the strength of the muscles in front, the muscles in the back, and the deep core muscles working together to maintain good, erect posture.
Q. Okay. Now, what's your opinion with regard to whether Ms. Garcia's -- Ms. Garcia's preexisting Grade II spondylolisthesis was stable or unstable following this motor vehicle accident, and why?
A. Number 1, she's -- as the records affirm, she's testified she had no symptoms. People that have instability, progressive movement, whether -- and it reduces on its own have symptoms of low back pain. They may not have any radicular pain or radiating pain, but they have localized low back pain.

The other is her X rays and her MRIs clearly show what we refer to as buttressing. The slippage is taking place over a period seven to nine years, maybe longer, since she was skeleton mature. And you can see the buildup of the bone.

Bone cells respond to pressure, in other words, weight-bearing pressure. We call it Wolff's law. And the body knows it's slipping. And you can surely see on her X rays and her MRI that she's
building up bone at the bottom of L 5 and the top of the sacrum, buttressing to keep it from slipping any further. And that takes a long time for that to become mature that you see on the X rays and the MRIs.

So this has been going on. And it's very slow. It's moving less than a millimeter per year probably.

And then, depending on what she does -- and it'll have periods of where it doesn't move, and then it'll move a little. And it's part of -- things that we know aggravate it is pregnancy. During the third trimester of pregnancy, there's a hormone called relaxin that relaxes all these ligaments that are in the pelvis. We know that that's a period where a spondylolisthesis will move forward.

But when patients are pregnant and have low back pain, we don't X ray them because of the fetus. So the diagnosis never gets established. And it's assumed, "Well, you just are pregnant, and you got low back pain." And then you have this large, you know, swollen uterus.
Q. And so based on all of the -- the reports, the treatment records, and the imaging studies and reports that you've reviewed in this case, your determination -- what was your determination as to the
stability or instability of Ms. Garcia's spine?
A. She had a very stable chronic slip -- we use the term "chronic" because over time -- and the fact that she subsequently had flexion-extension X rays performed by Dr . Cash that showed it was stable.

That's the other set of X rays. Can we demonstrate on flexion, when we ask the patient to bend, and to extend movement?
Q. Thank you. Okay. Thank you, Doctor. Okay. Let's move on now.

In your report, you had cited various articles regarding the treatment of spondylolisthesis, and I wanted to ask you some questions about those articles.
A. Sure.
Q. First I will ask you, what was your purpose in referencing certain articles?
A. The treatment of spondylolisthesis was, is, and continues to remain controversial.

You have a group of surgeons, treaters who feel it needs to be treated even if it's stable, assuming it's going to progress.

You have another group that says, conservative treatment works adequate, weight loss, exercise.

I thought that by referencing the report from Dr. Spratt, from Dr. Moller, from Ekman, Donaldson, they give a balance that -- there isn't any particular cookbook that works all the time. One of the articles was a 45-year follow-up. They had followed kids -children that had spondylolisthesis through their adult years.

So my point was to give some balance and to show there isn't just one way to do it. And, in fact, Mr. Smith asked me those. We went through those in detail in my deposition, what -- what -- the purpose and what --
Q. Sure.
A. -- and -- and that was the whole point of it, putting them in there.
Q. Now, in the Moller article that discussed surgical versus conservative treatment for spondylolisthesis.

What was the gist of that article by Moller?
A. The article shows some patients respond very nicely just to conservative treatment. The article also shows that -- and, in fact, one of the things you mentioned earlier, the NASS study, that patients who have surgery early on get more immediate relief. Then they do crossovers, people that were treated
conservatively then had surgery.
So you compare those groups at five and ten years. And coming -- trying to come to a consensus, it sometimes is successful. It depends upon the follow-up. It's very difficult to -- to keep one group of people in one area to get the follow-up as the years go by. We tend to be a transient society.

The Spratt article was, how does it work just to do exercises, flexion-extension, and use bracing? The -- I mentioned the Ekman article, long-term effects of the surgery. So that -- my own purpose was balance, not to show any bias.
Q. Okay. All right. Let's move on to -- to the MRI studies.

As you know from your review of the records in this case, multiple diagnostic studies have been performed on Ms. Garcia since January of 2011; right?
A. That's correct.
Q. Okay. And would this be a good opportunity to review those and share those with the jury?
A. I think so, yes.
Q. Okay. But before we go into the studies specifically, why don't you tell the jury, you know, the part of your clinical practice and medical-legal practice, what your -- the nature and scope of -- your
work entails involving reviewing films, diagnostic imaging studies?
A. In my practice as an orthopedic surgeon and before that as a physician, we were trained to read $X$ rays. And as I shared with you, just from the -- my training -- the years of training, my training began before the MRI or the CT was even available.

So we are trained to look at X rays, know what is normal, a variant, and markedly abnormal, like a severe fracture of a leg, an arm, or the spine. Because we're trained in what normal anatomy is.

With the advent of the MRI, then I started taking classes and took my first class here in Las Vegas with Dr. David Stoller, who teaches MRI studies. I took the opportunity to sit with a fellow named Dr. Al White, who was interested. He was learning too -- he's a radiologist -- to -- to keep adding to my knowledge base of interpreting MRI studies as the technique got better and better.

On a weekly basis, I teach residents X rays. I teach them how to interpret MRIs because you have to know cross-sectional anatomy and coronal anatomy.

So as part of my med-legal, I'm looking at 2 to 300 MRIs of the spine every year. They're repetitive ones, as Ms. Garcia's had; people that have
just had one.
So -- and my background and knowledge as a anatomist, a neuroanatomist, I know -- I can see -sort of like Superman. I have X ray vision. I know what it's supposed to look like in a three-dimensional format. So it's an area of extreme comfort for me.

And the other thing is, as the techniques improve, the -- which we have to thank our engineers for -- the computer programmers keep improving the way that the -- that they're formatted through the computer.
Q. Okay. Now, what's the value of magnetic resonance imaging studies, MRIs, in terms of looking at the structures of the vertebrae, disks, and tissues?
A. The big advantage of MRIs is there's no X ray. There's no radiation. They're using a big magnet that lines up a hydrogen ion, and then you throw an electrical beam through it, the energy. And you then are able to come up with a image, and then it's reformatted through a computer. Okay. That's -- in simplification.

It really is best for looking at soft tissue -- that's what it originally was for -- more so than looking at bone. Bone imaging is best done through a CT scan, which is X ray. But there's X ray
radiation. So they both have some limitation.
The MRI gives you a great deal of
information. We typically say they are highly -- they have a high degree of specificity but -- a high degree of sensitivity but a low degree of specificity. They give us almost too much information.

So you have to correlate what you see in the MR, the patient's symptoms and histories, and the exam. There has to be a clinical correlation, and that's a common last sentence in radiology reports, "clinical correlation necessary."
Q. Okay. Thank you.

MR. MAZZEO: So let's go ahead and take a look at this. Judge, if we can turn the monitor on. I think it --

MR. SMITH: Can we approach, Your Honor?
THE COURT: Sure.
MR. SMITH: I'll be brief.
(A discussion was held at the bench, not reported.)

MR. MAZZEO: I don't know if that went on.
THE COURT: I'm not seeing anything on my screen yet, which means it's not going through the system yet.

MR. MAZZEO: Oh, okay.

THE COURT: You have it going through the ELMO, not through the table; right?

MR. MAZZEO: Correct. Right through the ELMO.

No RGB signal, Judge. Whatever that means.
Regional --
THE COURT: I pushed all the right buttons on my screen.

MR. MAZZEO: Okay. And I think that the monitor went off, Judge.

THE COURT: It's still not showing on the little monitors, so it's not going to show up up there --

MR. MAZZEO: Okay.
THE COURT: -- unless you get it on everybody else's screens.

MR. MAZZEO: Well, is there -- yeah. Sure.
Yeah, let's do it this way. Actually, I mean -- Roger, I can keep this at the table if you just want to go from slide to slide.

Yeah. Oh, there we go. Got it, Judge. Just wasn't a tight connection. I think I have it. So I -but I think it has to be switched. No? I'm on -let's see here.

THE COURT: Whatever you're seeing is what
everybody else is seeing.
MR. MAZZEO: Okay. Slide show. Oh. We're up. Here we go. BY MR. MAZZEO:
Q. And, Doctor, what I'll -- yeah. Thank you. You -- that's what I wanted to ask you. I know you have it come up on your screen, but I wanted you to come down so you can actually show -- point to the structures as you look at these slides.
A. Is there a laser pointer --
Q. So --
A. -- available?
Q. I don't know if the laser pointer will pick up on that -- on the monitor. So --
A. Is there a pen pointer?
Q. That is a point on the -- at the end of the cap, so ...
A. Serious budgeting issues.
Q. To use that. Okay. So and --
A. I just don't want to block this --

MR. MAZZEO: Yeah. Can everyone see this screen fine? Okay.

THE WITNESS: Sometimes there's these long pointers in courtrooms.

MR. MAZZEO: This is -- Mr. Bailiff, is this
the laser pointer?
THE WITNESS: No.
THE COURT: That's the remote control.
THE WITNESS: Oh. I'm very sorry.
MR. MAZZEO: I mean, if you can make do with
using your finger or using the pen, we can --
THE WITNESS: Can you lower the lights a little bit, just for some contrast?

MR. MAZZEO: We might get better -- better contrast if we can lower the lights in the front, Judge.

THE COURT: I don't know how to do that.
MR. MAZZEO: Oh, here it is. Curt, do you have control over the lights? We want to make -- we want to -- it will make the images clearer for the jurors if we can lower the rights in this area.

THE MARSHAL: Well, the answer is, it's complicated.

MR. MAZZEO: Okay.
THE MARSHAL: I do better from over here.
MR. MAZZEO: Okay.
THE CLERK: Do you want me to get it? Is it
over here?
MR. MAZZEO: There we go. That works.
THE WITNESS: Thank you.

MR. MAZZEO: Great. That's good? Better?
THE WITNESS: What I'm sharing with you, I was provided three sets of MRIs that were preoperative. This is $1 / 26 / 11,24$ days after the accident. And this, as you can see, I'll just mention if you can't 11/19/12. So we have a -- about a 22 -month hiatus between this and this.

And whenever you do magnification, you're going to see Lowe's resolution. This is the L5 vertebral body. You have heard about that before. This is the sacrum. And the point that I put on here, bone spur, this is the bone spur that has developed at the lower part of L5, the top part of the sacrum. As L5 is slowly been moving forward, this is -- the dark thing is the disk, but this is the spur. We sometimes call it the top of the sacrum or the sacral promontory.

The reason it's whiter is, as I testified earlier, bone responds to pressure, the bone cells. We call this buttressing. The body knows that this is slipping, and it responds by building up bone and remodeling. And you can see that it's here, at S1. I'm telling you, this is a long-term, chronic problem.

Next?
Q. Sure.
A. The other thing that we look at is the
structures at risk. And I keep talking about -- I sound like a -- a --

Go back one.
Q. Yeah.
A. -- a broken record, but it's the nerve root. Can we demonstrate that this nerve root, the one that I showed you on the model, is at risk? What's it look like? So we don't just look at the nerve root. We also look at the fat -- the peri -- there's fat around it -- and the accompanying vessels. One's here, one's here. Because when it moves forward in an acute slip, the pressure makes this go away, and the vessels get contorted. So this is the nerve root, and this is the sacrum. Here's L1. And you can -- and in my opinion, there hasn't been any change.

We also look at the shape of the neural
foramen. Has it changed in its configuration? So we see that these all are what we would expected to see. Go ahead?
Q. Sure.

MR. SMITH: Your Honor, is there a question here, or are we just going to get a presentation?

THE COURT: Good point. Let's have a
question.
/////

BY MR. MAZZEO:
Q. So, Doctor, what I -- my question would have been please explain what -- what you're showing to the jury on this -- on this slide. And you did.
A. That's the information that we can glean from that slide.

Next one.
Q. Okay. All right. Doctor, tell us what slides we're looking at -- tell the jury what slides we're looking at --
A. All right.
Q. -- the dates, and tell us the findings that are significant with respect to this case.
A. So then I took the opportunity to do what's called sagittal -- right down the center of the MRI -from 1/26/11, 8/19/11, eight months later, and 11/19/12. Three MRIs. What I'm looking for is evidence of change -- anatomic change of is this moving forward at all, L5 on S1? I'm looking at the -- this white area, which is actually the fluid, and looking to see has there been any change between the three.

In my opinion, there hasn't been. This is the dural sac where the nerves roots are. Here's the vertebral body. This is L4-5. The configuration at this level -- L5-S1, L4-5 -- hasn't changed between

January 26th of '11 and 11/19/12.
Q. And was this an opinion that you arrived at independently, based on your own evaluation?
A. Yes. And I thought it would be helpful from an instructional standpoint to just put these three together.
Q. Sure. Now, in addition to you arriving at this assessment regarding these three films, did you also have an opportunity to speak with a neuroradiologist, Dr. David Seidenwurm?

MR. SMITH: Objection. Outside the scope of his report. Testifying outside the scope of his expertise.

MR. MAZZEO: Your Honor, the expert can rely on hearsay evidence, which is what he has done as well.

THE COURT: The question that he was asked so far, I'm going to allow.

MR. MAZZEO: Thank you.
THE COURT: Once he gets into the next
question, make the objection.
MR. MAZZEO: Okay.
THE WITNESS: I did. And -- and, in fact, I mentioned that in my deposition.

BY MR. MAZZEO:
Q. Correct.
A. That because of the issues --

MR. SMITH: Your Honor, objection. He's going to testify as to what you thought the next question would be, and he can't parrot the opinions of another expert if it's outside the scope of his expertise.

THE COURT: He answered the question. Ask another question.

MR. MAZZEO: Yes. Thank you, Judge.
BY MR. MAZZEO:
Q. All right. And what -- in conferring with -after arriving at your own independent opinions, and after -- and secondly, in conferring with Dr . David Seidenwurm, a neuroradiologist, what discussion did both of you have with regard to these specific findings at the L5-S1?

MR. SMITH: Objection. Same objection I just laid out.

THE COURT: Sustained.
MR. MAZZEO: Judge, can we approach, please?
THE COURT: Sure.
MR. MAZZEO: Thank you.
(A discussion was held at the bench, not reported.).

MR. MAZZEO: May I proceed, Your Honor?

THE COURT: You may.
BY MR. MAZZEO:
Q. So, Dr. Klein, after speaking with Dr . David Seidenwurm, did your discussion with him change any of the opinions you arrived at independently with regard to there being no change between the three studies that were performed?
A. He concurred with my assessment.
Q. Okay. And --

MR. SMITH: Objection. Move to strike.
THE COURT: It will be stricken.
MR. MAZZEO: Okay.
THE COURT: The question that was asked.
BY MR. MAZZEO:
Q. Okay. And if I can -- did -- rather than what Dr. Seidenwurm said, my question was: Did that change any of your opinions after speaking with the neuroradiologist, Dr. David Seidenwurm?
A. It did not change my opinion.
Q. Thank you.

Okay. Anything else with regard to this slide, or should I move on?
A. Move on.
Q. Okay. All right. So tell us what these three slides -- what the dates on these three slides
and what they represent.
A. These are the same three dates, 1/26/11, $8 / 19 / 11$, and $11 / 19 / 12$. These are the $T 1$ weighted images. If you go back to the other slide, you'll see that the spinal canal, the structures are dark. Here they're white. And, again, each image of the formatting gives us other information. The disks are dark, so you can see that, on each one of these, with some minimal technical changes, L 5 is in the same position it was on $1 / 26 / 11$, the same place it was on this 11/19/12. There's been no change. This even clearly shows the buttressing and the building up at the top of sacrum, and even better over there.

Every time you do an MR, you're going to get a little different finding. That's just the way they are. You do -- the same person in the morning and the afternoon, you're never going to get same identical image. The point being, it demonstrates stability.
Q. Now, if you recall, at the time of your deposition, you were asked about the third one on November 19th of 2012, performed by radiologist Dr. Hake. H-a-k-e.
A. Yes.
Q. And who noted on the report that there -- he noted a progressive worsening of the -- of the slip --
slippage, the T 1 -- the L 5 on top of the S 1 ?
A. Yes. I have that on the slide. He reported that it went from, I think, 7.2 millimeters to 10.3, in that range. In terms of millimeters, yes.
Q. Okay. And so -- and what was your -- having reviewed these films, have you -- have you -- are you in agreement with Dr. Hake or -- or do you have your own independent opinions with regard to whether there was a progressive change?
A. I have my own independent opinion.
Q. Which is based on what you've said?
A. Yes. There is no change. And the variation with MRs from one to the other over this period of time, you don't have that quality of resolution. There's at least a 10 percent error of measurement, with -- you say from 10 -- 3 millimeters is less than an eighth of an inch, but it could be the other way as well.

There just -- we don't -- it would be nice if we had that finite measurement, but none of these -there's no MR right now -- the biggest magnets that you can measure things in millimeters, you have to correlate it to the clinical symptoms. That's what's lacking here.
Q. And for the jurors' own edification, how can
you assist them in -- in showing points of reference which might -- to indicate there's been no progressive change from one to the next?
A. You focus on the back of $L 5$ at this point. It looks a little different here, but look at its relationship here to the back of the sacrum. Look at it -- its relationship from the bottom of $L 5$ here to the back of the sacrum. And the same when we get to 19 November of 2012.

Look at the tissue here, which is the posterior longitudinal ligament, in this area, and this is fibrous tissue. This goes along with the chronic slip. It all looks the same. This whiteness, as we call hyperintensity. This is based upon that beam, that day, and the -- the problems that we deal with in terms of MRI studies.
Q. Okay. I'm going to back up to the first slide again. Sorry. The second slide. The -- on the left side -- the left -- the image on the left side.
A. Yes.
Q. And you have two boxes circled or outlined in red. And you pointed that out to the jurors.

That -- that depicts what, specifically?
A. That's the --

MR. SMITH: Objection. Outside the scope of
his report and testimony.
MR. MAZZEO: It doesn't, Your Honor --
THE COURT: Come on up, guys.
(A discussion was held at the bench, not reported.)

THE COURT: Based on the representation of what the testimony will be, I'm going to overrule the objection. Go ahead.

MR. MAZZEO: Thank you, Judge.
BY MR. MAZZEO:
Q. All right. Doctor, the -- I went back to the slide. This was the second slide in the presentation. You talked about this a few minutes ago.

What I want you to talk about, does this slide, particularly the one on the left -- well, the left and right -- do they show the nerve root?
A. Yes, they do. It was -- I just took red to show the size of the foramen. And it's -- it's -there's a magnification here. This is the nerve root, the dark structure. It's surrounded by what we call perineural fat. Every nerve has fat around it. And these are the accompanying vessels. One here and one there.

If the nerve root had been moved at the time of an acute slip, the contour of the foramen would be
different because the vertebral body had moved forward, and the vessels would not be in the normal position. That's what this demonstrates quite clearly.
Q. And so how do you characterize the condition of the -- that would be the $L 5$ nerve root, the one on top?
A. Yes. But, see, if L5 moves, it's going to take the L5 nerve root with it. And L5-S1 is the S1 nerve root. You see how -- mentioned it here?
Q. And how -- so how would you characterize the condition and -- and --
A. It's stable.
Q. Okay.
A. The condition is stable. It doesn't depict movement of the nerve roots.
Q. Okay.
A. The structure's at risk.
Q. Okay. And also, from looking at these two films, what, if any, indication is there of any -what's referred to as impingement or pressure on -- or compression of either the L5 or S1 nerve roots?
A. Doesn't exist.
Q. And that can be seen in -- on these two films?
A. If -- if L5 had moved forward as a result of
an acute event, you would not see a normal-appearing contour of the foramen. It would be changed. You can -- usually, in this situation, it would look like this because, as the body moves forward, it's going to pull nerve root and vessels with it. The configuration would be different.

The same on the S 1 nerve root. You would see it -- it doesn't have the elasticity, and it would be draped over the back of the $\mathrm{S} 1 \mathrm{-}$ the top of S 1 .
Q. And -- and as an orthopedic surgeon who's evaluating and looking at this film, what does that tell you in terms of the potential for symptomatology to emanate from the L5 or S1 nerve roots?
A. It correlates directly with her clinic -lack of clinical symptoms of an acute stretch injury or contusion to the L5 and S1 nerve roots. The lack of those immediate symptoms, I shared with the jury earlier. The severe pain and lack of pain radiculopathy into the buttocks, the hamstrings, and down into the lower extremities.
Q. Thank you. We're going to move on. I think we were up to Slide 5. Right? We already talked about the sagittal T2; right?
A. Yes.
Q. So now we're up to Slide 5.
A. Yes.
Q. And would you please --
A. This is --
Q. -- discuss with the jury what this slide -what these two films represent and the dates.
A. Okay. This is 1/26/11. Both the same. And what -- you changed it.
Q. Sorry. Slid back. There we go.
A. I said, the two words here -- you may have heard it earlier, during the course of the trial -- T1 and T2. This is, as you can see on the T1, it's white. Over here, it looks a little bit different. It's dark. But the point being, this is the area we're talking about. This is now looking -- it's a loaf of bread. We're looking down on top of the vertebral body, the canal, over where the nerve roots are coming out. That's the importance of this slide.

This is -- the abdomen is up in the front. This is the back. In other words, Ms. Garcia's laying on her back, as all patients are, in an MRI unit. This demonstrates normal-appearing nerve roots. This is what the nerve root looks like. Since she's lying on her back, the other nerve roots pull down.

If you get over to this side over here on the T2, you can see, quite nicely, that the nerve root is
beginning its transverse, moving along to go out through the foramen. This round thing that's dark here is the same thing that's over here. It just appears dark. The muscle, everything is the same.
Q. And when -- when you're looking at this -this nerve root --
A. Yes.
Q. -- is coming down from the -- this is what level?
A. Well, this is -- this is just a represent -doesn't show here, but this is a lumbar. There's the -- the ganglion. This is the nerve root as it comes through the foramen, the contour of the foramen. And the slice is through this area. (Witness indicating.) So we're looked straight down to see, has this nerve root been drug along? Because there's no slippage here. This is a normal level.
Q. Sure.
A. Okay?
Q. But this is Ms. Garcia's actual study?
A. Yes.
Q. Okay.
A. Exactly.
Q. And this -- this nerve root that you pointed out is -- is which nerve root?
A. That's the L5.
Q. Thank you. Is there any indication of any impingement, pressure, compression of that L5 nerve root?
A. No. It's a beautifully round, normal-appearing nerve root.
Q. Okay. Moving on. We're on Slide 6.

Tell the jury what these slides represent, and identify each of these films that we're looking at.
A. Again, this is -- the yellow line shows through -- this is L4-5. Vertebral body 5, vertebral 4. This is S 1 . You can see the 5, where it's moved forward. This demonstrates -- this very small bulge here we call a normal physiologic bulge at the back of the vertebral body of the annulus. You can see it there and here. (Witness indicating.)

And just showing you -- this clearly depicts, as the nerve's moving up, appreciate each one of these is 4 millimeters in thickness. You can see the configuration of the nerve root here, here as it goes out. You don't see it as far in this side. It's never symmetrical, but you can see it on the right side here.

This means left and right. You can see $R$ and H. It's always reversed on the MR. These are the other nerve roots. The lower sacral nerves, as
they're -- because she's lying on her back. So L5 --L4-5 is a beautifully looking -- appearing nerve root. There's nothing wrong with that nerve root.
Q. Okay. All right.
A. Had -- had the vertebral body moved forward, it would look abnormal.
Q. Okay. We are -- now, this is the next slide. Slide 7.
A. Again, the first one, done 24 days later, that there's no pressure on the nerve roots. These are the nerve roots moving through the foramen. This is 1/26/11. It did -- you can see the difference, T 1 and T2. And then the sagittal picture, just to show you where the cut is through.
Q. Now, in looking at these slides that are taken -- what did we -- what is it? 24 days after the accident?
A. Yes.
Q. Because all of these slides are from January 26th of 2011?
A. Correct.
Q. So what does this tell you in terms of Ms. Garcia's complaints with respect to her lumbar spine or -- and low back?
A. This affirms to me that her complaints are
not emanating from injuries to nerve roots. That's really good because that's the structure at risk. Her back pain is from the soft tissue component. The lumbar -- the muscles, of which there are significance -- appreciate, in terms of the anatomy, 90 percent of the tissue is muscle and soft tissue. The nerve roots make up maybe 1 percent of the total tissue.

So this affirms -- in the absence of deformity of the nerve roots, the absence of the system -- symptoms, the absence of clinical findings that go along with nerve root, tension, her symptoms are those of soft tissue complaints.
Q. Okay. Moving on to the next slide, 8.

Tell the jury what these slides represent and the dates of these slides.
A. This is August 22nd. All these are the same. August 22nd. And what I wanted to show you on this -now, this is looking at her at a bit of an angle.
Q. Sorry, Doctor. What's -- I'm sorry. What's August 22nd?
A. This is -- let's see. Excuse me. I missed -- let me get over and get one. That's a little bit fuzzy because of the blowup.
Q. Yeah, it is.
A. This is -- excuse me. This is $1 / 19 / 12$ and 1/26/11 comparison. Okay?
Q. 11 -- it's 11/19/12. It's cut off on the left side.
A. Excuse me. 11/19/12 and 1/26/11. In other words, the 20 -month hiatus -- 22-month hiatus.
Q. Okay.
A. And this -- this one -- both these show this beautiful-looking nerve root as it's coming out on both sides. This is the nerve root. Sometimes you don't always get such a nice on an MR.

Here's the -- this looks oval here because of the angle, but it's the vertebral body. You can see the nerve root coming out as it's coming down and as it's exiting. There is just no pressure or deformity on this nerve root at all.
Q. And what level is that?
A. This is at L5-S1, the S 1 nerve root.
Q. Okay. And -- and so the top row of slides are from 2012, and the bottom three slides are from 2011?
A. Yes, you can see here. You've magnified this, so it does -- cuts off the date. Here's '11; here's '12, 22 months later.
Q. Okay. So what, if any, appreciable change do
you note, if any, from 2011 to 2012?
A. None.
Q. Okay. All right. Moving on to Slide 9.

MR. SMITH: Objection, Your Honor. Outside the scope of his opinions. This is what we discussed at the bench.

MR. MAZZEO: Judge, can we approach on this? THE COURT: Sure.
(A discussion was held at the bench, not reported.).

MR. MAZZEO: Curt, could we have lights, please, for a minute. It's too dark to see the words.
(A discussion was held at the bench, not reported.)

MR. MAZZEO: May I proceed, Your Honor?
THE COURT: You can.
Was there an objection to this specific
slide?
MR. SMITH: Yes.
THE COURT: Because I took the slide down. You want to move on to a slide that might not be objectionable?

MR. MAZZEO: Well, you didn't sustain the objection with regard to the slide.

THE COURT: Turn the TV off so I can look at
the slide again.
MR. MAZZEO: I think it's off, Judge. And I'll turn to it. There we go, Slide 9.

THE COURT: Well, if -- if the problem is, if I put the slide back up, you're going to see it. So turn the TV off.

JUROR NO. 3: The TV is off.
MR. MAZZEO: It's off, Judge.
THE COURT: Now there's a slide there; right?
MR. MAZZEO: No. No. It's just turning on.
I'll shut it off.
There we go. It's off.
MR. SMITH: Your Honor, may we approach about this one? Because this is a different one than we were discussing.

THE COURT: Yep. Come on up. Sorry, folks. (A discussion was held at the bench, not reported.)

THE COURT: Jury needs a break. Okay. Let's take a break.

All right. Folks, let's go ahead and take a break. During our break, you're instructed not to talk with each other or with anyone else about any subject or issue connected with this trial. You are not to read, watch, or listen to any report of or commentary
on the trial by any person connected with this case or by any medium of information, including, without limitation, newspapers, television, the Internet, or radio.

You are not to conduct any research on your own, which means you cannot talk with others, Tweet others, text others, Google issues, or conduct any other kind of book or computer research with regard to any issue, party, witness, or attorney involved in this case.

You're not to form or express any opinion on any subject connected with this trial until the case is finally submitted to you.

See you in ten minutes. We'll take a quick one.
(The following proceedings were held outside the presence of the jury.)

THE COURT: All right. While we're outside the presence of the jury, let's go ahead and put this on the record since we've been having a lot of time spent up at the bench.

With regard to these various slides, my understanding is that Dr . Klein testified on page 29 of his deposition that he saw a postoperative MRI. So I let you ask questions about the postoperative MRI or I
said that I was going to.
You then switched the slide to discuss a postoperative X ray, which apparently is not referenced in the deposition. And I said that, because the slide or the exhibit has apparently been shown to other doctors, you can ask him whether or not, after seeing this slide or this X ray, his opinions have changed.

Doctor, while you're here, I'm going to make it real easy for you.

The instruction was, if the opinion has not changed, then he will answer no and you can move on to the next question. If the opinion has changed based on anything you show him and he answers it yes, I'm going to strike the opinion because it's not previously offered. Okay?

MR. MAZZEO: Yes.
THE COURT: Anything else we need to discuss as it relates to those?

MR. MAZZEO: No, Judge.
MR. SMITH: One other thing that we discussed, Your Honor, is the opinions regarding the postsurgical MRI. And the only disclosure to us of him reviewing a postsurgical MRI is that page 29 of the deposition, where he says, if you look at the postoperative lumbar MRI, there's still fatty
infiltration of the multifidus muscles that we saw on the preoperative MRI. So her obesity is a factor and her deconditioned status as the basis for her ongoing low back pain.

When we got his reports, neither of his -- or his initial report identifies the scans that he has reviewed. And that report does not mention the postsurgical MRI that he intends to testify about. And, in fact, that report was generated before she had that MRI.

His subsequent two reports do not mention this postsurgical MRI. And, in fact, on January 6th, 2016, Dr. Klein authored a report where he said, "I was not provided any additional diagnostic studies for review."

Our understanding at the time of the deposition was that he was talking about having reviewed the report. We also were time-limited in his deposition and cut off by defense counsel because the time ended. So we didn't have an opportunity follow up on things like this because there were other parts of the deposition that we thought were more important.

If Dr . Klein is going to testify about the postsurgical MRI, which we don't think he should be allowed to because he never offered any opinions and he
says specifically on January 6th, 2016, he did not receive that film. And we should be allowed to rely upon his statement on January 6th, 2016.

But to the extent he's allowed to testify about it, the only opinion he should be allowed to give is the opinion that $I$ read into the record that's in the -- in the deposition. He should not be allowed to expand upon that opinion or talk about how that MRI relates to the presurgical MRIs in any other way because those opinions have never been offered.

And as we discussed at the bench, as an expert witness, he cannot expand upon his opinions or offer new opinions at trial. This MRI is from October 2014. He has had sufficient time to provide us with the opinions that he intends to offer in front of the jury and have -- has issued two reports since that MRI. And having not provided those opinions to us before today, then he's not allowed to testify about them.

THE COURT: I tend to agree. Are you planning on offering or asking him questions based on those post -- that postoperative MRI in addition to what he offered in his -- in his deposition?

MR. MAZZEO: From -- that would be from October of 2014?

MR. SMITH: No. It's October 2014. June is the X ray record.

MR. MAZZEO: So you're talking about the October 2014 MRI?

THE COURT: He apparently offered a specific opinion in his deposition at page 29 as it related to a postoperative MRI. I think that opinion is fair game for trial today.

MR. MAZZEO: Okay.
THE COURT: Any other opinions as it relates to postoperative MRIs, I think I agree with Mr. Smith. If it wasn't previously disclosed, it can't be offered.

MR. MAZZEO: Well, Judge, with regard to his January 6th, 2016, report, to the extent that he didn't review any for the purposes of that report doesn't preclude him from offering opinions where he's reviewed them prior to other -- prior to some of the other supplemental reports that he's provided. And that's what I'm looking at right now, if I can just have a moment.

THE COURT: If you can find me something that shows that he looked at these postoperative films and offered opinions on them in his reports, then I allow it.

MR. MAZZEO: Okay.

THE COURT: Why don't we -- why don't we go off the record. We'll take our break. And if you find something, you can let me know when we come back. Fair enough?

MR. MAZZEO: Yes, Judge.
MR. SMITH: Thank you.
THE COURT: All right. Off the record.
(Whereupon a short recess was taken.).
THE COURT: Back on the record. We're still outside the presence.

MR. MAZZEO: Okay. All right. So what we discussed off the record, Judge, which we're going to put on the record now, is that what I intend to -- how I intend to proceed with Dr. Klein is, I'm going to show him that Slide No. 7, and it shows the post-op $X$ rays. I'm going to ask him that one question that we discussed earlier about whether his inspection and review of that imaging study changes any opinions that he's expressed in this case with regard to the necessity for fusion surgery or the condition of the spondylolisthesis postaccident.

Same thing with the 10/11/14 MRI slide, which is No. 8 and 9 in the presentation. Just those one -just those questions. And then the 10th slide is a comparison that shows the 10/11/14 post-op versus the

1/26/11 and $11 / 19$ pre-op images.
Again, my question to you is whether that changes any opinions with regard to the condition of the spondylolisthesis postaccident, postsurgery.

THE COURT: As long as you're just asking him if seeing these things is changing his opinion, I'm okay with it. If you ask him now to offer a new opinion comparing the three MRIs, that's where they're going to have an objection because that's apparently what wasn't previously disclosed; right?

MR. MAZZEO: That's correct.
MR. SMITH: And there's a separate issue with this. He's not just showing them the images. They have words on here that are new opinions from him or that could -- some of them are new opinions, and some of them could lead the jury to believe that there are new opinions.

So if counsel wants to ask if he's reviewed the X rays or the MRI -- or this X ray or this MRI and did it change your opinions, or if he wants to show the actual X ray or the actual MRI film, that's one thing. If he wants to show these slides that have words on them, that have the opinions that are being excluded, that's a problem.

THE COURT: Can you do it without the words?

MR. MAZZEO: No, Judge, and that would be unfair rulings from the bench with regard to plaintiff versus the defense. We had an artistic image by the plaintiff that I objected to because they put the word "edema" on something that half their experts disagreed with, but they put it in there anyway. I objected to it, and you said, no, that's just their artistic -they put in words to describe various conditions that are on -- on the imaging studies that none of their treating physicians testified to.

THE COURT: Show me the slides that you want to put up. Let me see what the words are.

MR. MAZZEO: Sure. Actually, I can give you --

THE COURT: That's fine.
MR. MAZZEO: It has the wording on it. It starts from -- that -- top of the -- the slide at the top is Slide No. 7, which is what was -- we were talking about.

So these are just descriptive words, and the captions just identify the content in the slide, but he's not going to testify to that. So it -- it -- it puts context to what this slide represents. That's all. He's not offering any opinions, though, other than what we had discussed.

THE COURT: Is there a dispute about the lateral position of the L -- right L5 pedicle screw? There's no dispute about where the positioning is; right?

MR. MAZZEO: I don't think so, Judge.
MR. SMITH: Well, I guess I -- there's no dispute about where it is. I guess I don't understand why he's showing a slide that says the jury's supposed to note that and insinuating to the jury that there's something wrong with the lateral position of the right L5 pedicle screw, which is not something he's ever testified to. He's never said, in anything, that the right L5 pedicle screw was improperly placed.

MR. MAZZEO: It gives context for the doctor, Judge, for what slide is -- is now being -- coming up on the screen. So I don't have to give preamble about what the slide depicts and what it represents before I ask the question.

THE COURT: He's not going to say that they were installed or positioned incorrectly; right?

MR. MAZZEO: I'm not -- no. I'm not allowed to ask him that. I'm not asking him that, and that's not indicated in the caption.

THE COURT: I don't think -- I don't think the note says that it's positioned improperly or
anything, so I'm okay with what it says.
MR. MAZZEO: Thank you, Judge.
MR. SMITH: Then there's the next one that says, "MRI 10/11/14 post-op versus 1/26/11 and 11/19/12 pre-op. Note, epidural scar tissue anterior and posterior to thecal sac on post-op scan."

So there he is testifying about scar tissue on the postoperative scan, which is, again, a new opinion that he did not testify to.

MR. MAZZEO: What slide are we looking at?
MR. SMITH: I don't have numbers on the one he gave me.

MR. STRASSBURG: 15.
MR. MAZZEO: Oh. The last one.
MR. STRASSBURG: Our Slide 15.
MR. MAZZEO: No, I only have 14.
THE COURT: On the bottom of page 6 .
MR. STRASSBURG: I numbered it. 15.
THE COURT: The one on the bottom of page 6.
MR. SMITH: And there's no reason to show him an additional picture of the October 2014 MRI. The only thing he's allowed to ask him is, did -- did the review of this change your opinions?

MR. MAZZEO: That's Slide 12, Judge. I think that's what he was referring to.

THE COURT: I don't have numbers on it. The one that says MRI 10/11/14 post-op versus 1/26/11.

MR. MAZZEO: Oh. Yeah. Okay. I have that up on the -- on the -- okay. Yes, I see.

So, again, the caption just gives -identifies the content and gives a frame of reference for what Dr . Klein is referring to. I don't want to go into the details nor have him discuss the content. It gives him a reference point.

As with the artistic rendition by plaintiff, where they provided these postoperative -- or actually operative drawings of the procedure that's taking place and -- and then identified certain structures that are in dispute. And specifically that word "edema," which no treating physician ever testified to, but they threw that in there because a rebuttal expert, who is not even going to testify at trial, made a reference to it, not at the time of his expert reports, but after he reviewed the defense witness's depositions. So -- and you allowed that in. So this is --

THE COURT: You're telling me a lot more now about that word than $I$ ever heard when it was --

MR. MAZZEO: Yes. And I'm not -- so I'm not asking him to describe -- this gives him a frame of reference so he can go right to it. Doctor, does
this -- do the images on this slide change your opinion about any -- about the -- whether the spondylolisthesis had slipped -- or sustained an acute trauma and before or after the --

THE COURT: If you can take the words off the top, I don't have a problem with the images.

MR. SMITH: Well, including the one on the slide that says "epidural scar," because that's a new opinion.

THE COURT: I don't know.
MR. STRASSBURG: Judge, can I --
THE COURT: I don't see one that says epidural scar.

MR. SMITH: You can't -- I can see it on Mr. Mazzeo's screen because the contrast is different. If you look at the picture on the left where it says "epidural," underneath that, it will say "scar" on the black-and-white copies that you and I got.

THE COURT: Let's keep this one out because you've already got pictures of the MRI up there in these other slides.

MR. STRASSBURG: Judge, can I add some comments upon the scope of disclosure on this scarring -- epidural scarring as the cause for postsurgical pain?

MR. MAZZEO: Yes.
MR. STRASSBURG: Let me direct your attention to Volume II of Klein's deposition on February 17, 2015, where he testified:
"One of the downsides of doing this magnitude of surgery is we have no way to control the scarring that takes place at the site of the surgery in the operative field. If you have a patient who develops these symptoms into the right lower extremity and, you know, one of the complications is perineural fibrosis, scarring around the nerve roots and directly at the fusion site."

This relates to an opinion in his
October 9, 2014, report at page 16, in which he said:
"In my opinion, for Ms. Garcia's medical records and per her representation, she did not have pain in -- on the medial lateral or anterior aspect of her right thigh between January 2, 2011, and December 26, 2012. In my opinion, this is iatrogenic in origin and, based upon reasonable medical probability, is as a result of postoperative perineural
fibrosis or injury to a portion of the anterior divisional fibers of the lumbosacral plexus."

He also has testified that --
THE COURT: Sounds to me like that's an opinion he can offer.

MR. STRASSBURG: Yep.
THE COURT: Probably without looking at the MRI study.

MR. STRASSBURG: Judge, if he can offer the opinion, he can describe its basis, and he can explain where it comes from anatomically in this case. That's fair game. It was fairly disclosed, and it's directly relevant to the issues in this case.

THE COURT: I don't have a problem with the opinion because the opinion was disclosed. I have a problem with him looking at an MRI study as the basis for it when that wasn't disclosed.

Apparently, there was no reference to this MRI study in any of his reports. The only reference was on page 29 of his deposition, and it didn't have anything to do with this opinion. So if the opinion's in the report, that's fair game.

As far as this MRI study is concerned, the only opinion that can be asked about it is the opinion that came out during the deposition; otherwise, he would have had to disclose it in his report and say these are the opinions I have based on the MRI study
that I reviewed.
You guys know the disclosure rules. All
right?
MR. MAZZEO: Yes .
THE COURT: So as far as the slides that talk about the pedicle screws, you are going to ask him if these change his opinion. As long as he says "no," those are fine.

The one that says -- has the three different studies and it talks about the epidural scarring, let's not use that slide.

MR. MAZZEO: Okay.
THE COURT: Okay.
MR. MAZZEO: Yeah. I move that to the --
THE COURT: You want to talk to him about the scarring and the opinion is in the report, you can talk to him about that. Here's your slides back.

MR. MAZZEO: Also, while we are talking about it, he also gave an opinion about pseudarthrosis resulting from the surgery, and he testified to that. Mr. Smith asked him:
"Pseudarthrosis is a potential
complication from a fusion surgery; right?"
And Doctor -- well, Dr. Klein had testified:
"There's a conundrum here. What's
going on with Ms. Garcia and why is she remaining symptomatic?"

So he -- he discussed the complication from fusion surgery, pseudarthrosis.

THE COURT: If it's an opinion he's offered, I'm going to let him talk about it. That's what the rule is. It's real easy, guys.

MR. STRASSBURG: Well, Judge, on page 9 of his deposition on February 17th, 2015, he was asked by Mr. Smith:
"What's your opinion of the reason for the symptoms Ms. Garcia described to Dr. Gross?"

He answered:
"Would be multifactorial. She -- she could have the worst-case scenario that she's not completely fused from the procedure that was done on 12/26/12. In other words, she has a incomplete fusion, which we call a pseudarthrosis."

THE COURT: Pseudoarthrosis.
MR. STRASSBURG: I guess. Yeah. I don't see an "o" there, but maybe --

MR. MAZZEO: There's no "o" there. It's just pseudarthrosis.

THE COURT: Yeah. That's because you didn't have Kristy as your court reporter.

MR. MAZZEO: Judge --
MR. STRASSBURG: Well, we tried, but we couldn't afford her, and she was busy.

MR. MAZZEO: Judge, I think the actual word is "pseudarthrosis," but I have been corrected by doctors, so ...

THE COURT: Okay.
MR. STRASSBURG: He furthermore said:
"She's having some degree of instability with micromotion at the pseudarthrosis -- pseudarthrosis site, and those would be my concern."

Page 9, deposition February 17th, 2015.
THE COURT: I don't know that there's an issue about that. Is there?

MR. MAZZEO: No.
MR. SMITH: That's not what we're talking about. We're talking about whether he can say he then reviewed the MRI and talk about what's on the MRI. That's what this discussion is about.

MR. MAZZEO: You made a decision that we can't show that film with the -- the October 2014 MRI versus the November --

THE COURT: Not with the language that's on there and the scar references and stuff.

MR. MAZZEO: Okay. So I'm not showing that.
THE COURT: Okay.
MR. STRASSBURG: Okay.
THE COURT: Let's go.
MR. MAZZEO: All right. I would like to
finish direct today.
THE COURT: Come on up, Doctor.
MR. MAZZEO: Judge, I'm continuing from
Slide 9, which is the post-op X ray.
THE COURT: Okay.
MR. MAZZEO: All right. So I just needed to
put on --
THE COURT: You want to be able to see it.
THE COURT: Let him get the TV working, Curt.
THE MARSHAL: Okay.
THE COURT: Because I'm not showing -- I'm
not seeing anything on my screen.
MR. MAZZEO: Right.
THE COURT: We good?
MR. MAZZEO: Yes.
THE COURT: All right. Bring them back.
THE MARSHAL: All rise for the presence of
the jury.
(The following proceedings were held in the presence of the jury.)

THE COURT: I think that was a -- a little more than a ten-minute break. Sorry. Go ahead and be seated.

We are back on the record, Case No. A637772.
Do the parties stipulate to the presence of the jury?
MR. MAZZEO: Yes, Your Honor.
MR. SMITH: Yes, Your Honor.
THE COURT: All right, Doctor. Where is the doctor at?

You're going to be down there talking about it. That's fine. Just be reminded, you're still under oath.

Go ahead, Mr. Mazzeo.
MR. MAZZEO: Yes. Thank you, Judge. BY MR. MAZZEO:
Q. All right. Doctor, take a look at this next slide. It's Slide No. 9 in the presentation of 13 slides. And I'm not going to ask you to comment only insofar as in reviewing and looking at the structures that are contained within these two imaging studies.

Does anything in this change your opinion about the necessity for a fusion surgery that you had offered previously? Well, actually, you know what?

Let me back up one second. Because I don't know if I got to that in my questions of you.

Doctor, did you come to an opinion with regard to the necessity for Ms. Garcia to undergo fusion surgery that was performed by Dr. Gross in this case? And, if so, what was it?
A. In my opinion, she was not a candidate for the fusion surgery.
Q. Okay. At any time, from the time of the accident up until today?
A. That's correct.
Q. And in -- now, directing your attention to the -- to the image that is in front of us and on the -- on the film, in reviewing the structures that are identified within that -- in these two images, does anything within this imaging studies, in either of them, change your opinion with regard to the necessity for fusion surgery and -- and the opinions you expressed with regard to the fact that there was -Ms. Garcia did not sustain an acute injury to the preexisting Grade II spondylolisthesis?
A. No. These images affirm --

MR. SMITH: Objection, Your Honor. He can say "yes" or "no" per your ruling.

BY MR. MAZZEO:
Q. Okay. Yes or no?
A. It did not change my opinions.
Q. Okay. Thank you. All right.

So we're going to go on to the next slide. And same question, Doctor. With regard to the imaging -- images that are depicted in this slide -and let me just identify for the record, this depicts an MRI that was taken on October 11th, 2014 -- and from your review of the structures that are contained within these images, did that change any opinions you have expressed with regard to Ms. Garcia's -- whether or not she sustained an acute Grade II spondylolisthesis or the need for fusion surgery?
A. No.
Q. Thank you.

And now we're going to move on to same question with regard to Slide 11, which are axial images of the -- that you can see.

Did any structures contained within this -within these images change your opinions that you have offered with respect to Ms. Garcia not sustaining an acute Grade II spondylolisthesis?
A. It's not changed my opinion.
Q. Or with respect to Ms. Garcia not
necessitating a fusion surgery?
A. It has not changed my opinion.
Q. Thank you. And now we will go on to -- so now I want you to -- to tell the jury what -- what images we see because we're looking at -- what slides are we looking at? And, now, I don't want you to describe in detail the significance and relevance of the findings on these slides.
A. These are images from August 19th, 2011.

These are sagittal images and demonstrating that, at L4-5, there's just this very minimal bulge. And the axial image shows this very minimal bulge here. But, more so, this beautifully detailed dorsal ganglion in the L5 nerve root coming out. That's point of this image.
Q. And what's the -- what's the significance of this -- of the detail and the image of the dorsal --
A. Because if Ms. Garcia had sustained an acute slip, L5 would have moved forward. It would have taken these contiguous tissues here, the posterior longitudinal ligament, and the nerve root. The nerve root would look lengthened and thin because it moves along as the vertebral body moves forward. It changes the entire contour of the foramen.
Q. And can you -- can you tell the jury what --
where -- you pointed to the nerve root, which is the white image on the screen; correct?
A. Yes. This is --
Q. Can you tell us what's on either side of that structure of the nerve root? And watch yourself, please.
A. Okay. So for orientation purposes, this is the front of the abdomen. This is -- Ms. Garcia's laying on her back. This is this large spinal canal she has. These are the other nerve roots that fall down when you're laying on your back. And this image shows the nerve root. And these -- as it shows here, thicknesses are 4 millimeters, each one.

So you see the dorsal root ganglion, and the nerve root is moving. It's -- it's -- just as showed on the previous one, it's coming down. So it looks like there's gap here, but the next time you see it, it's here. It's just the configuration of the nerve root. The same here. Now you can see it coming out over here, the white structure. It just demonstrates a pristine-looking L5 nerve root that has not been disturbed in any way.
Q. What do you mean by "disturbed?" Are you referring to compression, impingement, or something else?
A. Pulling, compression, extrinsic pressure. Correct.
Q. Okay. What does that mean? That it's not disturbed?
A. It fortunately has not been damaged as a result of an acute movement of L 5 on S .
Q. And if it was disturbed by -- by pressure, impingement, or -- or stretching, what would --
A. There would --
Q. -- what would be the constellation of symptoms or -- related to that?
A. It would be, as I have shared with the jury earlier, these immediate symptoms of severe pain into the L5 and S1 nerve roots, the severe sciatica going all the way down to the heel where the S 1 nerve root enervates, the hamstring spasm because the L 5 is a major enervator of the muscles in the back of your thigh. That history is lacking as part of an acute event.
Q. Okay. And moving on to the final slide, tell the jurors what we're looking at and the -- on each of these slides.
A. It gives an idea of -- at each level above, from 1 -- L1 to 3, 3-4. At each level, comparing -this is on 11/19/12, looking on. In other words, 22
months later. That shows no change, so these are the axial images that correlate to the -- where you see the line.

And this is the normal appearance at L1. You can see the canal. You can see the nerve root coming out. Here's L3. When we say L1-2, it's -- the second nerve root coming out, L2. And at L2-3 it's L3. At each level -- and this is the highest one. This is all the way up to the lower thoracic because now you can see a rib coming in. Each one of these are normal levels.

And the other part is that it shows normal facets and there's no abnormalities at any adjacent level because that was once discussed, adjacent segment disease.
Q. Okay. All right. Anything else with regard to this image?
A. No.

MR. MAZZEO: Okay. We're done with the
slides, then, Judge.
THE COURT: You want your lights back on?
MR. MAZZEO: Sorry? Yes, please.
Thank you.
BY MR. MAZZEO:
Q. Now, with respect to -- just a few questions
with regard to each study. The 1/26/11 MRI, the 8/19/11, and the 11/19/12 MRI.

How would you characterize the quality of the 1/26 MR that you reviewed?
A. I would say it was good, average quality. That was the first one that I saw. That was the first sentence I said -- if you look at my report, I said, this is a good quality MRI, which is relatively clear resolution and lacks motion artifact.
Q. What is the most susceptible structure to injury in the lumbar spine?
A. The nerve root.
Q. Okay. Why is that?
A. The nerve root is what supplies enervation, especially L5 and S1, to the bladder function, to your function of your bowels, motor to the legs, to your thighs, to your foot and ankle, sensation to your entire buttock, and the entire pelvic structure, into the gynecologic origins, the bladder, and as well as sensation on the bottom of your feet. These are very, very significant nerve roots, 4, 5, and S1.
Q. What evidence is there on the -- referring now -- I have a couple questions for you regarding the $1 / 26 / 11$ MRI. What evidence is there, if any, on the MR that the L4-L5 sustained any traumatic injuries as a
result of the subject accident?
A. None.
Q. What is there -- what evidence -- is there any on the $1 / 26 / 11$ MR that the L5-S1 sustained any traumatic injury as a result of the subject accident?
A. None.
Q. And what evidence is there on that $M R$ from $1 / 26$ of 2011 that shows the presence any acute findings following the subject accident?
A. None.
Q. And what evidence is there on the $1 / 26 / 11$ MR that shows any evidence of swelling, edema, or nerve impingement?
A. None.
Q. There was a reference on the -- from the radiologist regarding the 1/26/11 MR that indicated -indicated an AP diameter of the spinal canal of 1.4 centimeters. Would that be considered normal or abnormal?
A. That's normal.
Q. Okay. And with respect to any other findings on the $1 / 26 / 11 \mathrm{MR}$, was there any evidence, in any indication, that you would deem to be reflective of something that would be acute or traumatic in nature?
A. In my opinion, there are no representations
of acute injury on the $1 / 26 / 11$ MR.
Q. Directing your attention now to the August 19th, 2011, MRI of the lumbar spine. Doctor, you reviewed both the report and the MRI study; correct?
A. Correct.
Q. And based on your review of either the report or the image, did it show any findings of nerve root impingement at all, at any structure, at any point?
A. No. I compared that MR of 8/19/11 to 1/26/11. And, in fact, I even, in my report, said -- I referred to images 22 to 25 . There is no difference. There is no change.
Q. And was there any evidence or finding by yourself of any acute or degenerative -- acute or degenerative findings on the 11 -- I'm sorry -- on the 8/19/11 MRI?
A. Both MRs show some very minimal desiccation. In other words, what you expect with a Grade II spondylolisthesis of chronic nature. But there's no acute abnormalities when comparing one to the other. No change in the ensuing seven months.
Q. Okay. Now -- and I know you made -- you described various findings that you observed when we juxtaposed the three MRIs from January 2011, August 2011, and November of 2012. What -- what were
the primary differences, if any, between the January 2011 MRI and the November 2012 MRI?
A. Other than some minimal technical differences, there's no change anatomically.
Q. And you had mentioned -- well, let me ask you this: What is -- when the radiologist refers to millimeter measurements, what is the preciseness of millimeter measurements by a radiologist on an MRI study?
A. They're inaccurate. They're -- these do not have enough resolution, any of these, that you can measure differences in millimeters. There's a good 10, 15 percent difference either way. So that's why the radiologist -- the cautious radiologist and -- in some of the reports, clinical correlation warranted. Are there clinical symptoms that go along?
Q. Okay.
A. These are adjunctive, diagnostic studies.
Q. What is the significance, because you testified to this when you -- you referred that there was -- you didn't observe any progressive changes between the January 2011 MRI and the November 2012 MRI -- what is the significance of no progressive changes between those two MRIs at the L4-L5 and L5-S1 levels?
A. That there is stability. That this is a stable spondylolisthesis in which there's no evidence of an acute change taking place nor change taking place over a 22-month period.
Q. And based on your experience and expertise and training as an orthopedic surgeon, after reviewing each of these MRIs, what is your opinion with regard to whether fusion surgery was necessitated for Ms. Garcia as a result of the findings on the MRIs?
A. In my opinion, there was no necessity for a fusion. She was stable.
Q. And so now moving on. Following your interview of Ms. Garcia, your review of the medical records, the MRI studies and reports, in your opinion, what is the recommended treatment for the symptoms that Ms. Garcia discussed with the emergency room physician on $1 / 5$ of 2011?
A. The recommended algorithm of care flowchart treatment is an exercise program. In other words, hopefully some weight reduction, improving abdominal muscle tone, paraspinous muscle tone, and strengthening. And over -- little baby steps, trying to improve. And as the spasm and acute pain resolves from the soft tissue component, the weight reduction and strengthening takes place over -- and it varies
from individual to individual -- over a three- to four-month period, depending upon the functional level and sometimes depending upon the treater, the use of a brace, as Dr. Cash suggested, at 44 days postinjury. We sometimes will use a corset just as an adjunct to help. But the treatment is conservative, and its success rate in the 90 percent area --
Q. Okay.
A. -- just with this conservative treatment to get through this acute phase.
Q. And during -- and in your review of the medical records, specifically in 2011, in the early part of 2011, was there any indication that Ms. Garcia was making improvement from the treatment she was receiving conservatively?
A. Yes. As identified by Dr. Gulitz.
Q. Do the records indicate from -- do the records from Dr. Gulitz indicate that Ms. Garcia was making slow but steady improvement?
A. Yes.
Q. Okay. And -- and in your opinion, based on Ms. Garcia's preexisting, deconditioned status, would you anticipate that it could take longer for her to return to a preinjury baseline?
A. Yes.

## Q. Why?

A. She's deconditioned, she has -- doesn't have good muscle tone on the abdominal muscles, muscles in the back, the paraspinous, and the -- and exercise was not a part of her daily routine or weekly routine. So there's an education process, hand-holding, reassurance because when you start doing the exercises, it's painful.

It's something she wasn't used to doing, so there's a protracted period of time the patient makes improvement, they plateau, you reassure, they plateau, you reassure. And gradually, as the pain level goes down, her functional level goes up. In the records, fortunately, her functional level didn't change much during that period of time.
Q. And what's the relevance of that?
A. She was able to function, her activities of daily living, taking care of her children, going to work, with the exception of her visits to Dr. Gulitz and her physicians.
Q. Why is it important to note Ms. Garcia's continued functionality postaccident?
A. As I have testified, the thing that we're concerned about is, is there any evidence of progressive slip? There certainly is no evidence of
symptoms with an acute slip. But she has a preanatomic disposition. She already has a Grade II. Does it continue to slip? Does she have symptoms demonstrating that neurologic deficit that she's reporting? And as the -- the pain level would go up, and her functional level would go down.

And it wouldn't be anything she could control. She works in a cage. She stands. Her activities of daily living, she'd have to start giving up things. That's the classic appearance and finding in -- sometimes the physician thinks, well, we've plateaued; we're not making improvement here. Let's reassess things.

Hers was the same functional level, able to take care of her kids and work. And -- and if you look at Dr. Gulitz's records, progressive decrease in her visual acuity scale.
Q. Okay. And in your reports you opine that the selective nerve root block performed by Dr. Lemper on August 30 of the 2011 was causally related to the accident.

Why is that your opinion?
A. Suppose we're wrong, that there aren't any symptoms with an acute slip, and the structure at risk is the nerve root. Is it possible that she moved
forward a little bit, because this is a -- this defect that I have been showing you is fibrocartilaginous. It's not bone. Did she move forward a little bit, and did she go back? Some people reduce their own, occasionally.

Because she's complaining of pain, which was, in my opinion, radiating pain, selective nerve root blocks can be both diagnostic and therapeutic. If she has pressure on her nerve roots and we're misinterpreting the MRs, which are just studies, you can put some local anesthetic around the nerve root -and it's done under fluoroscopy, under sedation -- and you anesthetize the nerve root around it.

If you're correct, all the buttock pain will go away. That -- that's typical. It's diagnostic and therapeutic. Yes, we're in the right area. This nerve root is irritated. Something happened. And you would expect, within 72 hours after the injection, a reduction in pain of 80 to 90 percent, and it persists. The pain doesn't come back.

So that was very helpful because she didn't get good resolution. Within -- the week later, she's back to her baseline pre-op -- preinjection status.
Q. Okay. And what is your opinion as to whether Ms. Garcia sustained an injury to her facet joints?
A. There is no evidence. She's not talking about localized facet pain. She's talking about diffuse back pain. And she has preexisting -- as the radiologist described, when you have this slip and settling, it puts pressures on the facet joints. She has a little bit of narrowing at 4-5 and 5-1. We know that. We expect that.

I apologize for speaking so fast. At L4-5 and L5-S1. We expect that. We know there's going to be some narrowing. It's part of the progressive, degenerative change. That -- there's nothing wrong with those facets. She has diffuse pain, not localized pain where she's saying, Doctor, I hurt right here. Patients will say, with the facet problem, it hurts right there. They point to it. That's not what she's describing.
Q. Okay. What's your opinion as to whether Ms. Garcia sustained any injury to her sacroiliac joint?
A. None. Her records are devoid of any symptoms or findings of a sacroiliac joint injury.
Q. In your opinion, did the injections performed by Dr. Kidwell into the sacroiliac joint have anything to do with her alleged ongoing pain?
A. No.
Q. Why is that?
A. There's nothing wrong with her sacroiliac joint. She's reporting, as I have testified, diffuse pain from a pseudarthrosis.
Q. Did you have an opportunity to review Dr. Gross's operative report in this case?
A. Several times.
Q. And in your opinion, after reviewing Dr. Gross's operative report, what are your opinions with regard to the comments made by Dr. Gross as well as the procedure that was performed?
A. Under the heading of indications, Dr. Gross dictated that the indication for the surgery was progressive instability. That's not anatomically correct. There is no evidence of progressive instability.

In the operative report, Dr. Gross describes removing all of the lamina at L5, part of L4, and taking out of the facets and then inability to get a purchase of the screw on the right side at L4. The operative report suggests that taking away all this tissue created instability. In other words, biomechanically. It's a technique that we don't do anymore. So I'm not -- now I know that she has a pseudarthrosis.
Q. Okay. And let's talk about what -- when you say pseudarthrosis, what are you referring to? What does that mean, by the way?
A. The purpose of the screws that you've seen, and the rods, is to create a rigid construct. It is to be done along the weight-bearing axis on both sides, and we put the cages in between. And you've seen those. We filled the cages with bone graft. After we take out the lamina, we morselize it. We have like a little Cuisinart in the operating room. We grind it up, we pack it, and we put it in from the side.

When you take out these facets, we now know that's not the proper thing to do. The pedicle screw technique, with the rods, provides the construct, the stability, as well as compression as we tighten the rods down. So the operative report, as he describes, created the basis for what we call "micromotion," and micromotion in the same plane, millimeters of motion, creates a pseudarthrosis.

And I have said in my reports and my depo, that's what she has now. She's symptomatic of a pseudarthrosis.
Q. Now, when you're doing a fusion surgery in the lumbar spine, what's the importance -- or what -well, what's the relevance or importance of
reestablishing the lumbosacral angle?
A. Preoperatively, in the planning, we measure this angle, the long axis of the sacrum and the axis of the back of the vertebral bodies. So that's called the lumbosacral angle. In an individual who has a spondylolisthesis, a Grade II, you can, on some occasions -- and Dr. Gross discusses that -- attempt to reduce it, to bring it back. You don't have to do it.

Sometimes you're successful, as you -- with the pedicle screws to bring it back, but you want to reestablish the angle and not create a flat back. That anatomically doesn't work. It goes against the weight-bearing axis of the body. That's the point of reestablishing the lumbosacral -- you have to have a clear understanding of the biomechanics of the spine and not create an instability.
Q. Based on your --

MR. SMITH: Objection. Move to strike.
Outside the scope of his opinions.
THE COURT: I think it goes with the pseudarthrosis which he testified about. Overruled.

MR. MAZZEO: Thank you, Judge.
BY MR. MAZZEO:
Q. Based on your review of Dr. Gross's operative report, is it your understanding that -- did Dr. Gross
reestablish the lumbosacral angle?
A. In my opinion, he did not.
Q. And in your opinion, following -- you have reviewed the follow-up consultations that Ms. Garcia had with Dr. Gross after the surgery --
A. Yes.
Q. -- correct?

And -- and what did you note, in particular, with regard to the complaints of pain that Ms. Garcia reported following the fusion?
A. Just an inconsistency between Dr. Gross's post-op note and when she was being seen either by Dr. Kidwell or -- or his PA, physician assistant, is -she was reporting all the leg pain and Dr. Gross reporting she doesn't have any leg pain. So, in other words, I would rely on what she's saying, but she has the pain into the right leg, which she told me, I didn't have before surgery. So she has postoperative right leg pain.
Q. And she's reporting that to Dr. Gross or Dr. Kidwell?
A. Well, she's reporting it to both.
Q. Okay.
A. She's consistent in her story, but it doesn't appear in the records. The inconsistency is in the
reporting in the physician's records.
Q. Okay. And in your opinion, why is she complaining of pain post fusion surgery?
A. In my opinion, she has a pseudarthrosis, she has scarring, and she has scarring around -- I'll show you on here. The pain into the front of the leg that shows here, there's the nerves that come out the back we call the posterior lumbar division and then the anterior.

We know, from what she says, "It's in the front of my leg," it has to be one of the front nerves. So the word we use for that -- and that happens after a fusion. You can get -- there's no way for us to control the scar. So she has a little scar around those nerves that -- going down towards the front of her thigh and also the back too.
Q. Is there a way to prove or disprove pseudarthrosis?
A. Yes.
Q. How so?
A. You do a postoperative CT scan. You ask for thin slices and three dimensional reformatting.
Q. Do you know if Dr. Kidwell or Dr. Gross ordered a postoperative CT scan?
A. To my knowledge, it's never been done.
Q. In your opinion, is the placement of a spinal cord stimulator going to resolve Ms. Garcia's constellation of symptoms?
A. No.
Q. What would be your recommendations regarding the future care for Ms. Garcia?
A. Ms. Garcia requires a CT scan; she requires postoperative bending films. She requires a -- in some cases -- and not everyone's trained -- is to demonstrate the loosening of the screw that I see on the post-op X rays. And in my opinion, she's going to require another operation because she has a pseudarthrosis.

MR. SMITH: Move to strike his comments regarding the postoperative X rays.

THE COURT: Come on up. (A discussion was held at the bench, not reported.)

THE COURT: All right, folks, you're instructed to disregard. We're going to strike any comments regarding -- regarding the postoperative X rays.

BY MR. MAZZEO:
Q. Doctor, in your opinion, is the continued performance of facet blocks and radiofrequency
ablations, also known as rhizotomies, as well as injecting the sacroiliac joints going to resolve Ms. Garcia's symptoms?
A. No.
Q. Okay. And in your opinion, did the procedure performed by Dr. Gross represent proper care and treatment for Ms. Garcia's condition?
A. In my opinion, no. It was not indicated.
Q. Okay. Oh. Also, based on your review of the all of the imaging studies from January of 2011, August of 2011, and November of 2012, was there any indication and any reason to include the $14-5$ level as part of the fusion?
A. No. That was a normal level. There, again, is controversy, as I shared with you, and some of the articles, should you go a level above the slip? With the instrumentation we have in our armamentarium, all the technique, a single level would be more than adequate if somebody is unstable. And an individual who is not unstable, there's no reason to go up and violate a normal level.
Q. Was Ms. Garcia a candidate for the lumbar fusion surgery performed by Dr . Gross on 12/26/2012 regardless of whether it's related to the accident or not?
A. No. She wasn't a candidate for any stabilization procedure.
Q. Thank you. And based on your -- and we may have -- we may have touched upon this, and if you did, then we can move forward. But what diagnoses -- you talked about the -- strike that. Withdrawn.

You talked about the injuries that you believe Ms. Garcia sustained as a result of this accident; right?
A. Yes, I have.
Q. The neck, thoracic, and lumbar sprain and strain; correct?
A. Correct.
Q. And following your review of the -- well, is there anything else you want to offer with regard to your opinions regarding the injuries sustained by Ms. Garcia in this accident, or did you offer a complete statement?
A. No. I think the records clearly identify those are the symptoms she had when she presented to the emergency room three days later, clearly identified to Dr. Gulitz, and continued to continue complain at each of her visits.
Q. In your opinion, what were the primary factors that directed Ms. Garcia's treatment protocol
in this case?
A. Her complaints of diffuse low back pain, not the complaints of radicular pain, which would have been consistent with an anatomic rearrangement and acute slip.
Q. In your opinion, in what way was the MRI instrumental in guiding Ms. Garcia's treatment regimen?
A. Each MRI -- 1/26/11, the August MRI, and the one in November 2012 -- demonstrated, fortunately, no progressive slip over a 20-month hiatus. Excuse me. 22-month hiatus.
Q. Okay. Thank you.

Doctor, what factors should be present before deciding to do a fusion surgery on a Grade II spondylolisthesis?
A. Symptoms consistent with the nerve root irritation either at L5 or S1, evidence of instability on flexion and extension $X$ rays, lateral views, evidence of some type of progressive neurologic deficit, watching the patient walk, as I did.

As the nerve roots get irritated, patients will take on this posture: Flex at the hip and flex at the knee because of the hamstring spasm. The patient's complaint of progressive decrease in doing things, sitting for prolonged periods, bending, standing. So
everything correlates. Symptoms, objective findings, sometimes hyper reflexes. The nerve root's irritated, so when you tap the knee, it jumps very quickly. We call hyperreflexia.

The clinician takes all the symptoms, findings, there's progressive change and corroborative MRIs and X rays, and then decides that the patient has maxed out on all the conservative treatment. Done the exercises, has lost weight, demonstrated motivation. And you discuss, these are your options. You could wear a brace the rest of your life or consider an operative procedure, which is called a fusion.
Q. What is your opinion whether -- as to whether the conservative treatment was properly explored prior to the interventional treatment by Drs. Lemper and Kidwell?
A. In my opinion, it wasn't. It halted, even though she stayed with Dr. Gulitz up through May of 2012, but there was hiatuses, breaks in the treatment. And so you have to get back -- get the train back on the track and start again from point zero.
Q. And -- and when you mentioned Dr. Gulitz, you meant May of 2011, not 2012?
A. Excuse me. Did I -- did I say '12?
Q. I think so.
A. I meant May -- excuse me. That was May of 2011. Correct.
Q. And what evidence was there whether Ms. Garcia engaged in any regular exercise programs prior to submitting to the fusion?
A. There isn't any. There is one mention, but -- and that was from that she used to exercise by going up and down the stairs where she worked, but I don't know -- that's just mentioned.
Q. Okay. Dr. Gross states in his January 7th, 2013, report, about 13 days -- 12, 13 days after the fusion, he states, "Amazingly, her low back pain has improved compared to prior to the surgery."

Would you agree with that statement?
A. I was --

MR. SMITH: Objection to the foundation.
THE COURT: Sustained. I think he answered it that way too.

MR. MAZZEO: He answered it which way?
THE COURT: He wasn't there.
MR. MAZZEO: Oh.
THE COURT: Lacks foundation.
MR. MAZZEO: Okay. Fine. Fair enough.
BY MR. MAZZEO:
Q. Doctor, in the course of your reviewing
medical records, did you review Dr. Gross's records of his consultations with Ms. Garcia pre- and postsurgery?
A. I was provided those, yes.
Q. Did that include a review of Dr . Gross's postsurgical consultation on January 13th of 2013? January 7th of 2013.
A. Yes, it did.
Q. Okay. And -- and did you note in your review of Dr. Gross's record on January 17th of 2013 where he states that amazingly her low back pain is improved compared to prior to the surgery?
A. I saw that comment, yes.
Q. Okay. And do you have an opinion as to whether you agree with that statement that Dr. Gross made and inserted into his report on that date?

MR. SMITH: Object to the foundation. THE COURT: It's the same question.

Sustained again.
BY MR. MAZZEO:
Q. Okay. What is your -- Doctor, what is your understanding as to the purpose for the -- Dr. Gross doing these multiple follow-up consultations between January 7th of 2013, and December of 2015?
A. Well, there normally are post-op visits for the first three months.
Q. Okay.
A. Depending on how the patient's doing at the three-month period, we may say come back in six months. In other words -- and then $X$ rays along the way to evaluate if the fusion is taking place. And getting history as to any new symptoms, such as the right leg symptoms, which were affirmed by Dr. Kidwell and his physician assistant. In other words, things that occur that normally weren't expected.
Q. Okay. Now, Dr. Kidwell refers to -- refers to the fusion on $8 / 25$ of 2014 as a failed low back surgery syndrome. Can you tell the jury what your understanding is of "failed low back surgery syndrome"?
A. The last word there, "syndrome," means a set of symptoms, not just one thing. Failed back, as Dr. Kidwell's opining, she's had surgery, but she's not recovering as would be expected. She shouldn't be having all the constant low back pain, as is recorded.

So meeting an expectation after a fusion -and it can take a minimum of a year for the fusion to take place -- but there's an expectation at six months, patient returning, reintroducing their activities, and their pain gradually subsiding. That it's tolerable. Not that they're pain-free, but they're reintroducing things. They're doing their exercises, weaning
themselves out of the brace, expectation.
The -- in Ms. Garcia -- unfortunately, in Ms. Garcia's case, she now had pain into the right thigh, numbness, and recurrence of her low back pain -her preoperative pain. Dr. Kidwell opined that she had failed back syndrome and discussed that she may need a spinal cord stimulator. And that's at nine months post-op, very early in the game.
Q. Now, what is your opinion of the benefit Ms. Garcia received from the injection provided by Dr. Kidwell on 9/27 of 2012?
A. You mean the preoperative.
Q. Pre-op. Correct.
A. Yes. On 9/27/12, there -- it was another set of selective nerve root blocks, what had been done by Dr. Lemper. And the -- it just didn't relieve her pain. She said she had relief of a pain -- pain for a day or two, same thing she told Dr. Lemper in 2011. So, again, it's affirmation it's not the nerve roots --
Q. Doctor --
A. -- that are painful.
Q. Dr. Lemper and Dr. Kidwell testified at trial, last week or a few weeks ago, that what that -that relief was, in fact, diagnostic. Why do you consider that not to be diagnostic?
A. Because she says she had improvement for a day or two. She told me, when I asked her, that the injection -- her comments to me were, "The injections provided absolutely no relief."
Q. Okay. And now, you've -- in the course of your -- your career, your clinical practice as well as your forensic practice, you have evaluated patients who have received injections, such as Ms. Garcia did, facet blocks, as well as selective nerve root blocks; is that correct?
A. Yes.
Q. And based on your education and training, do you have an understanding as to why relief might be reported following a procedure like a selective nerve root block, albeit only temporary?
A. There's always some relief because of the local anesthetic. Always. We have no control where the local anesthetic goes, where it diffuses. In fact, that was the comment that Dr. Kidwell made. We put steroid in. That decreases -- that is -- steroid is both an anti-inflammatory and provides analgesic. But there's an expectation of what we expect from the injection, some long-term relief, assuming we have made the right diagnosis.
Q. Now, we know that Dr. Gross had recommended
to Dr. Kidwell -- he directed Dr. Kidwell to perform both sacroiliac joint injection, lumbar facet injection, and to inject the hardware as well.
A. Yes.
Q. What's your understanding of -- of why that was done -- recommended?
A. Anatomically, it makes no sense. It was attempting to relieve her back pain, the pain that she's now having into her leg. When the surgeon -when we start suggesting injecting in around the hardware, we're highly suspect that we have loose hardware, that there's a pseudarthrosis. That would be the only reason to do that is -- even absent injecting the SI joint, every MR that we looked at, her SI joints are normal. Doesn't have any positive findings -positive Patrick's test.

Her -- the L2-3 and 3-4 facets are normal. Why would he inject those? But injecting the hardware is indicative and suggestive that Dr. Gross is concerned she has a pseudarthrosis.
Q. Okay. And based on the injections that were performed by Dr. Lemper and Dr. Kidwell, did -- did either of them ever identify the pain generator, the source of pain, for Ms. Garcia?
A. No. Because she didn't get relief. She had

