IN THE COURT OF COMMON PLEAS

LAKE COUNTY, OHIO

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| KATHLEEN SANTON, et al., Plaintiffs, | ) | |
| vs. | ) | Case No. 92 CV 000987 |
| STATE FARM INSURANCE COMPANY, et al., Defendants. | ) | |

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Deposition of ROBERT C. CORN, M.D., taken as if under discovery examination before Catherine Radie, a Notary Public within and for the State of Ohio, and by videotape, at the offices of Robert C. Corn, M.D., 850 Brainard Road, Highland Heights, Ohio 44143, at 5:50 P.M., Monday, the 25th day of October, 1993, pursuant to notice and stipulations of counsel, on behalf of Defendant State Farm Insurance Company, to be read into evidence at the trial of the above-entitled cause.

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APPEARANCES:

Nurenberg, Plevin, Heller & McCarthy Co., L.P.A., by Mr. David M. Paris,

On behalf of the Plaintiffs;

Svete & McGee Co., L.P.A., by Mr. James P. Carrabine,

On behalf of Defendant State Farm Insurance Company;

Davis & Young Co., L.P.A., by Mr. David J. Fagnilli,

On behalf of Defendant Cincinnati Insurance Company.

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STIPULATIONS

It was stipulated by and between counsel for Plaintiffs and Defendants, that this deposition may be taken in stenotypy by Catherine Radie; that said stenotype notes may be subsequently transcribed into typewriting in the absence of the witness, and that the reading and signing of the deposition by the witness are waived.

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# OBJECTIONS INDEX

OBJECTIONS:



(CONTINUED ON NEXT PAGE)

OBJECTIONS INDEX, CONTINUED

MR. CARRABINE: Let the record reflect that this is the videotape deposition of Dr. Robert Corn, which is being taken by the Defendant, and for the purpose of playing it in lieu of live testimony at trial.

ROBERT CORN, M.D., of lawful age, called by Defendant State Farm Insurance Company for the purpose of discovery examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

DIRECT EXAMINATION OF ROBERT CORN, M.D.

BY MR. CARRABINE:

Q. Dr. Corn, would you be kind enough to tell the ladies and gentlemen of the jury your full name and address, please?

A. My name is Robert Curtis Corn, C-o-r-n. My office address is 850 Brainard Road in Highland Heights, Ohio.

Q. Are you a medical doctor?

A. Yes, I am.
Q. How long have you been licensed to practice medicine in the State of Ohio, Doctor?
A. Since 1976.
Q. Do you specialize in any particular field?
A. I'm an orthopedic surgeon.
Q. Could you tell the ladies and gentlemen of the jury what it means to be an orthopedic surgeon?
A. Orthopedic surgery is that branch of medicine which involves the medical and surgical treatment of diseases, disorders and injuries of the musculoskeletal system. That includes the bones, muscles, tendons, joints and ligaments, and also has a number of areas ofsubspecialty -- surgery of the spine, surgery for total joint replacements, sports medicine surgery, arthroscopic surgery, and surgery of the hand.
Q. Are you Board certified in your occupation, Doctor?
A. Yes, I am.
Q. And what does it mean to be Board certified?
A. Board certification is a designation given by the American Board of Orthopedic Surgery. The Board is a committee that is set up by each of

the medical and surgical subspecialties for standards of care, standards and qualification of training, as well as certain examinations. And after fulfilling the obligations that were deemed necessary by the Board, the Board certifies you.

Q. Doctor, could you briefly tell the jury what your education and training has been since -- beginning with college, please?

A. I received my Bachelor of Science in Biology from the Albright College in Reading, Pennsylvania in 1971.

I then moved to Philadelphia, Pennsylvania, where I attended the Hahnemann University School of Medicine from 1971 through 1975. I graduated with my M.D. Degree from that institution in June of 1975.

I then moved out here to Cleveland, where from 1975 through 1979, I completed the orthopedic residency program at the Cleveland Clinic, and from August of 1979 to the present, I've been in the private practice of orthopedic surgery.

Q. Doctor, do you have staff privileges at any of the hospitals in this area?

A. Yes.
Q. Which hospitals are those?
A. I'm an attending orthopedic surgeon at the Meridia Huron Hospital, Meridia Euclid Hospital, Meridia Hillcrest Hospital, Lake County Hospital System, Mt. Sinai Medical Center, and Community Hospital of Bedford.
Q. Are you a member of any medical associations, and if so, tell the jury some of those associations?
A. Yes, I am. I am a Fellow in the American Academy of Orthopedic Surgeons, a Fellow in the American College of Surgeons, a member of the American Medical Association, Ohio State Medical Association, Cleveland Academy of Medicine, Orthopedic Research Society, and a number of other organizations.
Q. Do you do any teaching, Dr. Corn?
A. Yes.
Q. Where do you teach at and what do you teach?
A. I'm a clinical instructor in orthopedic surgery at the Case Western University School of Medicine, and I'm also an assistant professor of orthopedic surgery at the Ohio College of Podiatric Medicine, the podiatrist school here

in Cleveland.

Q. Doctor, as part of your practice, I know you mentioned that you do orthopedic surgery, do you treat people who don't require surgery?

A. Yes, I do.

Q. Do you treat people who have injuries to their neck on a regular basis?

A. Yes.

Q. Do you treat people who have neck problems, even without injuries, on a regular basis?

A. Sure.

Q. Do you treat people who have arthritis in their neck?

A. Yes.

Q. And are those patients that you see on a regular basis in your practice?

A. I see the broad spectrum very usually every week.

Q. You've examined Kathleen Santon at my request; do you recall doing that?

A. Yes.

Q. And as a practicing orthopedic doctor, do you frequently examine people who have the same or similar symptoms and complaints that she has?

A. Yes, I do.

Q. When did you examine Kathleen Santon, Doctor?
A. On January the 9th, 1992.
Q. I see that you have a file there in front of you. Feel free to look at that if you need to, as I'm asking you questions.

Before you examined Kathleen Santon, did you take a history from her?
A. Yes, I did.
Q. What is it to take a history from a patient, what does that mean?
A. Well, the history is essentially the history of the present illness; that is, the complaints -- what is the complaint and how did the complaint start, what's happened since the complaint began, what treatments had the patient had, any hospitalizations, surgery, testing, scans, leading up to the present time.

So it's a chronological recounting of all the medical care that was rendered from the time the symptom or problem started to the present time.
Q. So you actually sat down with Kathleen Santon and got all this information from her as to what had happened to her from the time of the accident up to the present time; is that

correct?
A. Right.
Q. And you also did a hands-on physical examination of her; is that correct?
A. That's correct.
Q. And did you look at all of her records from her doctors and the hospitals that she had been in?
A. After the examination, and when they arrived, yes, I did.
Q. And in addition to taking her history, examining her, and looking at her records, did you also look at her films, her MRI film, her X-rays and so forth?
A. Yes, I did.
Q. Without giving us the whole history from 1985 through the present, since the jury has already heard that several times, can you tell us basically what the history was that Kathleen Santon gave you when she came in, mainly what her present complaints were at that time, when she saw you?
A. The complaints at the time of this evaluation were really solely residuals from her neck -- her alleged neck injury. She was on no medications for her neck.

She was taking a medication, which I am sure was discussed, which is Prednisone, which is a very strong steroid anti-inflammatory medication that she was taking for her asthma, and that seemed to help her neck and her arm symptoms.

Q. Did she tell you that?

A. Yes.

She had an aching pain in the neck, which she stated was there most of the time over the course of the day. She had an occasional pain radiating to the left arm to the top of the wrist, the top part of the wrist area. This seemed to be related to posture and position of her head and neck.

Occasionally, she used heat to the neck and back of her shoulder, which gave her what she considered a, quote, "soothing," end of quote, relief. She had not used heat, however, for over the past year. She occasionally took aspirin or Tylenol for her pain.

And those were essentially all the residual symptoms that she had concerning her neck.

Q. Doctor, did she tell you whether or not she had had any neck problems before this accident in

1985?

A. She stated that she, quote, "may have injured," end of quote, her neck years ago. She had no -- she was seen for her neck in 1982. I don't recall what she said about that. I think that was established also in the medical records. She was never really X-rayed prior to this accident.

And basically, that was her history. She had some neck complaints. I think her treating doctor, I think Dr. Wellman from MEDNET, saw her and felt that this was either a strain or arthritis, but never really pursued that to any extent. But there was obvious signs on X-ray that she had a chronic problem with her neck at the time of this injury.

Q. When you say "a chronic problem at the time of this injury," do you mean a problem that preceded the accident?

A. Well, by her X-rays, since her X-rays were not normal, by definition, it had to have been there before. And this was this degenerative disk disease that I'm sure was discussed before, and I'll be glad to discuss.

Q. We're going to discuss it at length later on.

Did she also discuss with you the details of her asthma condition and her treatment for that?

A. Yes, she did.

Q. Now, after you sat down with her and listened to her story, did you then do a hands-on physical examination of this lady?

A. Yes, I did.

Q. Would you be kind enough to tell the jury what your physical examination consisted of and what your findings were upon physical examination?

A. The physical examination was a complete orthopedic examination, in other words, the same examination I gave to her as I would give to a patient for treatment. The only thing different between this evaluation and someone I would treat is that I would, number one, see them again, and number two, offer additional suggestions. That was the only thing that was different from this examination.

The physical examination revealed a somewhat cushionide appearing 58 year old female, cushionide meaning it's a certain way the face looks and the way the trunks look, which were compatible with long-term steroid

use -- not anabolic steroids, like a weight-lifter would use, these are catabolic steroids such as Prednisone that she was taking for her asthma.

She also appeared somewhat older than her stated age, when I saw her.

Not to dwell on the respiratory aspect, but she did have labored breathing -- not shortness of breath, but labored breathing, short sentences, short breaths, just a few words in a sentence, and that was basically how she answered throughout the interview.

From an orthopedic standpoint, she was able to stand without difficulty. She walked without a limp, she was able to heel and toe walk without difficulty, she was able to arise from a sitting position and climb up and down the examining table. All those composite motions that are using multiple body parts were done completely normally, to my satisfaction.

Specific examination of the cervical spine, the neck region, showed that there was no spasm or abnormal or reflex muscle contraction. There was no muscle guarding or tightening of the muscles to movement, and there was no

dysmetria, which is uncoordinated motion.

Q. Excuse me, Doctor, pardon me for interrupting, but what is the significance of your finding that there was no spasm?

A. Spasm usually indicates an acute inflammation or an acute flare-up of inflammation. Spasm has a very particular diagnosis, at least in an orthopedic standpoint. I think doctors in general use spasm for anything from a charley horse to a muscle tightness, but spasm is a reflex muscle contraction, like a very severe charley horse, that you can't break.

It's an extremely painful condition and never lasts a long time. And obviously, it was not present at this time of this evaluation.

Q. Go ahead, Doctor, I apologize.

A. Continuing with the examination, there was a very minimal restriction of motion in her ability to bend her head forward, putting her chin on her chest, looking all the way up to the ceiling, looking to the right, looking to the left, and tilting right and tilting left. And this restriction was less than ten percent restriction of motion, which is really pretty normal for someone almost 60 years old and

considering her chronic degenerative condition in her neck.

Q. Doctor, would you consider her range of motion to be good or bad?

A. I would consider it to be just shy of normal, even for a 58 year old, now 59 year old.

Her shoulder blade motion, that is, the shoulder blade -- she was asked to roll her shoulders forward, roll them backwards, shrug them up against resistance, and this was perfectly normal. There was no atrophy or muscle wasting noted in the shoulder musculature. There was a full range of motion of both shoulders, being able to move the shoulders forward in a frontal plane, in a side plane, rotate out, rotate in, and touch all the way above her bra line in the back.

The elbows, wrists and small joints of the hand examined perfectly normally. I measured her arms with a tape measure at the armpit level, at the mid-arm level, the forearm level, at the wrist level, and they were equal and symmetrical, indicating essentially normal function, or certainly no -- not favoring one side over the other side.

A neurological examination, including her ability to detect sensation, motor examination against my resistance, as well as reflexes, were entirely within normal limits for the neck, upper back, as well as the upper extremity.

Essentially, she had a normal physical examination, with the exception of a very minimal restriction of motion, which is really the only quasi or partially objective sign that was anything other than normal at the time of this evaluation, which was a number of years after the accident.

Q. Would that finding of slight restriction, of ten percent restriction, would that be consistent with a person who has arthritis as she has on X-ray?

A. Absolutely. Actually, it's better motion than I thought she would have had after looking at the X-rays, which I did subsequent to her evaluation.

Q. Do you attribute that ten percent restriction of motion to her arthritis, or to her motor vehicle accident, Doctor?

A. In that there was no muscle guarding, in other

words, the muscle didn't contract, she just stopped moving, she wouldn't go on beyond that point, I would have to say, within reasonable degrees of medical certainty, that it was solely due to her progressive degenerative deterioration at the mid-level of the neck.

Q. When you say "degenerative deterioration," is that the arthritis that you're speaking of?

A It's the disk disease and the concomitant arthritis, which is essentially wear and tear changes in the middle of the neck.

Q Doctor, in your opinion, based on a reasonable degree of medical certainty, is that degenerative disk disease something that was caused by the accident, or was it something she had beforehand?

A. By definition, it was something that she had beforehand, since it was present at the time of her initial X-rays.

Q. How long does something like that generally take to form?

A. Nobody knows for sure exact dates, because it obviously depends on the age that it's first diagnosed, the type of occupation the people have, and any other concomitant problems, but

most people say anywhere from two to five years for the condition to be diagnosable by X-ray.

So I would say somewhere within that time frame, so 1980 to 1983, possibly even earlier, but at least two to five years before.

Q. You've reviewed the records of the Urgent Care where she went in three or four or five days after the accident, haven't you, Doctor?

A. Right.

Q. Do you recall what her range of motion was then, at that time?

A. Not offhand. But I don't think it was dramatically reduced at that time.

Q. Let me show you that -- these are part of the MEDNET records, if I can show you that record, Doctor. Does that indicate what her range of motion was shortly after the accident?

A. It says good range of motion.

Q. Is that consistent with your examination?

A. Well, I would probably use a better word than "good," but I would say good would be -- if you're using good, fair, and poor, good would be the best designation, and I would say that would be compatible to what she had at this time.

Q. Do you recall what her range of motion was when Dr. Ttani saw her, according to his records?
A. I believe he said it was pretty normal, certainly not significantly restricted.
Q. Dr. Nemunaitis testified in this case that her range of motion was 50 percent of normal.

Have you seen anything in her records or did you find anything on your examination that would be consistent with Dr. Nemunaitis's testimony?
A. No. I think in the review of the records, I think he was the only one that found that there was any abnormality in her range of motion.
Q. Do you know Dr. Nemunaitis?
A. Sure.
Q. Is he an orthopedic specialist, such as yourself?
A. No, he's not.
Q. Has Dr. Nemunaitis ever referred any patients to you?
A. Yes.
Q. Does he do so on a regular basis?
A. Well, he's part of an HMO, so it's not on that regular a basis, because I am not a member of that HMO.

But I did a total knee replacement on a patient of his, actually just went home today from the hospital, so he does refer patients to me for surgical treatment.

Q. Doctor, I'd like to ask you some opinions that you may or may not hold, and in the event that I forget, I'd like you to express all your opinions to a reasonable degree of medical certainty, if you would.

First of all, after you've had the opportunity to take her history from her, to examine her records and her films and to do a hands-on physical examination of her, do you have an opinion based on a reasonable degree of medical certainty as to whether or not Kathleen Santon is permanently disabled as a result of this automobile accident, with respect to her neck injury?

A. Yes, I have an opinion.

Q. What is your opinion, Doctor?

A. My opinion, based on my examination, she is not permanently physically impaired enough to be considered disabled, in my mind, as an orthopedic surgeon, due to the neck trauma allegedly sustained in 1985.

Q. Why do you say that she was not impaired, Doctor?

A. Well, I think the AMA has come up with guidelines for physical impairment, and the numbers of impairment -- the percentage of impairment for a region and for the whole person are based on a number of things, but it's primarily based on decreases in range of motion or motion abnormalities or -- obviously, not in the neck, but in other areas, amputations or losses or ankylosis or stiffness type of problems.

But on the basis of the AMA guidelines, she has very minimal, if any, physical impairment that's measurable. And with a very low physical impairment that's measurable, I would have a hard time calling that a disabling condition.

Q. Tell us some of the things that you found in your examination that you feel indicate that she is not disabled with respect to her neck injury?

A. The fact that there was really no signs of active inflammation, that there was an excellent -- certainly minimally restricted

range of motion, she had good function of both of her shoulders, she had excellent use of both of her extremities, and there was no atrophy, there was no wasting of the muscles. She had a normal neurological examination.

I really was unable to find anything that was dramatically or even significantly abnormal in the examination, and therefore, it would be difficult to give her any degree of physical impairment.

Q. Dr. Corn, Dr. Nemunaitis has testified that, in his opinion, this woman has an injury to her disks -- actually, an injury to several of her cervical disks, and a nerve injury.

Do you agree with that opinion? And again, base your opinion on a reasonable degree of medical certainty, Doctor.

A. There was clearly no evidence, other than the EMG study, which was slightly abnormal, that was done back in the early -- or early after the accident, that there was any neurological abnormalities. This was never repeated.

A neurosurgeon went over her, Dr. Itani, and found some questionable, very mild weakness, which doesn't even correlate to the same

neurological level as the slight abnormality.
Q. By the way, did you find that same questionable left arm weakness?
A. No. Dr. Itani saw her in '85, and she was much -- she was normal by the time I saw her. So there must have been some improvement in that mild -- very mild weakness which he described, which I think is probably insignificant.
Q. By the way, do you know the physician who conducted the EMG?
A. Yes, Dr. Seo.
Q. When you need a patient -- when you have a patient who needs an EMG, do you ever refer them to Dr. Seo for an EMG?
A. Never.
Q. Is Dr. Seo a neurologist?
A. No. He's the same specialty -- actually, he's a partner of Dr. Nemunaitis. He's a physical medicine and rehabilitation specialist. Very good at what he does, but that's where his training is and that's where his expertise is.
Q. What type of doctor do you have perform EMG's on your patients?
A. Without question, I would have a neurologist perform an EMG, a nerve conduction study, on a

patient of mine.

Q. Do people with arthritis sometimes have some symptoms that would be consistent with the EMG study that was done?

A. Not on the basis of arthritis. Arthritis doesn't cause nerve conduction problems.

If the arthritis was pinching on a nerve or a spur was resting on a nerve, then theoretically, it could. But, you know, I'm not really convinced that that was a significant neurological finding, at least it was never repeated, and it was really done by -- not a Board certified specialist, who is qualified to do that.

In Ohio, anybody can do anything, as long as you don't hurt anybody, in the form of treatment and diagnostic testing. That would not have been my choice to pin a diagnosis that sat on -- that's been sitting with this lady for nine years now, eight years.

Q. You have reviewed her MRI film of the neck, Doctor?

A. Yes.

Q. And you have reviewed her CAT scan film that was taken in 1988?

A. Yes. There were a number of them that weren't available, but the one that was available, yes.
Q. Is there any indication on those films, that you reviewed personally, that this woman has a herniated disk or an injury to her disk?
A. There is nothing on the scan that would show an injury to the disk or a herniated disk.
Q. Ts there any indication on those scans that there is an injury to her nerve, to any of her nerves?
A. First of all, that wouldn't be how you tell, but no, there is no indication that there would be any impending neurological problem, based on the scan.
Q. Now, I've asked you what you saw personally, with your own eyes, and now I will ask you if you have reviewed the MRI report and the CAT scan report that was authored by the radiologist who reviewed those films; have you reviewed those documents?
A. Yes, T have.
Q. And those documents are authored by a Board certified radiologist?
A. Yes, they are all Board certified radiologists, and one of them was a neuroradiologist.

Q. Do you know them?
A. Yes, I do know them, personally.
Q. And you know those radiologists to be competent in their field?
A. I think they are. I trust them with my patients, so I do. I think they are very good.
Q. Do any of the radiologists who authored any of the CAT scans, the CAT scan reports or the MRI report indicate that there is a disk injury or a nerve injury on those reports?
A. There was not in their concluding remarks on any of the -- by any of the Board certified radiologists, on review of their films.
Q. Doctor, I would like you to assume that the history that Kathleen Santon gave you, with regards to her neck symptoms, is true.

Based on that and based on your examination of her, what would your diagnosis of her be, to a reasonable degree of medical certainty?
A. At the time of my evaluation, I would say that my clinical impression was, clinically, that she had, by history, a resolved soft tissue injury to her neck.

The bulk of the very minimal remaining symptoms and remaining physical findings were

due to degenerative disk disease at multiple levels.

And of course, her most disabling condition, the asthma, I wasn't going to address specifically, but I think that's her biggest problem from a medical standpoint.

Q. When you say degenerative disk disease, is that -- getting back, is that the arthritis you talked about earlier?

A. Well, there's two aspects of it, one is the arthritis and one is the disk disease. Disk disease and arthritis are different. You can have one, or either, or both. And in this case, Mrs. Santon has both.

Q. Do you have any special interest in your practice, Doctor, in treating people with arthritis and with disk disease?

A. Yes, I do.

Q. And do you treat patients who have the same or similar symptoms as Mrs. Santon, who have disk disease, who have not been injured in an automobile accident?

A. Sure.

Q. Has there been any aggravation of her pre-existing degenerative disk disease by this

accident?

A. Well, there certainly was no evidence at the time that I saw her. Certainly, it was quite a number of years after the accident.

She may have had a transient aggravation, which may have been the source of her symptoms that persisted initially for the first six or eight weeks afterwards. That would be the normal time frame that these, quote, unquote, aggravations usually persist.

But by the time I saw her, there was really nothing that showed acute inflammation or anything that could be directly attributed to a direct, quote, unquote, aggravation.

There certainly wasn't any acceleration faster than what would normally be expected for this condition and this age group, considering her steroid use and the activity level and the asthma problems that she's had.

Q. Would you expect there to be a change in her condition, by X-ray, over a period of eight years from 1985 to 1993, even if she had not been in an accident?

A. Oh, absolutely.

The only X-rays we really do have for direct

comparison are her plane films. These give a two-dimensional view of a three-dimensional object. The three CT scans she had are, in my opinion, somewhat useless from a diagnostic standpoint. And the only other study she had was the MR scan, which clearly, definitively, shows the extent of the degenerative disk disease, the levels of the degenerative disk disease, and the fact there is no neurological impingement or pushing, and that this is basically a degenerative condition with minimal bulging or minimal abnormality pushing toward the spinal cord.

Q. Doctor, do you expect -- what is the natural progression of arthritis and degenerative disk disease with age, what do you expect to see?

A. It always gets worse. Some people get worse faster, some people get worse slower, but it never stays the same and it never gets better.

The symptoms can get better, but the condition always gets worse. It's a wearing out, degenerative process that we haven't really found out a way of stopping or halting to any extent.

Q. Doctor, are you familiar with what she did for

a living, did you talk to her about that?
A. Yes. She was a bookkeeper.
Q. Is there anything in her medical records or in your examination of her that would indicate that, based on her neck injury, that she's unable to work at her job as a bookkeeper?
A. Based on my evaluation, I do not see why she couldn't work. It was pretty obvious, and pretty obvious to her, that her main reason she wasn't working was -- and the reason she was on her disability was because of her pulmonary problem.

MR. PARIS: Objection. Move to strike.

Q. Doctor, you had previously stated that you thought she may have had a resolved cervical strain from this accident --
A. By her history, right.
Q. -- by her history that she gave you, assuming her history to be true.

You've treated many patients with that type of injury before?
A. Yes.
Q. Is that the type of injury that disables a person from working at a bookkeeper job?

A. Not on a permanent basis, for sure.

You know, it's always a degree of severity. I mean, if you have a severe neck problem, it may be difficult working over a desk. I have a number of bookkeepers that have to use an easel type of -- vertical type of desk, but that's mainly people that have arthritis.

Usually, soft tissue components virtually always improve over a short period of time, certainly by three months. What people can suffer from is from arthritic symptoms and from decreased range of motion, soft tissue inflammation, which clearly, there was no objective evidence on at the time of my evaluation.

Q. Doctor, do you have patients with much more severe injuries than Kathleen Santon, who work full time?

A. Absolutely.

Q. Can you tell us -- without giving us their names, obviously, can you describe some of the injuries that you treated people for who have gone back to work full time?

A. Well, there are even a number of attorneys, that I'm sure you know and the people in the

court know, who are basically quadriplegics or paraplegics, that have absolutely no hand -- or minimal hand motion and absolutely no leg motion, but drive and work. And they have to use motorized wheelchairs, but they're basically capable of earning a living in a sedentary type of job.

I have, probably, 40, 50, patients that I'm just sort of scanning in my brain their faces -- I don't think I can remember all their names -- that have had basically devastating injuries, that are quadriplegic or have some degree of spinal cord injury, who are able to go and -- actually, one person does a pretty repetitive manual factory type work.

So there are clearly people that have more significant objective abnormalities and injuries to their neck and spine that are able to maintain gainful employment.

Q. Doctor, I wonder, do you have the MRI film there of her neck?

A. Yes.

Q. Would you be kind enough to put that up on the box there and we can maybe look at it and show the jury some things?

A. Sure.
Q. Dr. Nemunaitis has testified that this woman has a disk injury and a nerve injury, and I'd like to put the film up and see if we can see whether or not there is any disk injury on that film, Doctor.
A. First of all, I'm not sure how, on the basis of a scan, you would be able to tell an injury other than with bleeding in the area, and there is absolutely no sign of bleeding.

I'm not sure the jury has seen any of this yet, but, basically, I'll show you two groups of MR scans.

Did we define MR scans?
Q. Why don't you tell the jury what an MRI scan is?
A. There are a number of different imaging techniques available to physicians as diagnostic studies. We're all pretty familiar with an X-ray. An X-ray is basically a photograph that, instead of light, a burst of radiation is actually shot through a patient and it registers on a photographic film. That's where we get regular X-rays from.

The CT scan, the computer tomography, is the

same type of study. In other words, it's done with X-rays with radiation, but it's -- the images are computer-generated.

Well, the MR scan is the next step above that, in which we don't use any radiation whatsoever. What happens is the patients are placed into a very large electromagnetic field which pulsates, and that pulsation resonates or causes the electrons in every single atom to oscillate, to move slightly, and they're the sensoring device that can pick up this oscillation. And an image is created, and this image is a magnetic resonance imaging or MRI picture.

Basically, by computer, you can tune out the fat, you can tune out the muscles, you can tune out everything to look at specific soft tissues. And that's the premiere imaging technique of the spine that we have available today.

This is a series of pictures. An MRI scan, if you can imagine somebody standing with their head sort of facing -- well, let's face the camera, it may be easier. The first view, what we're looking at, is what we call sagittal

pictures. If you can imagine somebody taking a meat slicer, putting one of those slicing machines in the deli, starting at one ear and working toward the other ear. And that's the first series we're going to look.

The second one, we're putting the head first into the machine and we're making slices in this direction. These are called the transverse pictures. And I'll try to show the same structure.

What we're looking at is the vertebral bodies, which are anterior or the front of the spine. We'll use this middle one, if you can zoom in on the second row, middle picture. You may even be able to see the numbers, but basically, this is -- the first cervical vertebrae is a ring, the second, third, fourth, fifth, sixth, and seventh, and then the first thoracic vertebrae.

If you look at the normal configuration, it's sort of like a square. The fourth vertebrae probably looks the most normal. But you can see, you get down here between the fourth and the fifth, and the fifth and the sixth, there is a big abnormality. And you

see the disk is no longer -- the disk is the area between these bones -- is no longer clearly delineated. There is a big spur sticking out anteriorly, right where these numbers are. That's where the esophagus is, that's where the swallowing tube is that goes from the throat to the stomach. And this is on one study, this is the T-1 study.

Q. What's a spur, Doctor?

A. A spur is the degenerative arthritis, it's part of the degenerative condition.

And you can clearly see that there is no disk material that pushes out and impinges or pinching on the spinal cord, so there is no evidence of a herniated disk. Although, this is not the better study for the disks.

Q. Doctor, are you going to get to the other study there?

A. Yes. We'll look at the other one, and you can actually see that -- the actual disks themselves and their water content.

Q. Before you go through that --

A. Basically, I'm just going to concentrate on the --

Q. Go ahead.

A. -- on the area, we're talking about C4-5 and C5-6.

And this, you can clearly see the disks are white, water content is white. The stuff with a higher water content is the whitest. The spinal cord, which is this gray stuff in the middle, is not as white as the cerebrospinal fluid that's around it. The air in the trachea over here and the breathing tube is denser than the esophagus, which is the swallowing tube.

And you can see the disks -- clearly, if there was a herniated disk, this white stuff would be pushing out backwards. This is collapsed, essentially very severe degenerative disk at the C5-6 level. So that's the sagittal section.

We'll just look at one series on the cross section. It's labeled a tiny bit differently, but in this area, this is mainly for the fluid content one. The gray area is the spinal cord, and you can walk right -- this is the 5-6 level, and clearly, there is some white stuff in the front of it, clearly indicating there is no impingement of the spinal cord. And you can see sort of like a doughnut structure, like

a white ring around the spinal cord, all the way along, so clearly, there is absolutely no MRI evidence of any herniated disk or any nerve root or spinal cord impingement. And certainly, no injury observable on the basis of the MR scan.

This is nothing more than degenerative arthritis and degenerative disk disease, which is most severe at the C5-6 level.

Q. Dr. Corn, Dr. Nemunaitis has told us in his deposition -- and I'm going to quote from Page 34 of his deposition transcript, while he's showing us the film -- he says, quote, "You can see a bulge pressing on the thecal sac of the spinal cord."

Do you see that on that film, Doctor?

A. No. There is no bulging disk.

It's a bone spur that is causing some indentation, but it's clearly not pushing on it. You can see the white structure all the way around the disk, clearly indicating that there is no direct pressure on the spinal cord.

Q. And based on a reasonable degree of medical certainty, Doctor, is that bone spur something that was caused by this accident?

A. No.
Q. Doctor, did you also look at the CAT scan of 1988?
A. Yes, I did.
Q. Is there any indication on that CAT scan film that you saw, personally, of any bulging disk or herniated disk or any pressing on any nerves or the spinal cord?
A. Well, it's not the best study for the spine, but I would interpret it as not being abnormal.
Q. Did Kathleen Santon say anything to you about having any low back problems?
A. No.
Q. Dr. Nemunaitis told us in his deposition that there are, quote, "hundreds of reasons -- causes for low back pain."

Would you agree with that?

A. Maybe a little high, but --
Q. Would you agree with the proposition that there are multiple causes for low back pain?
A. Yeah. I was hoping you wouldn't ask me to list them.

Yes. There are multiple causes, obviously, going anywhere from degenerative disease, to tumors, to fractures, to abdominal problems,

that would cause problems of the spine. And there is certainly an equal number that would cause neck pain that -- as would cause lower back pain.

Q. Doctor, do you have patients that suffer from asthma?

A. Yes, I do.

My wife has asthma, so I have to live with it on a fairly regular basis.

Q. Is there any relationship between the continued steroid use that an asthmatic may encounter and the cervical spine or any other part of the spine?

A. I think that it's pretty well documented in the orthopedic literature and also in the endocrinological -- I can't even say the word -- endocrinological -- the glands, the people that study the glands and the hormones.

Endocrinological, there it goes. My disfluency comes out sometimes.

It clearly shows a direct correlation between prolonged steroid use -- this is legal steroid use -- and the development or the progression of increased bone loss. Some people feel it's because the bone can't

reaccumulate the calcium, and some people feel that the Prednisone or the Cortisone stops the absorption from the intestines of dietary calcium.

It is well known that Caucasian females, white women, probably starting in their late 30's, start developing osteoporosis, they start losing calcium normally. If there is prolonged calcium loss and the use of steroids, this will accelerate the condition known as osteoporosis, or loss of bone matrix.

This can lead to compression fractures, most commonly seen -- not so much in the cervical spine, but in the thoracic and lumbar spine, the chest and low back spine, fractures of the hip, fractures of the radius, fractures of the arm bone.

Steroids will make this condition, this osteoporosis condition, worse.

Q. Doctor, you know Mr. Paris, who represents Kathleen Santon?

A. Yes.

Q. Does Mr. Paris and/or the partners in his firm ever refer patients to you?

A. Sure.

MR. CARRABINE: Thank you, Doctor. I have no more questions.

MR. PARIS: Off the record.

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(Thereupon, a discussion was had off the record.)

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CROSS EXAMINATION OF ROBERT CORN, M.D.

BY MR. PARIS:

Q. Doctor, my name is David Paris, and I represent Mr. and Mrs. Santon.

Now, I understand that you examined Kay Santon seven years after her accident?

A. Yes.

Q. Is that right? And you examined her one time and one time only?

A. Right.

Q. And you examined her for State Farm in order to be in a position to let this jury know whether there is a cause and effect relationship between her complains and her accident of February of '85; is that fair?

A. I think that's a thumbnail synopsis, yes.

Q. You are not involved in her treatment?
A. Correct.
Q. You have not talked to Dr. Nemunaitis about her care?
A. No. I thought that would be inappropriate.
Q. You have not talked to Dr. Itani about her care?
A. No, I have not.
Q. Dr. Seo?
A. No.
Q. Or Dr. Wellman?
A. Correct.
Q. Do I understand that you don't know whether Kay Santon was a full-time employee before this accident?
A. I don't remember.
Q. You don't know if she was the main breadwinner of her home?
A. I don't remember that, offhand.
Q. You don't recall or know her duties at work before the accident?
A. Specifically, no.
Q. Do you know whether she had any orthopedic or pulmonary limitations or restrictions affecting her ability to work before the accident?

A. I am not aware of any pulmonary or orthopedic problems that restricted her from working prior to the accident.

Q. In 1985, I think you told the jury that, based on the emergency room X-rays, she had some mild arthritis, or mild degenerative disk disease, which of the two?

A. It was probably easier to diagnose the disk disease, but there was probably arthritis at the same time.

Q. Well, what do the films show?

A. I don't remember, offhand.

Q. Feel free to look at your records.

A. I don't know if I have that real close by.

It's the radiologist's interpretation, Dr. Kline, that it was, quote, "mild degenerative change," end of quote.

Q. At what level?

A. It doesn't really say.

Q. It doesn't say C2 or C3 or the fourth, fifth, sixth or seventh level?

A. No. Lower cervical vertebrae, he doesn't really put a number there.

Q. And it's impossible, is it not, for you to know if that mild degenerative process was present

--that was present in 1985 was present in 1982, let's say?

A. I'm -- I wasn't sure --

Q. Do you know if that was present in 1982?

A. I don't know for sure. In other words, there was nothing documented in 1982.

Q. Do I understand that it did not worsen between '85 and '88?

A I'm sorry, what didn't worsen?

Q The degenerative disk disease.

A. Well, there was different studies that were done, so it's really hard to compare them all.

Q. But you looked at the CAT scans of her neck of '85.

A. But the CAT scan doesn't really -- the CAT scans aren't really a good enough -- they don't tell me what I want to know.

Q. Well, I thought I asked you that question.

Do you remember I was out here in April of '93 and I asked you some questions about this case?

A. I know you were here, but I never got a chance to re-review it prior to today's deposition.

Q. You didn't read it over and make some changes?

A. I think that was maybe a week or two after the

deposition was taken, but I haven't looked at it since that time.

Q. Okay. You did read it over and make some corrections on the errata sheet?

A. Whenever that was, last summer or spring.

Q. Okay.

MR. PARTS: On Page 11, Mr. Carrabine and Mr. Fagnilli.

Q. I thought I had asked you, and I'll show this to you when I'm done, "Has the amount of arthritis in her neck increased between '85 and '92?"

And the answer was, "Well, there is no increase, at least by CAT scan, from '85 to '88." So --

A. Okay.

Q. My question to you --

MR. FAGNILLI: Would you let him read the entire answer?

MR. PARTS: I'm about ready to hand it to him.

THE WITNESS: Can I have one of the copies of it?

A. Okay, that wasn't your question, first of all.

Q. My question was --

A. You said looking at the regular X-rays and the CT scans in 1988, and I said there was no change between the 19 -- as a matter of fact, there were three CAT scans, 1985, '86 and '88.

The '85 and '86, there was some abnormality noted. Then 1988 was determined as perfectly normal by Dr. Terrar.

Q. Right. So my question to you is, is there a worsening between '85 and '88?

A. According to -- if you were to look at the radiologist's -- there was obviously no significant worsening, at least according to the radiologist.

But I'm not sure in the 1988 X-rays the radiologist said that he saw the 1985 X-rays. I think he just said it was a normal study. I'm not sure there was any signs or things that he mentioned that said comparing the 1985, 1986 and 1988 there was any significant change. I think that there was no mention of the previous scans.

Q. But you don't see any significant changes, do you?

A. I don't remember ever seeing the '85 or '86 scans. I saw the '88 and I saw the '93. I

can't remember specifically seeing the early CAT scans. I think they were not available for review.

Q. How about the plane films?

A. The plane films -- there were plane films in 1985 and there were plane films in 1993, and there were changes between 1985, from the description.

Q. I'm just saying '85 to '88, and you can't make that determination; is that fair?

A. I would be giving an opinion on somebody else's opinion, and I really don't know.

Probably not significantly worsened.

Q. Thank you.

You have told the ladies and gentlemen of the jury that soft tissue injuries, injuries to the muscles, injuries to the ligaments, sprains to the joints, those type of components will improve within three months. Did I hear that right?

A. I said there were usually improvements to the point that you would no longer be disabled from your injury within three months, in most cases.

Q. Okay.

A. Provided there is no pre-existing problem.

These are just from a purely soft tissue standpoint.

Q. But certainly, Doctor, you have treated patients in car accidents who have injured their neck and suffered sprains and strains to their neck, who you have treated with physical therapy over a ten-month period of time, and who you've had no problem coming up with an opinion that they have suffered a permanent injury; is that not true?

A. I don't know. I can't remember anybody offhand.

Most people will --

Q. But I'll direct your attention to a specific patient, as a matter of fact, a former client of my partner's, and if you'll take a look at that.

Do you recall testifying in that case involving Miss Gray in August of 1986?

A. No.

MR. CARRABINE: I'm going to object to the use of this, unless the entire transcript is provided to us in the trial.

MR. FAGNILLI: Same objection.

MR. CARRABINE: So we can find out what the facts were in that case.

Q. Doctor, did you, on Page 17, diagnose Miss Gray as having a cervical strain?

MR. FAGNILLI: Objection.

A. On her -- well, this is sort of a complex case, because this was her industrial -- this was about an industrial injury that you were concomitantly involved in both the Workmen's Comp and the personal injury aspect of it.

I continued to follow her on the industrial aspect of it, because she still has continuing symptoms from that.

Q. Just to get the facts, though, this is a car accident, right?

A. They both involved a car -- I mean, it was the same accident, but it was a work-related car accident.

Q. She hurt her neck; is that right?

A. She hurt her neck, correct.

Q. And you diagnosed a cervical strain, myofascitis, things of that nature?

A. Correct.

Q. And I believe you found some spasms, did you

not?

A. At one time.

Q. You prescribed therapy, physical therapy, if you'll turn to Page 25?

A. You know, I'm not sure what the relevance is, but, yes, there was physical therapy that was prescribed over a prolonged period of time.

Q. Did you render an opinion that she has a permanent soft tissue injury to her neck?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. For your purposes and for that particular individual, who had a much more complex story than is getting out today, yes, that was my opinion. But it was based on different, you know, different findings, and a different pathology, and a different injury and a different person.

Q. Did you, as it relates to this particular patient, indicate with people -- with her, and you can turn to Page 33, that one of her hobbies was recreational reading?

A. Which patient are we talking about now?

Q. Same patient, Pamela --

A. Pamela Gray?

Q. Right.

Did you render an opinion that she would have to give up recreational reading, because keeping her head in one position, her posturing, was affecting her pain syndrome?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. I don't remember.

Q. Could you turn to Page 33 and tell the ladies and gentlemen of the jury whether or not you advised her to discontinue that type of activity?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A Well, it was providing -- if I can read the whole thing -- this is my opinion, is that the injury and the residuals of the injury are preventing her from doing the horseback riding, recreational reading and other sporting activities that you mentioned. It was specifically --

Q. And on 33, would you tell the jury why recreational reading -- why you told her not to do that?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. Well, this is what I stated at that time. I -- quote, "I think that the injuries, the injuries that she sustained to her neck and of her back" -- and this is not a back injury case that we're talking about in this case -- "unfortunately have compromised her to some extent with posturing and positioning necessary for both sitting activities as well as active sports, such as sailing and target practice." She was a semi-professional skeet shooter, an excellent shotgun shooter at one time.

So -- but she had a back injury as well, not just solely a neck injury, so you're comparing apples to oranges.

Q. And one of the reasons that you asked her not to engage in the recreational reading anymore was because of the posturing of her head?

MR. FAGNILLI: Objection.

MR. CARRABINE: Objection.

A. I didn't ask her not to do that. I said that it was a problem, her doing that. She's, you know, a professional accountant, and she's always done recreational and non-recreational reading.

And I think that the jury is probably going to get a poor representation of what -- comparing these two individuals, two different age groups, two different activity levels, with the same subjective type of symptoms.

Q. Doctor, certainly you have treated patients who have had permanent decreased range of motion of their neck and permanent pain from a whiplash injury?

A. From a whiplash mechanism injury, sure.

Q. And it's possible for one to have pain and disability on a permanent basis with respect to sprains and strains of the cervical spine?

A. Provided there are physical findings that would correlate or corroborate objective findings, that would corroborate the objective symptoms, sure.

Q. And muscle spasms can be objective evidence of injuries to the muscles and ligaments, can they not?

A. If there is muscle spasm present, then muscle spasm can limit motion, correct.

Q. If you turn to the records that Mr. Carrabine and Mr. Fagnilli have provided you, starting with the Urgent Care Center record on March 1st

of 1985 --

A. You probably have these in order, so it may take me longer.

Do you want to just ask me the questions, or do you want to go over every single medical record?

Q. No, no, I'm not going to bore the jury with that.

On March 1st of 1985 --

A. Let me look at yours and then we can go quicker that way.

Q. On March 1st of '85, does the record indicate muscle spasm?

A. This physician's opinion, quote, "neck dash tender, left trapezius muscle with mild spasm." That's what they said.

Q. We have an indication of spasm in that record; is that right?

A. You have an indication by that physician that that was their opinion of what the physical finding was, yes.

Q. And have you had an opportunity to go through any other records to determine whether or not there were other notations of muscle spasm? Have you had occasion to do that in this case?

A. I didn't do a spasm review, in other words, review every single record to see if there was spasm mentioned.

I'm sure, in Dr. Nemunaitis's records, there may have been a mention, and there may have been a mention in another physician's records.

Q. But a spasm, as you've told us, is an objective sign of injury?

A. When it's present and it's true spasm, is an objective sign of inflammation, not necessarily injury, but certainly acute or sub-acute muscle inflammation.

Q. And you would agree that spasms are an extremely painful condition?

A. If a spasm exists, then while the patient is in spasm, it is not a comfortable thing, and it's quite uncomfortable.

Q. It's worse than a charley horse, is it not?

A. Yes.

Q. It can render a patient fairly nonfunctional?

A. It certainly can.

Q. In other words, you can't do a whole heck of a lot when you're having a muscle spasm?

A. No, you can't do a whole heck of a lot, and may not be able to do anything.

Q. And a C7 radiculopathy, Doctor, that is an irritation of the C7 nerve root; is that right?
A. As -- you mean by definition?
Q. Yes.
A. It can be.
Q. And the source --
A. It can be also a subjective and objective finding correlating with any inflammation of any branch of that nerve root. It doesn't have to be coming off the spinal cord.

It can come from the brachial plexus, it can come from shoulder injury, it can come from an elbow injury, but it would follow a specific pattern, sensory and motor.

Q. And an EMG, Doctor, is a valuable tool in determining whether or not there is some nerve denervation?
A. Well, I'm not an expert in EMG's.

If it's done appropriately and properly and repetitively, and you get the same answer on all types, and it does correlate with a clinical finding, then I think it's an objective finding.

And it's certainly objective no matter who does it, it's just -- obviously, it has more

weight if it corresponds with something clinically.

Q. Typically, you don't read the EMG interpretations yourself, you rely on others; is that right?

A. I don't read the oscilloscope, but I can look at the numbers and draw my own conclusions.

Q. Now, we spent a lot of time talking about arthritis in this case.

Doctor, would it be fair to state that as many as 90 percent of the people walking around who have arthritis don't even know it, because it's not necessarily painful?

A. Did I say that at one time?

Q. You bet. Do you want the page?

A. No.

I would say that, depending, obviously, on the age group -- it sounds like something you would be quoting out of, something I may have said, and it sounds like a very rhetorical type of statement -- but I would say most people that have arthritis, and it may be in excess of 90 percent, the only symptom that they may have is stiffness, and they may not even realize it as a painful condition. But obviously, that's

depending on the age group.

Q. Arthritis is not necessarily a painful condition; is that right?

A. It is not necessarily. Pain is not the only manifestation of arthritis, and some arthritis is not painful.

Q. I take it you don't take issue with the EMG findings of Kathleen Santon that they were consistent with the C7 radiculopathy on the left side?

A. I don't really have an opinion.

Q. And the CAT scan of March 5th of '85 was not inconsistent with the C7 radiculopathy on the left side, was it?

A. Well, is it inconsistent? Well, it's not specific.

The 1985 CT scan showed that there was degenerative narrowing of the opening. This is not related to the disk, but from spur formation at the C7, T1 -- that's really the C8 nerve root. I mean, there is nothing that's absolutely specific on this, that would be specific for a left C7, although you could have it with arthritis.

Q. Let me reask the question, Doctor.

I take it there is nothing in the CAT scan which would be inconsistent with the C7 radiculopathy; is that right?

A. I'm not sure how to answer that.

Q. How about the way that you answered it on April 6th of '93, when I asked that same question.

MR. PARTS: On Page 36, Mr. Carrabine.

Q. At Line 16, the question was, "But there is nothing in the CAT scan" --

A. "Nothing in the CAT scan which would" -- I would say there is nothing that is inconsistent with it.

Q. Okay, thank you.

A. To answer your -- the way you asked the question.

Q. Do you have an opinion as to whether Kathleen was disabled from work in 1985?

A. No. Not at this point in time.

Q. And I take it, it is your contention that Kathleen's problems are arthritic in nature; is that right?

A. Which problems?

Q. Neck, orthopedic problems. You're not here testifying as a pulmonologist.

A. Her orthopedic problems are primarily degenerative, I would say arthritis and disk disease.
Q. She had this disk disease before the accident?
A. It was present at the time of her -- maybe mild, but she had it at the time of the accident, so it had to pre-exist.
Q. She had one instance of complaints to a doctor in December of '82?
A. Right. But we know she had mild degenerative changes in the 1985 X-ray from the Urgent Care Center, so we knew they had to exist prior to 1985.
Q. Right. And she has had constant, continual neck pain since this accident; is that right?
A. Subjective neck pain.
Q. Right.
A. Well, I don't know if it's been the entire time, but it's been pretty consistent throughout the entire course.
Q. That's the history that you've been provided?
A. Right.
Q. Are you telling the jury that her arthritis is the source of her pain?
A. I think if she does have pain, it's probably on

the basis of her disk disease and arthritis. But there is certainly nothing on the physical examination that would be compatible with a painful degenerative condition of the spine.

Q. Her pain is not related to the injuries to the muscles and ligaments of her neck at the time of the accident?

A. Not -- not -- in my opinion, based on the fact that there was no signs of muscle guarding, muscle irritation, or anything really abnormal other than the fact that she couldn't move beyond 90 percent of her normal motion, I would say that would be probably -- it is not within reasonable degrees of medical certainty that any of her residual subjective symptoms or objective findings were related directly to the accident.

Q. But we know, Doctor, do we not, that in certain types of accidents involving injuries to the neck and the supporting soft tissue structures, one can have stretching, hemorrhaging and bleeding of the soft tissues that heals with scar tissue, which is not as elastic, which can also result in a decreased range of motion; is that right?

A. If there was no other basis objectively for decreased motion, then I would say that has a little bit more validity. But, yes, that is a theory.

Q. Sure, and that has been your opinion in other cases and other patients of yours, that some of their restriction of motion has been due to the scar tissue?

A. It has been -- right. But those people probably didn't have the degree of degenerative arthritis and degenerative disk disease.

Q. Why can't people have two conditions going on at the same time?

A. I think it's clinically, within reasonable degrees of medical certainty, difficult, if not impossible, to differentiate the two.

Q. Are you telling me, then, that you can't differentiate whether or not Kathleen Santon has scar tissue on the soft tissues --

A. I would say --

Q. -- and the degenerative changes going on in her neck?

A. I would say the degree of scarring in these type of injuries are minimal. I think that they are not always valid as a diagnosis, and

they are usually used to describe subjective symptoms when there is no objective findings.

Objectively, she had no real abnormality on her examination. My opinion is that they are coming -- the abnormality and the discomfort are coming from her disk disease, which is fairly substantial, much more so than any potential scarring would have been.

Q. When I asked you on April 6th of '93 the reason that Kathleen was still having neck pain, neck complaints, you told me you didn't know.

MR. CARRABINE: What page?

MR. PARIS: 52.

Q. And today, six months later, six and a half months later, you do know?

A. I don't know.

You're asking my medical opinion. Medical opinion is a guess based on reasonable degrees of medical information.

I don't even know if she is having neck pain. If she is having neck pain, it would certainly be compatible with the degenerative findings, which are pretty substantial at a couple of the levels of her neck.

But do I know if she's having pain? No, I

don't know if she's having pain.

Q. And if she's having pain, in April of '93, you told me you didn't know why she was still hurting.

A. Well, I still don't know why. I have a reasonable -- an opinion within reasonable degrees of medical certainty.

Q. Here is the question I asked you at that time.

"Then do I understand, Doctor, you do not have an opinion based upon a reasonable degree of medical certainty as to the source or the reason for the cause of her present neck complaints?"

Answer: "I am at a loss from an orthopedic standpoint, knowing the anatomic and physiological basis for this condition that she's claiming, to describe why she is still having the level of discomfort that she has with the positive findings and treatment that she's had during the past five years. I don't know why she is still hurting."

A. I'm sure I said it exactly that way, with that type of inflection and intonation.

Q. But I'm reading it slowly so that I don't make a mistake.

A. And without any inflections in your voice, I'm sure.

MR. FAGNILLI: Would you let him answer the question, please?

A April 6th. Can I have that piece of paper back?

You know, I didn't really see all the X-rays until May 17th of 1993, which included all the X-rays --

Q That would be five months ago; is that right?

A Yeah. One was in -- April of 1993, was when you took my deposition, and it wasn't until May 17th, '93, that I think I was able to review everything.

MR. CARRABINE: X-rays were not sent to you. In fact, we didn't even know they existed --

MR. PARIS: Let's not have a discussion on the record.

Q The fact of the matter is, that you had --

A There was additional information that was presented since the time of the deposition, which changes my medical opinion.

Q. That's fine.

Then, Dr. Corn, after having reviewed that

in May of 1993, did you dictate a report?
A. No.
Q. Did you dictate any notes?
A. Yes.
Q. Did you provide me with any of those notes?
A. No.
MR. CARRABINE: Objection.
Q. Did you provide anybody else with any of those notes --
A. No.
Q. -- that you changed your opinions?
A. No. Well, I wasn't --
Q. Thank you.
A. It wasn't to be kept a secret or anything, I just -- you finally sent me the rest of the information and I was able to generate a more accurate diagnosis or medical opinion.
Q. I didn't know you changed your opinion until about 20 minutes ago.
A. I didn't know until you read my deposition again to me.
Q. Doctor, the complaints that Kathleen expressed to you in January of 1992 are the same complaints that she has expressed to the Urgent Care doctors in March of '85 and to Dr.

Nemunaitis over the past eight years; is that correct?

A. I don't know if that's true.

I don't remember verbatim what her complaints were, other than just neck pain. I don't remember the details, I don't remember her responses to the questions. I think that I asked her a lot more questions than the Urgent Care doctor did.

But if you're talking about pain in a general area, yes, she has had neck pain and neck complaints, subjective symptomatology in her neck since the time of the accident.

Q. And she has also had and complained of intermittent left arm symptoms since the date of this accident; is that right?

A. I believe that's well documented in the medical records.

Q. Do I understand, Doctor, that you did not find Kathleen to be insincere or attempt to exaggerate her complaints or findings when you examined her?

A. She seemed to answer everything within -- I don't really remember at this point in time. I don't know if I noted that in my report, but

she seemed to cooperate. But I really don't remember her at all.

MR. PARIS: Thank you, Doctor. I don't have anything further.

CROSS EXAMINATION OF ROBERT CORN, M.D.

BY MR. FAGNILLI:

Q. Dr. Corn, my name is Dave Fagnilli. I have a few questions for you. I represent the Cincinnati Insurance Company in this case.

You mentioned that Mrs. Santon's complaints and -- that her complaints are inconsistent with the physical findings. What do you mean by that, could you explain that in more detail?

A. I think it's been pretty well established under the last hour or so that she still is complaining. But the physical findings at the time of this evaluation did not reveal any objective abnormality, and she had, essentially, a normal physical examination, with the exception of a very minimal

restriction of motion, which is somewhat subjective.

Her pain really wasn't that severe. When I saw her, that was not her -- she was not in any significant distress whatsoever. She had been on the steroids for her asthma, and she said the bulk of her symptoms were improved. And we do use Prednisone and steroids short-term for severe arthritic flare-ups as well, so that would certainly account for the diminution in her symptoms, since she's been on the steroids.

But really, there was no significant correlation between the longevity of her neck symptoms and the physical findings at the time of the evaluation in January of '92.

Q. Based on your review of the medical records, the history that you took from her, and the examination that you performed, is it your opinion based on a reasonable degree of medical certainty that she does not have a continuing soft tissue injury from the 1985 automobile accident?

A. Yes.

Without any other explanation, "yes," I think, would suffice.

Q. Doctor, Dr. Nemunaitis made some reference to a one millimeter bulge in her cervical spine in his deposition.

Could you explain to the ladies and gentlemen of the jury what clinical significance, if any, there is to a one millimeter bulge in the cervical spine?

A. Just to give an example -- you may want to focus in on this -- the line between the top of the card and the very first blue line is two millimeters. So one millimeter would be half that distance.

There is nothing that I'm aware of in orthopedic surgery that that one millimeter would have any -- one half of that distance, which is really pretty small, would have any clinical significance whatsoever, other than -- and especially on a CT scan. A CT scan basically, you know, as we discussed, is not the most accurate -- and it's certainly not accurate within five millimeters, let alone one millimeter. I would say it's clinically insignificant.

Q. Mrs. Santon has had a number of CT scans at Dr. Nemunaitis's direction. Are they the type of

diagnostic tool that would be used to diagnose and treat either arthritis or a cervical injury resulting from an automobile accident, in your practice as an orthopedic surgeon?

A. First of all, the X-rays would not be anything to do with treatment, other than giving you more information of how to treat.

But I think I previously stated that the only -- since late 1986, since when the MRI scans were available, that is the only test that has any degree of accuracy in the cervical spine for diagnosis and assessment of the degree of disease due to disk disease, arthritis, or spinal cord abnormalities.

Q. Do you use CT scans in your practice to diagnose patients that you are treating for cervical injuries, injuries to the neck?

A. Since 1986, I don't believe I have ordered one CT scan of the cervical spine, and I don't remember how many of those I would have done before that. They're just not that good, they're not that accurate.

I do use it a lot in the lumbar spine, because it does show arthritis in the lumbar spine better than an MR scan shows. But in the

cervical spine, I think it's useless.
Q. Just so we understand, you're an orthopedic surgeon; is that correct?
A. Right.
Q. And you operate on people with neck injuries?
A. I am qualified to operate. A number of years ago, I stopped operating on the neck, simply because I wasn't getting the amount of volume that I felt was necessary to maintain a high level of surgical skills.

But I have had training for it and I have done it in the past, although I don't do it routinely at this point in time.
Q. Do you treat patients with neck injuries?
A. Absolutely.
Q. And is that on a regular basis?
A. Yes.
Q. What is the significance of no spasm at the time of your examination, what does that tell you about Mrs. Santon?
A. It would tell me that there is no acute or subacute active muscle inflammation or protective inflammation present at the time of my evaluation.
Q. In your practice, have you seen patients who

have a soft tissue neck injury and have spasms on a daily basis for a period of eight years?

A. No, never.

Q. And why is that, Doctor?

A. I don't think that entity really exists, and if it does, it's exceedingly rare.

Q. If someone has a soft tissue injury of the neck, and they do have spasms resulting from that soft tissue injury, how long would you expect that condition to last in the normal course of things?

A. Well, I don't think if it was untreated that the patient would want to continue living, that's how severe -- I know from a personal standpoint, from an old wrestling injury, I do get intermittent spasms that reoccur with stresses and things like that. and you need treatment very soon. You need to get some medication in you and you need to have some heat or physical therapy applied to you, or you just can't -- you can't function, you can't work, you can't walk, you can't think. You're completely non-functional.

If you have this on a recurrent basis -- that's why, when people say muscle spasm, they

usually mean muscle guarding, the muscles are rigid. But true muscle spasm is an extremely short-lived, very painful, painful condition.

Q. How long would you expect it to last for?

A. Until some sort of treatment. Sometimes you have to go to the emergency room and get a Morphine or Demerol shot to try to break up the spasm.

Most people would seek attention rather quickly; you wouldn't try to live with muscle spasm.

Q. Did you note any treatment of Mrs. Santon's cervical injuries since November of 1985 in your review of the records?

A. I'm sorry?

Q. Did you notice whether Mrs. Santon has had any treatment for her cervical or orthopedic injuries since November of '85, as opposed to examinations?

A. I think she had some physical therapy early on. I don't think she's had a lot recently.

Q. We talked a little bit about the one millimeter bulge and you said that -- I think that you said that was of no clinical significance; is that correct?

A. I think it's zero clinical significance.
Q. At what level would a bulge become symptomatic in the normal course of things?
A. Well, it would depend on the anatomical abnormality, but I would say most of the time that I see one, they are a minimum of five millimeters and they're usually in excess of eight millimeters.

Most are symptomatic after ten millimeters or one centimeter, which is about that big, about five of those -- about five of these lines, probably the distance between two of the big lines, you know -- that doesn't really make a lot of sense.

That's -- this is about seven centimeters -- I would say a little bit longer than a regular line space, that would be usually symptomatic by that point in time.

And then they would have, if they had a true radiculopathy, they would have sensory abnormalities following a particular pattern, they would have motor abnormalities following that same pattern, and they would have reflex abnormalities of that same pattern.

You don't operate on X-rays; you operate on

clinical findings. You don't treat symptoms; you treat physical disease and you try to alleviate the symptoms that are associated with the physical disease. But there has to be some sort of objective finding to justify -- to justify a diagnosis of a pinched nerve, or -- you can't just hang your hat on a diagnosis of one EMG study, in this particular case, in my opinion.

Q. And in your opinion, Doctor, based on a reasonable degree of mental certainty, did Mrs. Santon have physical findings in her orthopedic evaluation that required treatment at the time of your examination?

A. No.

MR. FAGNILLI: That's all the questions I have for you. Thank you, Doctor.

REDIRECT EXAMINATION OF ROBERT CORN, M.D.

BY MR. CARRABINE:

Q. Doctor, just to be clear on this one --

VIDEO OPERATOR: Off the record.

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(Thereupon, a discussion was had off the record.)

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Q. Doctor, just to be clear on this one point, Mr. Paris had read some statements that you had made in your deposition which was given on April 6th of 1993. At that point in time, both you and I were unaware that Mrs. Santon had had another X-ray a few days before that.

Now, you saw that X-ray subsequent to your deposition; is that correct?

A. Right.

Q. So you did have additional information on that X-ray, which you feel, as you've already said, has explained some of her additional symptoms as that of arthritis; is that correct?

A. Correct.

MR. CARRABINE: I don't have any more questions for you, Doctor.

RECROSS EXAMINATION OF ROBERT CORN, M.D.

BY MR. PARIS:

Q. Doctor, you were telling the ladies and gentlemen of the jury that you can't hang your hat on one EMG study and, basically, a bunch of negative MRI's and CAT scans.

Did I misstate that?

A. I said I was basically directing that toward treatment.

But I would not -- if someone would come to me for treatment, and they would have one abnormal EMG but no correlating neurological findings, physical findings or scan findings, I would think that that would be a somewhat invalid examination to pin the whole diagnosis and prognosis on.

Q. See, I'm confused then, because I'm looking at a report from a patient of yours. If you'll take a moment and review your report.

Do you recall that patient?

MR. CARRABINE: Show an objection.

MR. FAGNILLI: Same objection.

Q. Do you recall Miss Medor?

A. Yes.

Q. And that's your report from November of '88, of a woman who had an accident in '86; is that right?

MR. CARRABINE: Objection.

A. April of '86, yes.

Q. Right. She had a car accident, she had some neck and upper and lower back complaints?

MR. CARRABINE: Objection.

MR. FAGNILLI: Same objection.

A. I'm sorry, what?

Q. She had some neck, upper back and lower back complaints?

A. I'm rereading this because I'm trying to -- yeah, neck and upper back complaints, as well as low back, correct.

Q. You ordered an MRI on her cervical spine?

A. Right.

Q. That was normal?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. The MRI was normal.

Q. She had a CT of her lumbar spine --

MR. CARRABINE: Objection.

Q. -- which, I think, showed a bulge?

A. She had two levels that were abnormal. Two

abnormal -- L4 and L5 were both abnormal.
Q. But one was a bulge; is that right?
MR. CARRABINE: Objection.
A. They were both central protrusions and bulges, both degenerative disk disease.
Q. All right. But you didn't see any herniation or impingement on the spinal cord or --
A. No.
Q. -- or anything like that?
MR. CARRABINE: Objection.
MR. FAGNILLI: Objection.
Q. You ordered an EMG test to determine whether or not there was any nerve involvement?
A. Correct.
MR. CARRABINE: Objection.
Q. And that failed to disclose, with reasonable medical certainty, any nerve denervation?
MR. CARRABINE: Objection.
A. It said, quote, "possible CAT-1 cervical radiculopathy," end of quote.
Q. So that's a questionable finding; is that right?
MR. CARRABINE: Objection.
A. You know, that's what I said in the letter. I don't really remember those details at this

point in time.

Q. And you felt pretty confident, after two years of working with her, that you would be unable to cure her, notwithstanding the involvement of orthopedic surgeons, radiologists, neurologists and neurosurgeons; is that right?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. Essentially, she had a great deal of subjective symptoms with very minimal subjective -- with very minimal objective findings.

Q. Your prognosis for this woman was poor, and you opined at that time that her symptoms would never resolve --

MR. CARRABINE: Objection.

Q. -- is that right?

A. They hadn't resolved in two years, they probably wouldn't resolve, right.

Q. Did you further opine that she would need physical therapy for the rest of her life on an intermittent basis?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. That was my opinion at that time, yes.

Q. And to the cost of about $2,500 per year?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

A. That was the opinion at that time, yes.

Q. Did you further believe at that time, Doctor, that you doubted whether or not there will be any significant recovery or that she will ever reach a pain-free status?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

Q. Is that right?

A. That's what my opinion was, yes.

Q. And of course, it was your opinion that these residual complaints of injury were a direct consequence of the motor vehicle accident in question?

MR. CARRABINE: Objection.

MR. FAGNILLI: Objection.

Q. Is that right?

A. In that particular case, yes.

MR. PARIS: Thank you, Doctor. I have nothing further.

FURTHER DIRECT EXAMINATION OF ROBERT CORN, M.D.

BY MR. CARRABINE:

Q. Doctor, I'm going to ask you a question. Because there is no judge here to rule on our objections, I may withdraw this question at a later date.

MR. PARIS: Move to strike.

Q. Is there any way that the ladies and gentlemen of the jury in this case, or me and Mr. Fagnilli, for that matter -- we have not been involved in these other cases that Mr. Paris has brought up -- is there any way that we can weigh or compare Mrs. Santon to those other individuals?

MR. PARIS: Objection.

A. I don't think there is any comparison whatsoever.

Q. Why do you say that, Doctor?

A. Both of them involve completely different areas of the spine.

I think Mr. Paris's points were that I have made, for his clients or clients of his law firm, definitive opinions based on soft tissue injury only, and I think he was just trying to make a point that -- trying to, you know, say

that what I'm saying now is just the opposite of what I said then.

Whereas, I don't think that just taking those statements out of context really clearly explains why I gave those opinions and how I felt on patients that I was treating -- not patients that I had seen after treatment was completed, essentially, that had ongoing symptoms that were difficult to describe on a physical basis.

And quite frankly, the last one, I essentially told her to go seek other medical attention because I had nothing else to offer her. And they have absolutely no pertinence to this case whatsoever. Neither one of them involved a purely neck injury.

One of them involved a back injury in a very obese young girl who was borderline mentally retarded, and I don't see the correlation between this particular case and either one of those two cases.

MR. PARIS: Move to strike.

Q. Doctor, do we have in front of us any of the medical records, the deposition transcripts of the parties, the deposition transcripts of the

doctors, or any of the other evidence in those two cases of Mr. Paris so that the jury can review those items --

MR. PARIS: Objection.

Q. -- and compare them to this case?

A. Not on the record, no.

MR. CARRABINE: Thank you, Doctor. I don't have any more questions for you.

MR. FAGNILLI: Nothing further.

MR. PARIS: Thank you, Doctor. Nothing further.

VIDEO OPERATOR: Doctor, you have the right to review this tape; you may waive that right.

THE WITNESS: I'll waive both my right to review both the tape and the transcript.

(Signature Waived.)

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CERTIFICATE

The State of Ohio, )
) SS:
County of Lake. )

I, Catherine Radie, a Notary Public within and for the State aforesaid, duly commissioned and qualified, do hereby certify that the above-named ROBERT C. CORN, M.D., was by me, before the giving of his deposition, first duly sworn to testify the truth, the whole truth, and nothing but the truth; that the deposition as above set forth was reduced to writing by me by means of stenotypy, and was later transcribed into typewriting under my direction; that the reading and signing of the deposition by the witness were expressly waived by stipulation of counsel and the witness; that said deposition was taken pursuant to notice and the stipulations of counsel herein contained, and was completed without adjournment; that I am not a relative or attorney of either party or otherwise interested in the event of this action.

IN WITNESS WHEREOF, I hereunto set my hand and seal of office, at Mentor, Ohio, this 26th day of October, A.D. 1993.

Catherine Radie, Notary Public
8547 Hilltop Drive, Mentor, Ohio 44060
My commission expires 10-19-94.