Q. And what's a better way to tell what's really going on in the shoulder, the MRI film or --

A. Again, the proof is in the difference of Dr. Ehrlich's findings from actually what's on the MRI studies, because in interpreting the MRI, the MRI is technology that really has become so advanced we can get to about 98 percent of accuracy. But there's still that one to two percent that may be lacking in perfection, so the best way is to actually go in and asses the tissues and see them first and see whatever damage you assume may be there.

Q. By the way, Doctor, can you see these sorts of injuries, the rotator cuff or labral tears on X ray?

A. Generally labral tears are not seen on X rays, none of these soft tissue injuries can be seen on X rays. They're to evaluate joints and bones as far as alignment and for fractures.

Q. Okay. Thank you. And we're done with that for right now. Thank you.

If you could, just describe for the ladies and gentlemen of the jury what operative intervention Mr. Molina underwent on his left shoulder?

A. So, again, in a similar description, Dr. Ehrlich did do an arthroscopic operation of his left shoulder. He did find subacromial impingement syndrome. He also found some arthritis at the clavicle and acromion, but he did find the type three SLAP lesion, which was a labral tear, which, again, was

suggestive on the MRI with fraying of the labrum and a partial tear of the rotator cuff.

So, again, that's what I stated, there was a discrepancy from the MRI films in appearance. Dr. Ehrlich did not find a complete rotator cuff tear in the left shoulder, he found a partial tear. So then rather than repairing it, he debrided the tissue, which is cleaning up the tissue that is damaged to stimulate bleeding so your body can make scar tissue to heal it that way. And essentially did a distal clavicle resection, which if I can show you on the board.

THE COURT: Okay.

A. This particular space is very narrow in everyone's shoulder, and the rotator cuff functions to keep this head in a downward position to create room.

And what happens in the case of a rotator cuff injury, whether it's traumatic or repetitive use type of thing, this space becomes narrow and the term for that is called impingement syndrome.

So what actually happens is that the rotator cuff becomes pinched or impinged between this joint and this small bone, which is called the acromion. So in a procedure to address that, there's a bur that's inserted into the space that shaves out the bone and creates space this way, but because of some of the degenerative findings in his shoulder, which you will normally find in a 50 year old, he had to actually remove a

piece of this clavicle to alleviate some pressure, because in despite of the surgery, if he didn't do that, he still would have had pain related to that joint.

Q. Thank you. And I just want to turn your attention right now to the course of treatment that Mr. Molina had at Medalliance in regard to his neck and his back.

A. Well, the medical record reviewed that was provided to me, you know, first of all, he did complain to me during the exam that he was having back pain or lower back pain since the time of the accident. He had reported that he did receive several injections to his back. He was receiving interventional pain management and was having difficulties related to back pain and radiculopathy, which is pain that shoots down your legs. And he did have an MRI done of his lumbar spine. He also did have an MRI of his neck that was requested by the doctors at Medalliance.

Q. Okay. And, Doctor, I am a little concerned about our time right now, so I would ask that you explain those images to the ladies and gentlemen of the jury referring to Plaintiff's B, which is the MRI of the cervical spine, and C, which is the -- 9B and 9C. 9C being the MRI images of the lumbar spine and I just ask that you just briefly show the ladies and gentlemen of the jury what those studies show?

A. Just some background quickly, I'll try to go as fast as I can. Again, it's the same type of study, it's a photograph

taken with magnetism. And in this particular case, it's slices taken through the cervical spine taking photographs of the different tissues.

So if I turn your attention to the cervical spine, this is your brain, and this is the spine or the bones of your neck from the base of your skull to about to the top of your shoulders.

Now, what's most notable and striking here is that normally this curve is shaped like a C. So if you look at me from the side, you can see that this is the particular shape that the neck wants to be in in a normal position. It's a C. If you look at the cervical spine here, you can see that that C, which should be like this, is actually gone. It's reversed. There's straightening of the C, which means there's a lot of muscle spasm on this MRI. And when you're looking at the cervical spine, you're looking at the brain stem here, and there are seven bones of the cervical spine. So you have C1, C2, C3, C4, C5, C6, C7, and the spaces in between are the disks which are these darker structures.

Now, in looking at the spinal cord, what are you looking for? You're looking for abnormalities. If you look at the spinal cord, which is this gray structure, you can see on the lower segments, there is space between the bones and the spinal cord. Okay? You can see clearly here's the gray spinal cord, here's the bones, this white line is fluid in between the

spinal cord and the bones. As you get into the supracervical segments, C6, C7, C5, C6 you can see the disks are actually into the fluid, they're bulging into the fluid and they're actually on some of these images actually creating pressure on the sack that holds the spinal cord.

So here, this is normal. You can see there's a clear fluid column, which is represented as white. Here you can see the fluid is cut off at the C5, C6 and the C4, C5 to a lesser degree, so that nice white column is being compressed by the disks that are bulging in the cervical spine.

And just for clarification, this is an MRI of the cervical spine, 9B, and it's dated 1/16/2009 of Mr. Luis Molina.

Q. Thank you.

A. And then we have the lumbar spine, which is dated 1/26/2009 of Mr. Molina, again, same anatomy, there's your bony structures, these are your lumbar vertebrae, which would be your lower back. There's five lumbar segments, 1, 2, 3, 4, 5. This is your sacrum and your tailbone. And what are we looking at here? The same type of configuration where you have the spinal canal, here the gray structure is the spinal cord. And you can see the disks in between. And at this particular level, which is L2, 3, it's L1, L2, we do see a significant disk bulge, which is sticking into that space or fluid. Also, you have one at L5, S1 where the disk is actually pressing up against the thecal sack. So you have abnormal placement of the disk. You can

actually see the disk at this level here pressing right on the nerve root.

Q. Thank you. By the way, Doctor, do you see any degenerative or arthritic changes in the lumbar or cervical spine of Mr. Molina?

A. Again, for a 50 year old, it's highly rare not to see some degenerative findings. So if you look at the disk, themselves, you know, you see some irregularity of the facet joints, which are the joints in the back of the spine. So there are some age related degenerative changes to both the neck and the back.

Q. All right. And, Doctor, can a patient have some of these age related changes but still be without pain and have full range of motion of the neck and back?

A. I mean, there are patients who do have age related changes to the neck and back that have a perfectly normal exam, so they could have full range of motion.

Q. All right. Thank you. Doctor, at this time, I'd like to turn your attention to the exam that you actually performed of Mr. Molina just this last September.

Can you tell us about what your examination of his right shoulder revealed?

A. Well, we did perform an exam of his shoulders, right and left shoulders were examined simultaneously. We also examined his thoracic lumbar spine, which would be the mid and

lower back.

So first to address the shoulders, we did do an inspection evaluation, which is visually looking at the shoulders, and both shoulders demonstrated previous surgical scars relative to the surgery that he did have to both shoulders. And he also was found to have some mild swelling to both right and left shoulder.

We did do a range of motion assessment with a goniometer. My range of motion assessment reportings were passive range of motion, with his forward flexion, which is raising up in front of his body was measured to be 155 degrees on the right and 160 degrees on the left. And normal is 170.

His abduction, which would be raising from the side of your body up was measured to be 155 on the right, 160 on the left and normal is 170. His internal rotation, so if I have the front of my body as an access, would be to turn the shoulder inwards, that's internal rotation, was measured to be 45 degrees right, 50 on the left, and 60 is normal.

His external rotation, which would be to rotate out from the body was measured to be 75 right, 80 left, and normal is 90. And his extension, which would be to bring your arm back, was measured to be 15 right, 20 left and normal is 30. And his adduction, which would be to bring your arm across your body, it was measured to be 25 right, 30 left and 40 is normal.

There was a palpatory exam performed, which did

demonstrate some diffuse tenderness, so when you did touch the shoulders bilaterally, you could elicit some pain. And we did do an impingement test, which was found to be positive right and left and normal is negative. So that test is a provocative maneuver, where you bring the arm up and externally rotate, and if there's still tightness in the space I described that is normally narrowed, there would be a solicitation of a response of pain and clicking, and that was found to be positive in both shoulders. And his arm drop test was negative right and left which indicated that at least for the surgical repair done by Dr. Ehrlich, that portion of the operation worked. We did measure his thor --

Q. Doctor, let me stop you right there and ask you one question about the loss of range of motion in his shoulders.

How would you quantify that?

A. Well, you know, I think that, you know, he has some motions that are mildly restricted, some motions significantly restricted. I think if you take into account the shoulder range of motion, you have to look at all the motions collectively. They didn't singularly affect your function, they all work with each other. So I would say that he has a moderate restriction to the right shoulder and to a lesser degree to the left shoulder.

Q. Okay. Thank you. And could you please tell the ladies and gentlemen of the jury about your findings with regard

to his lumbar spine?

A. Again, the findings were basically assessed the same with a range of motion assessment. His ability to flex forward at the waist was measured to be 55 degrees and normal is 90. His ability to extend back was measured to be 25 degrees and normal is 30. And his lateral bending, which is bending to the sides at his waist was measured to be 20 and normal is 40. And his ability to rotate right and left is measured to be 25 and normal is 30. There was muscle spasm, so when his back was palpated or touched, his muscles were found to be in spasm and hard from L1 to L5, and he also had a positive straight leg raising test on the right side at 20 degrees.

Q. What does a positive straight leg test mean?

A. Well, the findings of a straight leg test being positive is suggestive of a pinched nerve. It represents sciatic irritation or inflammation. The sciatic nerve becomes inflamed when there is a herniated disk or pressure on the nerve in the spine, so when you stretch it by performing a straight leg maneuver and get the appropriate response to that, that would be a positive test, that would indicate sciatic or a pinched nerve in the lumbar spine.

Q. Okay. And what is the -- how would you quantify those reduction in ranges of motion you just told us about for the lumbar spine?

A. Again, if you take the numbers individually, his

ability to flex was almost 50 percent reduced, you know, whereas the extension was only five degrees less than normal. And, again, the lateral bending was 50 percent reduced and the rotation was only five degrees less than normal.

So as a collective assessment, it would be a moderate restrictive range of motion, but he does have severe restriction and reflex in lateral bending.

Q. And, Doctor, what was your impression based on your review of the records and your examination of Mr. Molina?

A. Well, again, it was listed in my impression it was bilateral traumatic internal derangement status post bilateral shoulder bulge persistent orthopedic impairment of the right and left shoulder. I think it was also lumbar radiculopathy that was noted on my physical exam, lumbar disk displacement based upon the review of records and, again, just multi-ligamentous injury to the lumbar spine, which was representative of a lumbar sprain.

Q. I know you told us what the distal placement was when you showed us the film, but what is radiculopathy?

A. Radiculopathy is a term that describes the referral or radiation of pain down an extremity. So if you have a neck injury and you have a disk that causes a pinched nerve -- the referred pain or numbness or tingling that may shoot down the arm with that condition is called radiculopathy.

In the case of the neck, it's cervical radiculopathy.

In the instance of a lower back disk herniation or a pinched nerve, you have pain that shoots down the leg, so that would be a lumbar radiculopathy. So it's just a descriptive term of referred pain or numbness and tingling down an extremity that correlates usually with the disk displacement.

Q. Okay. Doctor, do you have an opinion to a reasonable degree of medical certainty as to what the cause of Mr. Molina's right shoulder injury was?

A. Yes.

Q. What is that?

A. Again, my opinion is the fall that occurred and the incident that was described on the corrected date which was November 16th, 2008.

Q. And what is the basis of that opinion?

A. Well, essentially, you know, you're dealing with a functional gentleman who is working, performing heavy labor. Had this fall, had objective finding of acute injury to the shoulder, you know, in the face of some degenerative finding, but he was a functional laborer, and had no prior history of treatment or complaints to the right shoulder that I viewed.

So the only pertinent information that I saw that was related to a right shoulder injury was this fall. And, you know, if you have a person that's functional without complaints of right shoulder pain, there is a described incident and now they are dysfunctional and they continue to be dysfunctional,

the only reasonable conclusion I can draw is that the history of his falling down the stairs or falling on the stairs caused the injury to his right shoulder.

Q. Okay. And I just want to clarify something. I think you said he had some acute injuries that Dr. Ehrlich noted in the operative report, but he also had some degenerative finding in the right shoulder; is that correct?

A. Yes.

Q. And those were preexisting arthritic conditions?

A. Well, again, he's 50 years old. There's no 50 year old around that doesn't have some baseline arthritis. Most people have some arthritic finding and they have no symptoms. If you look at his MRI, his MRI showed some changes you would see with aging in a 50 year old shoulder.

Along with those, there were findings of acute injury of torn tissues and tissues that were separated, that he could not function as a laborer if he had them as a preexisting condition. Because you can't do heavy work with a labral tear and a complete rotator cuff tear, it's just not functionally possible. He would be seeking treatment for significant pain in the face of those conditions.

So he had degenerative findings, again, you know, arthritis it's on his MRI of his AC joint, acromion clavicular joint, the little joint I described, so that's what was there preexisting to the fall.

Q. All right. But somebody could perform heavy manual labor with the amount of arthritis he had, correct?

A. Yes.

Q. Doctor, do you have an opinion to a reasonable degree of medical certainty as to what the cause of the left shoulder injury that you've been explaining to us was to Mr. Molina?

A. I do.

Q. And what is that?

A. Again, my opinions are really based upon my review of Dr. Ehrlich's treatment with the patient. His left shoulder symptoms were really coincident to the performance of the surgery and the fact he had a useless right arm for several months. I believe it was represented to an overuse syndrome to the left shoulder and, again, that was born out in Dr. Ehrlich's records, so I had to concur with an assessment it was really a compensatory overuse of the left shoulder that lead to the condition of the left shoulder.

Q. And, Doctor, do you have an opinion as to a reasonable degree of medical certainty as to what the cause of Mr. Molina's lumbar spinal injuries that you've been testifying to here today are?

A. Again, I think the disk displacements are causally related to the fall. He did describe falling directly on his back on a hard stair. I don't think the degenerative findings have anything to do with this accident, but I do believe the

disk herniations are related to this accident.

Q. All right. And do you have an opinion to a reasonable degree of medical certainty as to what the cause of Mr. Molina's cervical injuries that you've been testifying to here today are?

A. I do.

Q. And what is that?

A. My opinion is, again, that's based upon the lack of historical details pertinent to treatment to neck and back conditions and having neck pain prior to this, so that the only reasonable history that is present is the fall, so I would have to attribute the falls to the neck issues, as well.

Q. Okay. And are you aware if Mr. Molina has been continually treating for his lumbar spinal injuries?

A. Yes.

Q. And did you review some MRI films of the lumbar spine that were taken a year after those films that you first showed the jury?

A. Yes.

Q. And I would ask that you explain to the ladies and gentlemen of the jury the findings on MRI on January 27th, 2010?

MR. LAQUERCIA: What's the exhibit number?

MS. BORDEN: This is 10A.

MR. LAQUERCIA: I had previously objected to 10A.

MS. BORDEN: Right.

MR. LAQUERCIA: I'm objecting to 10A.

THE COURT: Overruled.

MR. LAQUERCIA: Can I make an argument at side bar?

THE COURT: Side bar.

(Whereupon, there is a discussion held off the record at the side bar among the Court, defense counsel and plaintiff's counsel.)

Q. Doctor, if you could please explain to the ladies and gentlemen of the jury what these findings in the lumbar spine showed a year after those first films that we looked at earlier this afternoon?

A. In a similar comparison, you can see this is the spinal column, this is the spinal cord, you can see it on several views, again, slicing from the outside to the inside of the spine and then back to the outside to look at the nerve roots. And, in essence, you have the 1, 2, 3, 4, 5 lumbar vertebra, which are the bones, you have the disks that are in between the bones, and, again, for me to have you understand the affect of what's going on here, you can see the white space between the bones and the spinal cord.

The spinal cord is this dark structure. Here is the disk space. This column in a normal spine will have the fluid completely patent, meaning it's fully open. You would see a continuous white space or white line, which represents the fluid that surrounds the spinal cord.

As you go down the lumbar spine and most notable you can see at L12, which is if you go, this is the fifth, this is the fourth, three, two, one. L1, 2, you can see the disk is actually herniated past the bones into the fluid and it's actually pressing on the nerve root in this particular location. If you have bulges of disks to lesser degree at L3, 4, actually L2, 3, but notable here at L5, S1, you can see the disk is actually closing off that fluid completely, so that's another disk herniation at L5, S1.

Q. Thank you, Doctor.

Now, I think I just want to clarify something. I think you told us on the MRI's from January of 2009, that there were bulges in the lumbar spine, but now in January of 2010, they are herniation; is that correct?

A. Well, I think that at the L5, S1 level, if you look at the radiologist's interpretation, he interpreted the L5, S1 as a bulge as well as the L1, 2 level. My review of the films, I believe that the L5, S1 was a small herniation, which now on this film is a large herniation, and the L1, 2, was a disk bulge, which is now a disk herniation.

Q. Okay. And do you have an opinion to a reasonable degree of medical certainty as to what the cause of that L5, S1 herniation was?

A. Well, as you look at the anatomy of disks, the only analogy I can give you is the comparison of a jelly doughnut.

You know, if you bite into a jelly doughnut, the jelly will squirt out the side, and why, because it breaks through the wall of the doughnut, and that's the equivalent of a disk herniation.

In order for the jelly to come out of the doughnut, it has to rip through the wall of the doughnut. In order for a disk to be herniated you have to go through the wall of the disk. So the disk has a connective tissue wall and a center fluid containment and with injuries or pressure. You can have that disk pushed through the wall to have a bulge you have to tear the wall. It's an incomplete tear. I believe that, you know, as disks become injured, the course of normal functions like just sitting in a chair which increases the disk space pressure can advance a disk bulge to a disk herniation.

So I believe the advancement of a bulge to a herniation or small herniation to a large is just a normal progression of the injury that had occurred.

Q. All right. And then initial bulge or herniation you believe to be caused by the accident of November 16th, 2008?

A. Yes.

Q. All right. What is his prognosis, Mr. Molina's prognosis for his right shoulder?

A. I think that the type of repair that he had with suture anchors and, you know, he's absolutely not a person who is going to be able to perform strenuous activity with the right arm. I think that his prognosis is guarded from that

perspective. I think he's highly susceptible to retearing his rotator cuff.

So it's a really careful type of future for him with the right arm. And I think that the expected outcome is not predictable. He may be okay, as far as not having further injury he may not, he may require additional treatment depending if the tear breaks down, but even in the best case scenario, I don't believe he would be able to do strenuous activity with the right arm.

Q. Is that loss of range of motion that you found on examining his right shoulder, do you believe that's permanent?

A. Yes, I do.

Q. And why is that?

A. Well, he was injured in 2008, he had surgery in 2009, you know, you're almost three years now. I mean, really you're probably at your maximum range of motion at about a year to 15 months after an injury or surgery, so I think what you're seeing in his right shoulder is what he's going to have and sadly the same goes for the left shoulder, as well.

Q. All right. I want you to assume for purposes of this question Mr. Molina told the ladies and gentlemen of this jury he experiences daily pain in his right shoulder, in his left shoulder and in his lower back.

Is that testimony -- would that testimony be consistent with the injuries?

A. I think so, yes.

Q. Okay. And what is his prognosis for the cervical spine at this point, his neck?

A. Again, you know, I think it's probably fair. I didn't really get into specific addressing of his complaints for the neck, because he was really complaining mostly of the lower back. Based upon an MRI reviewed and his level of complaint I would say it's a fair prognosis.

Q. And what about his prognosis right now for his lower back?

A. At his current level of functioning and what I see on the MRI, I believe his prognosis is poor.

Q. Okay. Is he indicated for any further medical treatment for either of his shoulders right now?

A. I don't think, you know, beyond intermittent conservative treatment, physical therapy for exacerbation or increase of pain symptoms. Beyond that, I don't think anything orthopedically at least from a surgical perspective is necessary, because the more surgery you do, the more scar tissue created, the more dysfunction you create.

I think although his range of motion is not normal, he does maintain something that is reasonable. Less than what he has if he did have additional surgery and lost more motion, he would be completely disfunctional, so unless there's an MRI that shows another rotator cuff tear or something that absolutely

indicates the need for surgery, that surgery should be entertained at this point.

Q. What about for his lumbar spine, is he indicated for any further treatment for his lumbar spine right now, his low back?

A. I know he's seeing Dr. Olsewski over at Montefiore Medical Center. I know that there were a conversations according to his history to me regarding possible surgery to his lumbar spine. You know, the medical history indicates that he's exhausted non-surgical treatment. It would be the next logical step in an assessment for spine surgery. I mean, given what he has on his MRI, plus the fact that his MRI's have shown some progression, you know, it's not unreasonable to suggest he is a surgical candidate for the lower spine.

Q. Do you think he needs spinal surgery?

A. Again, based upon the historical details, his response to treatment, I believe he's a candidate for spine surgery.

Q. What is that cost associated with the spinal surgery?

A. You know, it's variable, it depends on if there's just discectomy done, fusions done, you know. I think it ranges between 50 and $80,000, which includes the hospital stay and the rehabilitation. You know, if there's a normal fusion done, that would entail a short time in the surgical intensive care unit to monitor his spinal cord function before they would discharge him, so it can be rather costly, but, again, it would depend on