IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA
HARRISBURG DIVISION

[redacted], : CASE NO.
Plaintiff : 1:04-CV-01081
vs. :
YORK HOSPITAL : Harrisburg, PA
Defendant : 4 January 2006
.....: 9:300 a.m.

TRANSCRIPT OF TRIAL TESTIMONY OF
DR. IRA MEHLMAN, M.D.
BEFORE THE HONORABLE CHRISTOPHER C. CONNER
UNITED STATES DISTRICT JUDGE

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I N D E X

[redacted] vs. York Hospital

1:04-CV-01081

Testimony of Dr. Mehlman, M.D.

4 January 2006

PROCEEDINGS

PLAINTIFF'S WITNESSES

P R O C E E D I N G S

THE COURT: Good morning. Please be seated.

MR ROTHSCHILD: Good morning, Your Honor.

THE COURT: Mr. Rothschild, please call your next witness.

MR ROTHSCHILD: Thank you, Your Honor. At this time the plaintiff would like to call to testify Ira Mehlman, M.D.

THE COURT: All right. Dr. Mehlman, please step forward and be sworn.

(Dr. Ira Mehlman, M.D. was called to testify and was sworn by the courtroom deputy.)

COURTROOM DEPUTY: Please be seated and state your full name for the record.

THE WITNESS: Ira Mehlman. I-R-A, M-E-H-L-M-A-N.

DIRECT EXAMINATION BY MR ROTHSCHILD:

Q. Good morning. Dr. Mehlman, would you please tell the jury what your occupation is?

A. I'm a physician.

Q. Doctor, just so that everybody can hear you, you have to make sure that you're talking into the microphone so that everything gets picked up. And, Dr. Mehlman, are you currently licensed to practice medicine?

A. Yes, I am.
Q. Where are you licensed?
A. In New York state.
Q. Can you please describe for the jury your educational background towards becoming a physician?
A. I went to college at Princeton, in Princeton, New Jersey, and I went to medical school at Cornell Medical School, being in Manhattan, New York Hospital.
Q. What year did you complete or obtain your medical degree?
A. 1968.
Q. Upon completion of your medical school training what did you do?
A. I did an internship and beginning of a residency. I went out to San Francisco and did what was called a rotating internship, which was a mixture of the important specialties in medicine, and then the following year what's called PGY-2, I did the first year of a residency in internal medicine. That was 1969 to `70, and that was in San Francisco at the Kaiser Medical Centers.
Q. Then what did you do in 1970?

A. That was the time of the Vietnam conflict, and there was a draft and I was drafted and went into the Army. I had what was called a partial deferment, sort of a lottery, and I got pulled out of my residency and was sent as a general medical officer into the Army, and a number of assignments, primarily in Europe for four years. At the end of that time I intended to complete my medicine residency, and I enjoyed my military their experience. So I was allowed to, I was offered a position at Walter Reed in Washington, D.C., and I came back and completed two more years of a medical residency and -- shall I continue?

Q. Yes. That was Walter Reed Army Medical Center?

A. Yes.

Q. Then when you completed the residency in internal medicine what did you do?

A. Then I was offered a position as a junior staff at Walter Reed Hospital in the Department of Medicine, saw patients, and taught for the year from `76 to `77, and at that time I was, I was interested in endocrinology and metabolism, and I was offered a fellowship at Walter Reed in

endocrinology and metabolism, which I did from 1977 to 1979.

Q. And what did you do in 1979?

A. I was staff at Walter Reed and participated in seeing patients at Walter Reed, and then teaching the house staff in training in both internal medicine and in endocrinology and metabolism, and I did some research and had some publications at that time from 1979 to around 1981.

Q. Then in 1981 what did you do?

A. Well, throughout that time I had three young children, so I was doing some moonlighting working in critical care in the Washington, D.C. area, and I was doing a lot of emergency medicine and critical care medicine. Those were the early days of both those specialties, and in 1981 the Surgeon General of the Army asked me to, he knew of my interest in critical care and emergency medicine, it was the very earliest days of emergency medicine as a specialty, he asked me to participate in developing the emergency department at Walter Reed Army Medical Center, and I did that. I was the director and developed the emergency medicine department at

Walter Reed Army Hospital from 1981 until I retired in 1992 from the Army after 23 years.

Q. And what was involved in what you did then in those eleven years at Walter Reed at the emergency department?

A. Well, it was a new specialty. It was developing the protocol, the policies for practicing emergency medicine. Before that it was, emergency medicine in the early 70's was staffed by whoever was available or people who were building new practices or people who were assigned on a roster to sort of participate in helping staff the emergency department, and so the paradigm shift, the change was to develop people who were trained and really knew the issues rather than just sort of coming in.

So I had developed a staff, recruited people who were training in this new residency that was developed, and developed a staff of trained emergency medicine physicians and developed protocols and policies that sort of defined how we did business in the emergency department, the critical or high volume issues that have to have policies to define how you treat a pneumonia or a heart attack or things

like that. So I developed the department, the policy, the protocols, and hired and recruited people appropriate.

Q. Were you, did you also work in the emergency department at Walter Reed?

A. Certainly, yes.

Q. And was that on a regular full-time basis?

A. Yes.

Q. Now, can you describe for the jury the field of emergency medicine?

A. Well, emergency medicine specialty since the late 70's recognized, incorporated, is the specialty where the emergency department is open seven days a week, 365 days a year. It treats male and female patients, patients of all ages. It's the place first or last resort for patients when they have no other recourse or don't, are not able to be seen for various reasons by private doctors, and it's the place where patients come when their private doctors are not available.

So we see, in emergency medicine we see all kinds of patients. We see them in large volumes or small volumes. We see them at any time of the day or the year and in any circumstances.

It's where the most acute, most dangerous, most life and limb threatening illnesses present first, and it's where they get their initial treatment and triage and admission or discharge, and I also tell the young doctors that emergency medicine physicians, our job is to figure out what needs to be done now or five minutes ago to save a life or a limb, and then does the patient need to be admitted or not.

If not, what is the disposition going to occur and to whom and with what treatment, and if the patient is going to be admitted to initiate that process and engage the appropriate consultants. We're expected in all the areas of medicine, from neonatal newborn, the first thirty days of life, to 100 year old patients to come in, to be aware enough and knowledgeable enough to initiate life and limb saving treatment and to contact appropriate people to participate in the further care, if that answers the question.

Q. Are you board certified in any specialties?

A. I'm board certified in three specialties. I was originally board certified for internal medicine by the American College of Physicians.

I'm also a fellow of that college. I'm board certified for my training and work in endocrinology and metabolism, and I'm board certified in emergency medicine and a fellow of the American College of Emergency Physicians for my work in emergency medicine.

Q. In general can you tell the jury what it means to be board certified in a specialty?

A. Board certification means that you have -- excuse me, board certification means that you have mastered core curriculum in a specialty that's been defined by the board, a certain amount of material, minimal material that's expected that you know and have mastered. It's expensed that you know how to examine and treat patients in that specialty, that you know how to do an appropriate exam in the specialty in all the areas of that specialty, and then the department head or the head of the program that you're in certifies that you have mastered the material and the techniques for treating patients, like a nose bleed for example, which is special, and then you're allowed to sit for the exam, which for the most part are written exams,and in some specialties written and oral

exams, and if you have done all those things and successfully completed the examinations, then you're eligible for board certification and become board certified.

Q. And in the specialty of emergency medicine, what specifically did you have to do to become board certified in that?

A. Well, I was of the original generation of doctors who were doing emergency medicine before the residencies even existed, because it's a relatively new specialty, just like in critical care is the same thing, and so I had 7,000 hours, or five years of work in the field, and I was certified that I had the correct number of hours and was practicing in that field, and so I was allowed by the board to sit for the exams because I had been doing the new specialty. So I took the written and the oral exam in the specialty.

Q. And when was it that you were board certified in emergency medicine?

A. 1991 is when I got certified, when I asked to take the exam.

Q. And by whom, what board is it that you're certified?

A. The American Board of Emergency Medicine. American College of Emergency Medicine.

Q. What is the American College of Emergency Medicine?

A. It's the official organ that represents emergency medicine physicians. It's the, like every specialty has a legitimate official board, it is that board.

Q. Now, when you retired from the military in 1992, what did you do?

A. Well, I continued, I had 23 years of service in the Army. I retired as an O-6 colonel, and I retained in the Washington, D.C. area and the Walter Reed area, and I initially worked at Sibley Hospital as the associate director of that department. Subsequently I went to the Washington Hospital Center, which is the big hospital with a big helicopter service and urgencies and big teaching programs at the Washington Hospital Center.

Then I had a number of, then I had, I was senior attending there. Then I was director of a group at Bethesda Naval Hospital for three years of an emergency department, pediatric and ambulatory care contract that the Navy had.

I ran that for three years. Then there was a period after that that I was up as I recall, I don't have my CV in front of me, but I was in South Amboy, New Jersey, I was running Memorial Medical Center emergency department for a brief period until it closed its doors, and then --

Q. Let me interrupt you for a minute. Your Honor, may I approach?

THE COURT: Certainly.

Q. I'm going to show you what we've marked as Plaintiff's Exhibit 1. I'll ask you to identify it, and you'll have this in front of you. What is that, Dr. Mehlman?

A. It's my curriculum vitae, my CV.

Q. Continuing with your testimony, you certainly may refer to that.

A. Then I went to southern Maryland, a place called St. Mary's Hospital in Leonardtown, Maryland, a beautiful place on the Chesapeake, and I was director there for two years of the emergency department, and at that point I was interested in coming back to New York City where I grew up, my children had grown, and I was interested in being back in the New York area. I had family and friends, and so in around 2000,

I guess it was 2001 to 2003 I was director of the emergency department and working as a staff physician at the Mary Immaculate Hospital in Queens, which is part of the St. Vincent Catholic medical centers in Manhattan.

So I did that for two years, and for the last two plus years I was the director of the emergency department at NYACK Hospital, which is at the foot of the Tapan Zee Bridge in Rockland County in the New York City area, and I just resigned that position as director on January 1, a few days ago. I had been a director roughly or 25 years of a number of emergency departments, and I decided that at this time in my life I really just want to see patients a few days a week and not answer to what other people are doing anymore and not being on call eight days a week with two beepers and a phone, and so I'm now currently as of January 1 working about 30 hours a week in emergency medicine just seeing patients, and happy.

Q. And where are you doing that?

A. At NYACK.

Q. First of all, in your position as the

director of emergency medicine at NYACK Hospital what did you do?

A. Well, I ran the department, which means reviewing and refining and creating policies, which means hiring and firing appropriate people, and a big part of director is you're reviewing probably 15 to 20 percent of all the charts that pass through the department for various reasons. We do a lot of what's called benchmarking, where we look at the time to initiation, intubation for example if a patient's airway is failing, or the time to giving treatment like in a heart attack patient to, what's called thrombolytic therapy in the heart, or like the case under discussion today, the management of a stroke, time to initiation of treatment.

So in fact at the hospital I'm at, NYACK, we were certified this past year as a stroke center for the state of New York, and so the director, along with the head of nursing and hospital's leadership helped develop policies, directions for the department, and make sure that the outcomes are appropriate.

Q. You talked about several of your other

positions as directors of various emergency medicine departments, and as a director were those duties similar to what you did at NYACK?

A. Yes.

Q. Now, also at NYACK when you were the director did you also practice emergency medicine on a regular daily basis?

A. Yes, 30 hours or so a week, or more.

Q. And as we move into this year you're going to continue the practice of emergency medicine?

A. Yes.

Q. So that I guess now how long altogether have you been practicing emergency medicine?

A. Probably since around 1978. So what's that, 22, 27 years possibly emergency medicine. 37 years medicine. 27 or so years officially in emergency medicine.

Q. Can you calculate or estimate the number of emergency department patients you have seen during the course of those approximately 27 years?

A. Probably seventy-five, eighty thousand patients. I don't know. A lot.

Q. Now, doctor, this case involved the alleged failure to treat [redacted] with TPA within

three hours of suffering a stroke. Have you had experience during your career as an emergency physician in diagnosing and treating patients in the emergency department with stroke?

A. Yes.

Q. And over the course of the last ten years have you had that continuing experience?

A. Yes.

Q. And have you had experience over the last ten years with using TPA with stroke patients?

A. Yes.

Q. And could you describe what your experience has been --

A. With TPA for stroke patients?

Q. Yes.

A. I've probably treated eight to ten patients, maybe ten patients with TPA over the last -- probably the first one I treated was at St. Mary's Hospital in Leonardtown. That would be around 2000, 1999, 2000. So that's seven years or so ago, and I probably treated ten or so patients.

Q. And when using TPA how do you determine when to use it?

A. Well, it's very, it's a powerful treatment.

-TPA was used as the initial drug that was used --

MR. STUMP: Excuse me, Your Honor?

THE COURT: Yes?

MR. STUMP: I think we're getting into substance here, and I'd like the opportunity if I could to cross examine him on qualifications.

THE COURT: Mr. Rothschild?

MR ROTHSCHILD: I can move that later. I don't have a problem with that, Your Honor.

THE COURT: All right. If you could finish qualifications and identify the fields in which Dr. Mehlman will be asked to be an expert, then I'll allow Mr. Stump an opportunity to cross examine on qualifications.

MR ROTHSCHILD: Sure.

BY MR. ROTHSCHILD:

Q. Thank you. You mentioned you were involved in the certifying of NYACK Hospital as a stroke center. And just briefly, what is a stroke center?

A. Well, in the state of New York there are designated stroke centers, and that means that they have all the pieces exist for the

management of stroke, which means they do work with the EMS and the paramedics so that they educate the community in which the emergency department is, so that even at assisted living facilities, at nursing homes, and all the places the word is out so that patients get brought in promptly, because time is critical.

So education, the hospital participates in educating the community. The hospital works with the EMS paramedic system so that everybody appreciates the things to look for to know whether that's an issue, and then those ambulances in New York state are diverted to centers that have expertise or who participate in a stroke program, and then when the patient reaches a hospital, the emergency department, which is where it happens, that all the pieces are in place and there are protocols, there are plans that define what is going to happen when that patient comes in.

Like two nurses and a doctor will move to the bedside right away, the CAT scans, which are essential, are notified and clear the table so that the scan can be done immediately. The laboratory is notified that they're going to

be getting the blood studies that are required so that they're going to turn those out immediately, truly stat. So all that's in place, and then also there's a team leader typically who's a neurologist who will be called and participate on the phone typically initially until they get there.

And then the other piece, too, is the follow-up, that they go to a defined bed in the hospital where nursing staff are educated to the special issues of stroke patients, like swallowing problems. And then also that the physical rehab piece exists so that as soon as the patient gets in, there are people in physical medicine who know about the issues and are trained to start reeducating and maximizing the ability to return to full life in those patients with whatever residual they're left.

So a stroke center has, is doing work with the community, educating, making sure the EMS know the signs so that they don't take them to a place where they shouldn't be to get the most chance at recovery, and a staff that has policies in place and procedures to make sure things happen in time, quick time, and then the

follow-up, the right bed, the right personnel, and then disposition correctly. So if answers your question, that's what a stroke center is about.

Q. And during the course of your career in emergency medicine have you been involved in any teaching, teaching of residents?

A. Yes. Yeah, I was for many years an assistant professor of medicine, and I was also when I was at Walter Reed we had a number of students from Howard University, from GW, where President Reagan was treated when he was shot, the emergency department from Georgetown Medical Center, they would all rotate through Walter Reed, because we had a great patient population, a tremendous referral base from all over the world.

So as a professor, initially the assistant professor at Walter Reed, I was also for a time of a number of years also recognized as an assistant professor at GW, George Washington University, at Georgetown University, and then later in the late 90's I was an associate professor of medicine when I was director at the Naval Hospital of the emergency department

in recognition of the teaching that we did in the department, if that answers your question.

Q. And your teaching involved, was with whom?

A. With residents and students, students in training and residents in post-graduate training, and typically in medicine, surgery, pediatrics, the people who would rotate through the emergency department.

MR. ROTHSCHILD: Thank you, Dr. Mehlman. I have no further questions on direct qualifications, Your Honor.

THE COURT: And in what fields are you offering him?

MR. ROTHSCHILD: I'll be offering him as an expert in the field of emergency medicine.

THE COURT: All right. Mr. Stump, do you have questions on qualifications?

MR. STUMP: I do, Your Honor. Thank you very much.

THE COURT: You may proceed.

CROSS ON QUALIFICATIONS BY MR. STUMP:

Q. Good morning, Dr. Mehlman.

A. Good morning.

Q. I introduced myself earlier, my name is Chris Stump, and I represent the health care

providers in this case. You've spoken quite a bit about your experiences at Walter Reed, but do I understand you left Walter Reed in 1992?

A. Yes.

Q. All right. So that was before this issue of TPA for stroke patients occurred, correct?

A. Yes.

Q. So your experience at Walter Reed really doesn't have any bearing on treatment of acute stroke with TPA, correct?

A. That's correct.

Q. Now, you did not do a residency in emergency medicine, correct?

A. No, I didn't.

Q. And in fairness to you it's because when you were at that stage of your career, emergency medicine residency didn't exist?

A. Correct.

Q. But you then did do a fellowship in did you say endocrinology and metabolism?

A. Yes.

Q. And that really doesn't involve the treatment of stroke patients, correct?

A. No.

Q. You did not do a fellowship in neurology

for example?

A. That's correct.

Q. You're not licensed in Pennsylvania, are you, sir?

A. No, I'm not.

Q. You have never taught in an institution which has a dedicated emergency medicine residency, correct?

A. That's correct.

Q. All right. So you've done teaching, but not to emergency medicine residents?

A. I've had some rotate through, like where I am at NYACK I organize some residents from NYU's program who do electives, but not in a training program setting, yes.

Q. Okay, I wanted to make sure that we're clear, and you're not a member of the Society for Academic Emergency Medicine?

A. Correct.

Q. And you're not a member of the American Academy of Emergency Medicine?

A. That's correct.

Q. And you've not published any peer reviewed articles on the topic of emergency medicine, correct?

A. Right. All my publications are in endocrinology.

Q. And that's back from a couple of decades ago when you were in your fellowship, or shortly thereafter I presume?

A. Right. Correct.

Q. And so the jury is clear, a peer reviewed article is something that an expert or a practitioner submits to be reviewed by his peers, his or her peers, to determine whether it's of sufficient scientific value to be published, correct?

A. Yes.

Q. And you haven't had any papers published on emergency medicine, correct?

A. Correct.

Q. And you haven't written any textbook chapters or textbooks on emergency medicine, have you, sir?

A. That's correct.

Q. You haven't been involved in being a peer reviewer or serving as an editor for any peer reviewed journal which decides what scientific publications warrant dissemination, correct?

A. Correct.

Q. You haven't been given any invited national scientific presentations on emergency medicine, have you, sir?

A. No.

Q. You talked about board certification, and let's go back to that for a moment. Now, you said you were of the first group of emergency medicine physicians to be board certified, correct?

A. Correct.

Q. Did you say you weren't board certified until 1991?

A. That's correct.

Q. Well, board certification had existed for ten years up until that point?

A. About that time, right.

Q. So you really weren't part of the first group. You were practicing for ten years and then you became board certified?

A. Right. I had two sets of boards and I wasn't sure why I wanted a third, but I took it because I was director of the department.

Q. And to be clear though, sir, you didn't pass it the first time, did you?

A. I passed the oral the first time -- rather

the written the first time, and I repeated the oral and passed it the second time, and I recertified in 2001 without any problems.

Q. Okay. Now, I notice from your CV that in 1995, again which is when the NINDS study came out, right?

A. Correct.

Q. On the issue of TPA for treatment of stroke first surfaced?

A. Correct.

Q. Since 1995, in the last ten years it looks to me like you've had seven different jobs, is that correct?

A. That's possible.

Q. In four or five different states?

A. Four states probably.

Q. Four states, and D.C.?

A. D.C., correct.

Q. Okay. Now, you talked also about the fact that NYACK Hospital, where you just resigned as director of emergency medicine, is designated as a stroke center, correct?

A. Correct.

Q. Wouldn't it be true, doctor, that you only became designated as a stroke center in

September of 2005, almost two years after the care in dispute here?

A. It's true that I think all the stroke center designations were starting, that all became an issue this past year or two, yes.

Q. So for the two years after the care in dispute the facility that you were the director of was not designated as a stroke center?

A. That's correct.

MR. STUMP: Those are all the questions I have, Your Honor. If I could approach briefly?

THE COURT: You certainly may.

MR. STUMP: Thank you.

(Side bar at 9:30 a.m.)

MR. STUMP: There seemed to be a lot of discussions about policy and procedures, and I would like an offer of proof on whether he's going to opine that York's policies and procedures were inadequate, because there's no claim of corporate negligence in the complaint. The only claim against York Hospital in the complaint is vicarious liability as to the two doctors, which we've stipulated that they were agents, but what was being thrown out here suggests to me that this witness is going

to talk about inadequate policies or procedures or policies and procedure that they should have had, and that's not been raised as an issue in the case.

THE COURT: Mr. Rothschild, is the *probata* going to match the *allegata*?

MR. ROTHSCHILD: I don't know where that came from, Your Honor, quite frankly. Not at all.

MR. STUMP: Okay.

THE COURT: All right, I don't think we have an issue there. All right?

MR. STUMP: Thank you very much.

(Side bar concluded at 9:32 a.m.)

THE COURT: Ladies and gentlemen, the court will accept Dr. Mehlman as an expert in the field of emergency medicine. Mr. Rothschild, you may continue.

MR ROTHSCHILD: Thank you, Your Honor. Again may I approach the witness?

THE COURT: Absolutely. And both you and Mr. Stump and your associates need not ask my permission to approach the witness. I know it's force of habit and those formal rules have been required in the past, but not in this courtroom.

MR ROTHSCHILD: Thank you, Your Honor.

MR. STUMP: Thank you very much.

CONTINUED DIRECT BY MR. ROTHSCHILD:

Q. Dr. Mehlman, I'm going to place before you what we have marked as Plaintiff's Exhibit 2 for your reference during your testimony. Dr. Mehlman, at my request did you perform a review of various medical records regarding [redacted] and her admission to York Hospital on [redacted]?

A. Yes, I did.

Q. And did you prepare a report dated February 18, 2005 -- February 8, I'm sorry.

A. February 8.

Q. February 8, 2005?

A. Yes.

Q. And did you prepare a subsequent report that was dated August 18 I believe of 2005?

A. Yes, I did.

Q. Are those what's in front of you marked as Plaintiff's Exhibit 2?

A. Yes.

Q. Now, doctor, if you would please tell the jury a summary of the records that you reviewed in this matter.

A. Well, the records are summarized in my report, if may just sort of review them. The medical record from [redacted] from the York Hospital, [redacted]. The EMS, the emergency run sheets for [redacted] from the Pennsylvania EMS reports of [redacted]. The York Hospital department of emergency medicine guideline of care for CVA or stroke. VA/NIH stroke scale from York Hospital, the York Hospital inquiry, an audit trail concerning CAT scans performed on [redacted] on [redacted] a CAT scan log for two CAT scanners at York Hospital on [redacted]. The York Hospital CAT scan -- I said that. Plaintiff's first, second, and third supplements to Rule 26(a)(1)disclosure.

Q. Doctor, I think you may have missed number 7.

A. The York Hospital CAT scan audit, TPA policy, and TPA inclusion exclusion policy, excuse me. The depositions of staff physicians working in the emergency department, Dr. Lynn Jensen, the emergency department resident Dr. Eric Salib, and the emergency department nurse Jovita Miller. Then deposition

transcripts of EMS employees Scott Decker, Timothy Ross, and Deborah Herman.

Depositions of [redacted], depositions of [redacted]'s brother [redacted], daughter [redacted], sister [redacted], and niece [redacted]. Depositions of doctors Bedreshia, Giardino, and Yi, and a report of Dr. Kurlanzic, M.D. Those are what were, what I reviewed with respect to my first report on February 8th.

Q. And doctor, as a result of the review were you able to obtain a history of the events surrounding [redacted] and the events of [redacted]?

A. Yes.

Q. And could you describe, please, that history?

A. Well, on [redacted] was attending a religious retreat, which had left from around the D.C., Maryland area. She was traveling with her brother, [redacted] and they were on a bus heading through Pennsylvania. They had left at around 6:00 in the morning, and they were singing songs on the bus, and then some an acute episode occurred sometime in my opinion from

reviewing everything sometime at around 8:00, shortly after 8:00 in the morning on [redacted] had an acute episode of change of behavior, of function, of status. She acutely stopped singing and slumped over on her brother's shoulder. They were sitting in the front part of the bus. That was quickly brought to the attention of the bus driver, who pulled off to the side of road and with a cell phone called 911.

The 911 call is registered at around 8:14 as I recall in the morning. The EMS emergency medicine services responded and were at the site at around, shortly around, sometime around 8:30, 8:26, 8:30, and at that time they found her there at the scene, 8:25, and they found that she had a possible cerebral vascular accident with slurred speech and left-sided findings of weakness and some facial changes, and they notified the hospital, York Hospital, by phone as often happens, that they were coming in, and they arrived at the hospital sometime around I think it was 9:03, and [redacted] was registered by 9:14 at hospital.

Q. Now, in the records that you reviewed were

you able to tell when the notification from EMS came to York Hospital? Was there a time that you referenced?

A. The phone notification --

Q. Yes.

A. -- was around 8:41 I think is when they notified.

Q. Now, then if you would continue, you mentioned that she was registered at 9:14 a.m., and if you could continue your history at that point and what you found occurring in the hospital starting at 9:14.

A. Well, she was noted to have left-sided weakening in her initial triage and assessment, some gaze problems with her eyes, deviation of gaze to the opposite side, diagnosed as having a cerebral vascular accident. Was evaluated initially by Dr. Salib, who was a resident in training in the emergency department. He first saw the patient and a CAT scan and laboratory tests were ordered. Subsequently Dr. Lynn Jensen participated in the evaluation with Dr. Salib.

Q. And were other tests ordered in addition to the CAT scan?

A. Yes, blood tests for clotting studies were ordered, platelet counts, PT and PTT, which is a measure of clotting to look for what's called the coagulopathy, or a clotting problem, and other tests, cardiogram and other typical tests that we order on such patients in the emergency department.

Q. And were you, if you would continue then with your history and some of the findings then from the studies.

A. Well, all the studies were basically for the most part, they were normal. The CAT scan that was performed, and I think it was ordered as I recall the, it's around 10:04 it came back as basically a normal CAT scan. The blood tests were in the normal range.

Q. And what did that signify, the CAT scan being normal?

A. Well, in patients who present with the picture of a cerebral vascular accident or stroke, the critical things are when did it happen, time is critical, and is it ischemic stroke, meaning no blood clot or something blocking a vessel or just a closure of vessel, or is it a hemorrhagic stroke where there is

actually a bleed. So that's the critical determination. So the CAT scan being entirely normal is very important.

Q. You mentioned the time of 10:04, and what is that reference related to with regard to the CAT scan?

A. The time?

Q. Yes. What does the 10:04 time refer to?

A. The time it was completed.

Q. Now, doctor, what is the role of an emergency department physician when obtaining a history from a stroke patient?

A. Well, the role of an emergency department physician is as I said earlier is to save life and limb, keep the patient the most whole possible and alive, and in a patient with, presenting with a stroke one of the, the most important thing is time in terms of what can you do for a patient with a stroke. There's a potential to greatly improve or cure some patients with strokes, and time is most critical. It's one of the adages that started with cardiac problem is that time equals tissue in terms of heart attacks, and it's the same thing in a stroke. Time equals tissue.

Q. So that in talking then in terms of obtaining a history from a stroke patient, what is appropriate to be done?

A. Well, you absolutely have to determine if possible when this happened. Patients who wake up with a stroke, which is not unusual because of a number of things, but it's not a surprise that people get strokes because their blood pressure is higher when they're supine in bed and other reasons, but if a patient wakes up with a stroke you have no idea what time zero is, if they'd been sleeping four, five, or six hours.

If they just went to sleep an hour ago and they were fine that's a different story, but if a patient wakes up in the morning and has a stroke, there is no treatment except the things beyond thrombolytic therapy, the good care, the managing sugar, the managing blood pressure, and the rehab, and the physical medicine. But time is critical because there is a treatment. There's a standard, there's an accepted treatment, and that treatment has to be given at the right time, because if it's not it becomes dangerous. So there is a treatment, and

the most important thing when somebody comes in is to know exactly what the time was as best you can.

Q. Now --

A. If that answers your question.

Q. It does, thank you, doctor. Then let's talk about TPA. If you could, could you describe what TPA is?

A. Tissue plasminogen activator is what it stands for. It's a clot buster. It breaks down, everybody's probably heard about Heparin. Heparin and Coumadin prevent blood from clotting. TPA breaks down clots. It breaks down pre, already formed clots, so it gets rid of it. Heparin and Coumadin prevent it from propagating and occurring, but TPA breaks down clots.

And anybody has members who are on dialysis, sometimes catheters clot, you inject something like TPA, a streptokinase or one of those drugs that breaks down the clot and allows them to be dialyzed again, because it gets rid of the obstruction. It gets rid of it, and so it's what's called, you know, popular language, clot buster, and it's the original -- well,

streptokinase is the original drugs that break clots down and then there are other drugs that are used particularly in the heart, the same family of actions, but TPA is the drug, the only drug that's approved and used in brain attacks, strokes, in the brain clots where there's ischemia. Not a bleed, because then it would not be something that you would do.

Q. To follow up then, doctor, and you mentioned in terms of ischemia, but what is TPA used for with stroke patients?

A. What is it used for?

Q. Yes.

A. It's to reopen blocked vessels, if it can be done in the right time period, and the reason that's important is if you have a fresh clot and it's less than three hours, then it's been found that if you can open that you get a better outcome. If you go beyond three hours what happens is the absence of circulation, the absence of what's called profusion, of getting blood to tissue, when you go beyond three hours for sure you start, tissue starts dying, cells start dying, and the more and the further you get and the more death in those cells when those

cells that are dead or devitalized are not normal, when you give TPA then they are the kind of cells that are likely to bleed.

So what happens with TPA if it's given too late or in somebody with a big infarct, a big area of tissue damage, in that situation with a big stroke, ischemic, not bleeding, a big stroke or an area that's over three hours, the likelihood of bleeding becomes much greater. So beyond three hours it becomes dangerous to give TPA. That's why there's a time frame. It's better to give it in 30 minutes. It's better to give it in an hour. It's better to give it in two hours. But once you get beyond three hours then the outcome, the risks start exceeding the benefits. That's why the time is so critical.

Q. And that risk again if you go beyond three hours, what's the risk involved then?

A. Well, the risk beyond three hours becomes, the risk of bleeding becomes substantially greater. So it outweighs the potential for benefit.

Q. And the bleeding would be in what area of the body?

A. Well, bleeding can occur anywhere with TPA. But we're worried in patients, because if somebody has had any recent surgery or anything else, you're not going to give them TPA either. There's a whole bunch of criteria to exclude treatment with TPA, but assuming that the time is right and there's no other source of bleeding, possibly like an accident or a fall when they had the stroke, or a seizure, any of the exclusions, if none of those exist the risk that you're worried about is in the brain, and it is an increased risk.

But despite that, the statistics on TPA say that patients who get TPA who are candidates and get it, even if they have a bleed, even if they have the worst complication of bleed in their head, their survival is still better than the untreated group. That's important. Even if they get this bleed this thing that people that we all worry about, physician do no harm, we worry about that, but even if they get that bleed, they have a greater survival than untreated patients who were candidates of TPA, and it's the only possibility, it's only about 12 percent greater than the untreated group, but

it's the only chance of somebody not being paralyzed for the rest of their life, trapped in their body and a burden on their family in their mind, whether they are or not, but in their mind certainly, and it's the only chance that somebody, a family member would have of being whole or markedly improved. There is no other treatment. It's dangerous. Chemotherapy is dangerous. The way you treat cancer with radiation and chemo can kill a patient. But what's the alternative?

Q. Now, doctor, then are all patients who present with a stroke candidates for TPA?

A. No. Small number, my career maybe I have treated ten patients, and one had a bleed. It wasn't a head bleed, it was actually a GI, a gastrointestinal greed of significance. But no, most patients for a number of reasons are not candidates, but those who are should have the opportunity of a full recovery or a significant.

Q. Now, doctor, when was TPA approved for use in stroke patients?

A. Well, the landmark studies as I recall were at the NIH, the National Institutes of Health study, and those were as I recall 1995, 1996 was

when the literature as was talked about by Mr. Stump, the peer reviewed journals, the New England Journal, all the appropriate journals were 1995/96 is when it was established, and the FDA I believe, the Food and Drug Administration, which only approves medications that have value, the Food and Drug Administration would certainly not approve something that would not, that would benefit that was approved in 1996.

Q. Now, what characteristics must be present for a patient to be a candidate for use of TPA with stroke?

A. What characteristics?

Q. Yes.

A. Well, they have to be -- there's a whole policy. They have to be, it's a cook book, you have to be over 18, you have to not be pregnant, you have to have what's called the NIH stroke scale, which is a bunch of things to determine how much disability you have, how severe your handicap is from the stroke, like weakness in the arms, facial palsy, speech dysphasia, dysarthria. So you have to be over 18, you can't be pregnant, you have to have been, it has to be clearly within the earlier the better,

but within the three-hour time frame that I just chatted about.

You have to have a platelet count of typically over 100,000. That's one of the clotting studies in the body platelets that helps participate in it. You have to have not been on an anticoagulant like Coumadin or Heparin. You have to have not had any recent surgery of significance, because you'll bleed. And if it's internal that's risky. You have to have not had a lumbar puncture, a seizure, you have to have not had a recent serious motor vehicle accident.

You have to have not had a puncture in an artery that's inaccessible, because it's going to bleed, the clot is going to be dissolved, and a list of things that are in the sheets in here, if you like I can open, but there's a whole list of what you need to have. Under three hours, a stroke scale of 14, a 4 to 20, meaning you don't have a very mild or a very severe stroke, but if you've got an almost nothing stroke, which is some numbness and tingling and maybe a little facial weakness, that would be under 4, and you know, because the medicine is powerful you give

it when you need to worry about big deficits, like no arm and no hand and no speech because of a dominant hemisphere stroke. So they're all defined. There's a thing of what you need, which is under, over 18, not pregnant, NIH stroke scale 4 to 20, and no other contraindications basically.

Q. And what about brain bleed?

A. About what?

Q. A brain bleed. Bleeding in the brain.

A. If somebody has what's called a hemorrhagic stroke or a subarachnoid bleed or bleeding or head trauma of significance, that's an absolute contraindication to TPA. You can't give it.

Q. Let's -- and then talk about this for a second. First of all, what is an ischemic stroke?

A. An ischemic stroke, ischemia means decreased blood oxygen. An ischemic stroke is a stroke where the artery gets stenotic. It narrows. You get narrowing like from cholesterol or from, you know, lipid disorders, the things that you heard and see about, hear from your doctors, or maybe just congenital, just a bad luck at birth. So ischemia means a

narrowing or decreased flow of blood to the tissue, and that's from narrowing of a vessel from a plaque or cholesterol.

It could be from atrial fibrillation, like [redacted] was in atrial fibrillation, an irregular heartbeat, and you can get embolized, little pieces of clot from the heart with atrial fibrillation. So what happens is you either got a blockage from too much narrowing, or you've got a blockage because of a piece of debris has lodged in a small vessel and it blocks circulation, and so the tissue becomes ischemic. It doesn't get blood, which means it doesn't get oxygen.

Blood's reason to exist in terms of red blood cells is the hemoglobin carries oxygen. That's what the blood does, is part of what it does is it circulates oxygen and glucose, which is basic stuff for the body's tissues engines to work. So ischemia means no blood, and it means no blood because of a narrowing or blockage or a piece of emboli that might float up, sometimes in women on birth control pills, and as opposed to a hemorrhagic stroke, which means a vessel is broken, like a little aneurysm in the brain

which has a weak wall, it breaks, or tissues break down and tissue bleeds like subarachnoid bleeds, or an aneurysm which ruptures and bleeds, and those are bleeding problems.

Now, bleeding problems less likely, like a subarachnoid bleed to cause focal finding, because it's just blood breaking down, and so with bleeding problems like subarachnoids or intracerebral bleeds people can have deficits, but what's more prominent is lethargy and reduced functionality there and a degree of coma there. Their level of consciousness is reduced as opposed to ischemic stroke, where they can be perfectly conscious but have deficits, they've lost that part of the brain of functioning, move that arm, that leg, the speech centers. Does that answer your question?

Q. In part. How do you determine if the stroke involves bleeding?

A. Well, CAT scans, I mean medicine in 2002, and 2006 now we're in is, you know, the technology is powerful, and CAT scans are great for seeing bleeding. They're best for seeing bleeding. They're not so good in the back of the brain because there's a lot of bone back

here at the base of the brain. So there's a lot of artifact, but a CAT scan is very good particularly for example in the areas of [redacted]'s bleed, they are probably 95 to 97 percent valid at seeing a bleed.

It's very good technology for a bleed as long as it's not posterior. There the MRI, magnetic resonance, is probably better, and it's also better for looking at flow, but for bleeds CAT scans are excellent. 97, 95 percent. If you're really worrying about a bleed in a patient who has -- well, I'll --

Q. Let me ask you the next question, doctor, and that is in a hemorrhagic stroke then where there's bleeding, is a patient a candidate for TPA?

A. No. It would be criminal almost.

Q. And with an ischemic stroke, is that a stroke where a patient could be a candidate for TPA?

A. Absolutely. It's the standard of care.

Q. And in that stroke, an ischemic stroke, what does the TPA do?

A. Well, TPA, an ischemic stroke means there's blockage, and what TPA has the potential to do

is to open up the blockage and allow blood to circulate, and a little bit like, I like the metaphor of an eclipse, there's the umbra and then the penumbra around it, and what happens when you have an ischemic stroke, a blockage, that area is not getting blood, they're not getting oxygen, and then around it you get edema, swelling, fluid, and ultimately if you don't reverse that process more tissue becomes affected, because it's not really affected by the initial stroke but it's affected by the swelling and stuff that happens around reactions in the body.

So the key thing is that not only when you give TPA in appropriate patients, who don't have a bleed, who are at less than three hours and meet other criteria, very specific, stringent criteria, carefully decided to give it, it opens up that clot and it allows that tissue to get better, and it also allows the tissue around it to resume normal function, because what happens is you get a stroke and then you get all the tissue around it that wasn't even ischemic because of swelling and edema and fluid. That's the penumbra.

So it's absolutely not right to give it if there's bleeding. Cat scans eliminate that possible to 95, 97 percent and the clinical picture and all the other criteria, then it is the standard of care to treat patients so that they have a chance of being almost normal, or possibly normal.

Q. Now, doctor, is there any other medication available in 2002 to treat stroke patients to lessen the effects of the stroke?

A. No. And in fact in 2005 patients are getting TPA at big medical centers, university centers at eight and ten hours, but through catheter. They're not getting it peripherally. They're getting it focally through catheters right at the site. Fancy techniques with skilled radiologists are getting up into these arteries with catheters like we do with the heart and elsewhere, and they're extending the time to give TPA because it becomes safer to do it that way and you can go beyond, there's a whole literature in peer reviewed journals of giving TPA later than three hours, but by special techniques with good outcomes. But for most of us in the trenches seeing patients

in emergency departments it's three hours by needle periphery.

Q. Doctor, back in [redacted], if a patient was not a candidate for TPA was there any other medication available to be used in its place?

A. No. They would be committed to a life of paralysis and dependence.

Q. And back in [redacted], if a patient was a candidate for TPA was there any other medication available to be used in its place?

A. Other than TPA for a candidate?

Q. Yes.

A. No.

Q. Now, doctor, if a patient in [redacted] of [redacted] as a candidate for TPA, what do you as the emergency room physician do?

A. Well, you define the time, make sure as early as possible to give it, that you eliminate the chances of complications, of contraindications, consult early with a neurologist and get agreement. All of this happens concurrently from the moment they walk in. The calls go to neurology, to radiology, and what do I do if they're a candidate? I get

conformed, I get informed consent.

My neurologists at my hospital tell me I'm crazy, I don't need to do that. They say it's standard of care, you don't need to get consent. I get consent because I'm giving a potentially dangerous medicine that may cause bleeding. So I explain that to them and they all choose to get TPA if it's offered and they're told that they don't have any risks, and the alternative is that they're going to be paralyzed for life.

Q. Now, back in [redacted] of --

A. Does that answer your question?

Q. Yes. Back in [redacted] how was TPA administered? How did you give to it a patient?

A. Well, it's on the shelf in every emergency department. There's always a bottle on the shelf, and you give it, there's a cookbook formula, like making a pork roast. You do, you give a bolus in a minute and you give the rest 90 percent, I think it's over an hour typically, and you're measuring the stroke scale, the NIH stroke scale and a whole bunch of other things along the way, and they go to a critical care unit and typically it's an injection over roughly an hour of TPA.

Q. And how long does it take to start to administer the TPA?

A. Well, it's in the department, it's available. It's really when those patients come in, there's usually two nurses involved in their care. There's a lot of things that need to be done. They need to get the CAT scan back and the blood tests need to be -- so it's really within 30 minutes, 40 minutes is sort of what's expected the outside result for getting a CAT scan and having a report back are like 40 minutes max, nothing more.

Q. This 30 to 40 minute time you're talking about, that's from when to when?

A. From the moment they come in the door.

Q. And my other question is once the decision is made to administer TPA, how long does it actually take to get that going?

A. Not long, you know, five minutes max.

Q. Now, doctor, based upon the records that you reviewed, that you learned from those records, were you able to arrive at an opinion within a reasonable degree of medical certainty as to whether [redacted] was a candidate for TPA in the emergency department at York Hospital

on [redacted]?

A. Yes.

Q. And could you please set forth your opinion and the basis for your opinion?

A. Well, it's my opinion that she was a good candidate for thrombolytic therapy with TPA. She had a very, she had a very clearcut mental status and physical change. This was an observed change. She was in a bus, she all of a sudden stopped singing and slumped over. It was a, there was no question about when time zero was, and in my reckoning and reviewing everything, the bulk of everything, I believed her stroke happened around the time when the EMS were called, which is sometime shortly after 8:00 in the morning on the [redacted].

She was promptly brought to the ED. They were there were at 9:04, triaged at 9:16. I believe that all the studies which were done, the critical studies would have been back and should have been expected to be back by 10:00 at the latest. There were policies and protocols at York Hospital that defined, they were giving TPA, they had policies that governed it, they had the cookbook protocols to talk

about who could and couldn't get it, and she according to the policies at York Hospital, and York Hospital was a tertiary care center.

York Hospital had two CAT scanners and all the pieces that needed to be in place, and they had protocols, which means they considered it treatment in the right patients, and they had protocols that York Hospital had instructions about who should and shouldn't get it, and according to their protocols and according to their policies, [redacted] was a perfect candidate. She could have gotten it at two hours instead of three, and she had no contraindications, no risks that would have made her, you wouldn't expect her outcome to be anything other than better than what it was.

Q. You mentioned that York Hospital was a tertiary care center. What do you mean by that?

A. It's a referral center. It's a center, it's not a small community hospital in the middle of nowhere. It's a center with people in training, with two CAT scans, with people on call with the resources that a big medical center has. I mean, it's a big hospital, York. I have friends who work there.

Q. Now, you mentioned, or your opinion that the onset of the stroke was at or around shortly after 8:00 a.m. How did you arrive at that opinion?

A. Just the history and the dissecting the EMS sheets, which show 8:14. The bus, the history of the bus driver, I don't think was cruising on. He pulled over. This was a fairly obvious thing that she was having a stroke. She slumped over and was paralyzed. So he pulled right over, he made the call. We have the EMS log about when they received the call, which was shortly after 8:00. We have multiple history. We have history of residents and doctors who took care of her at the hospital afterwards, and the time is clearly in my mind, I have very little question about that, it was sometime around 8:00 in the morning or shortly thereafter. And she was at the hospital around the one hour time and they had, by two hours they had, they should have had everything back and the opportunity should have been made available to her.

Q. Doctor, as part of your review did you recall seeing Dr. Salib's dictated note from

later in the day about 1:41 p.m. on [redacted]?

A. Yes, I did.

Q. And where he refers to his dictation, the suggested onset of the stroke was at 7:00 a.m. Do you recall seeing that?

A. Yes, I do.

Q. Now, doctor, did you review the emergency department nurse's note containing when she first saw and assessed [redacted] at 9:14?

A. Yes.

Q. Did that note contain anything about time of onset of the symptoms?

A. Not that I recall.

Q. And we talked a little bit about obtaining the history and that being important. Who usually notes a history in the emergency department of a patient with signs and symptoms of a stroke?

A. This is sort of very important, so I think it's everybody notes. It's appropriate, it's good practice for everybody to make sure they're on the same sheet of music and note it, and I would have expected, too, Dr. Jensen, who was the staff doctor, would have been intimately

involved in all of that in making sure the times were right and assessing that the nurses, the doctors really.

Q. When is it typically noted? In other words, along the course of this when is it typically noted in this chart?

A. It's the first thing, because if it's clearly exclusionary for treatment then there's no urgency. Then it's no longer an emergency. It's an unfortunate outcome and you do everything else you can for the patient, but the fact that this is an emergency is because a completed stroke after three hours is very unfortunate, but it's no longer an emergency.

Unless the patient is so compromised, such as a severe stroke, there's a coma and there's a risk of airway and aspirating and having a respiratory emergency or something else and tongue dropping back, I mean in a serious terrible big stroke, the kind you wouldn't give TPA to, then those are emergencies, but in a completed sort of middle of the road just unfortunate stroke there's no emergency. It's just a terrible outcome, but the urgency and emergency is that there is a treatment,

but that treatment is in the first three hours, everything else being allowing that treatment.

Q. Doctor, in your review of the records did you note any other notes or reports from York Hospital besides Dr. Salib's dictated note that indicated the time of onset of symptoms is 7:00 a.m.?

A. There are a number of other notes and they all, Dr. Bedreshia and others, I think Dr. Yi, and there's a number of other notes and they all refer to 8:00 as being roughly around 8:00 at the time of onset.

Q. Doctor, I want to put up some of the records for you to point out to the jury.

(Brief pause.)

Q. Doctor, we have up here one of the EMS run sheets. I believe there were two that have been stipulated among the parties as being involved that day. Was this one of those that you reviewed?

A. Yes.

Q. And I'm focusing on the part of that that's showing the times, and did you use this run sheet as part of developing your history?

A. Yes.

Q. And what did that indicate to you in terms of when they were notified to leave?

A. Well, the dispatch is at 8:14. Basically it's synonymous when they receive the call, so they dispatch a unit and they're on route at 8:15 and they are at the scene at 8:25.

Q. Does it indicate when they departed the scene?

A. 8:35.

Q. And does it indicate on there when they arrived at the facility?

A. 9:03 at York Hospital.

Q. Now, if we go down towards the bottom of the, in the, some of the narrative, does it indicate in the narrative anything about her mental state and her speech?

A. She is awake, confused, slurred speech, and then something left-sided, a missing part there, but it says, you can go the other way, slurred speech and left-sided something. Flaccidity means no muscle tone. So left-sided weakness.

THE COURT: Excuse me one second. This monitor has a shine to it, and it's difficult for the jury to see. Is there any way we can improve that?

(Brief pause.)

Q. Then if we can move down to the bottom of where it, starting over on the left from the times, is there some indication there then as, during the course of the times that any notification made to the hospital, doctor?

A. Well, in the other, on other side I think that you have that you moved away, somewhere on the bottom I think it was saying 8:41.

Q. And does it indicate anything at 8:45 about again her mental state?

A. At 8:45, still confused, wanting to stand up.

Q. Doctor, we're going to move to the second EMS run sheet, again for the times.

THE COURT: Mr. Rothschild, for the record could you identify, are these coming from --

MR ROTHSCHILD: I'm sorry, Your Honor.

THE COURT: -- Joint Exhibit 2, and is there a Bates number on the --

MR ROTHSCHILD: Your Honor, the first one was from --

(Brief pause.)

MR ROTHSCHILD: The first one was from the Joint Exhibit 8. There's no Bates number on it.

It was just one document. And this one now is coming from Joint Exhibit 6.

MR. STUMP: Excuse me, Your Honor, I believe that first one was from Joint Exhibit Number 2 and the second one was Joint Exhibit Number 3, so the record is clear.

THE COURT: Okay, I believe Mr. Stump is correct. At least in my notebook. The first was Joint Exhibit Number 2. Now we're looking at Joint Exhibit Number 3.

BY MR. ROTHSCHILD:

Q. Doctor, again what does this indicate, and in your review what did it indicate to you?

A. Well, again it confirms the times that I had mentioned earlier of a call and a dispatch at 8:15, en route 8:16, arrive at the scene 8:19, and depart from the scene 8:35 and arrive at the facility, namely York, at 9:03.

Q. Now, doctor, what I want to show you to put up there is from Joint Exhibit 1, the York Hospital chart, page number 30 from the history, and physical it's actually three pages, 30 to 32, the last one from Dr. Bedreshia, but we'll just put up the page 1.

A. I've got Dr. Bedreshia's note.

Q. And, doctor, where was -- did you review this note by Dr. Bedreshia, which is noted being a history and physical examination?

A. Yes.

Q. And what information was contained in the history of present illness that was relevant in your review?

A. I think again it reiterates to me what I think is the time-line that around 8:00 she was singing and then suddenly slumped over and stopped singing and had her, the acute event sometime around 8:00.

Q. And can you just read for the jury that portion referring to the relevant timing periods?

A. "Reportedly on a bus trip in the morning around 8:00, was singing. Then suddenly slumped over on her brother's shoulder. The patient was not responsive when attempted to arouse. The patient was noted to have some slurred speech, left-sided weakness, and left facial droop. The patient was immediately transferred to York emergency department."

Q. Now, doctor, did you see reference in some of the records to having obtained a history that

she had a headache for four days?

A. Yes.

Q. And did that affect her being a candidate for TPA?

A. I think the history that was obtained did not, would not, did not affect her getting TPA.

Q. Can you explain why not?

A. Well, certainly you worry about a headache because headache will make you think of something other than a straightforward ischemic stroke. It can make you think of a bleed sometimes. But the headaches that are associated with bleeds are the kind of really severe, knock your socks off kind of headache. I mean, they're not subtle typically. They're severe headaches, and typically a bleed again is more likely to be associated with a tremendous level of mental status changes and not focal findings.

It just wasn't the kind of history that makes one think of a bleed, and certainly it didn't make the doctors at York Hospital think of the bleed, because if you've got a negative CAT scan, which I said is very good at picking up a bleed, if you're really worried about a

bleed, if you really think there's a possibility, then the standard of care is to do a spinal tap, a lumbar puncture. Then you will determine that there's a bleed.

So, you know, if you really worried that if you think that this is a bleed, which is important to know, if you believe that, in the face of a negative CAT scan that's when you go and do a final tap, that the blood will be in the fluid. You do what's called vasochromia, the coloring when you hold it up against a white jacket or a white piece of paper, and the lab will measure it and see red cells. So certainly you take a piece of information like a headache and you consider it, but this was not that kind of headache, and if it really was felt to be then they needed to do a spinal tap, which didn't happen. So I don't believe it was really a big issue, and it certainly with was not in my mind any reason not to have given her TPA.

Q. Doctor, what's a subarachnoid hemorrhage?

A. Well, a subarachnoid hemorrhage is that space, the subarachnoid space where a bleed occurs, and it's terrible event. It has a high mortality. It causes patients to go into a coma

readily, and there's high mortality associated with it. The old literature used to be 50 percent of people with a significant subarachnoid bleed would die within the first 48 hours, and of those surviving another 50 percent would die within the immediate post period, next couple of weeks. It's a serious event, the kind of event if you really think somebody has a bleed also, you get a neurosurgeon in immediately because they deal with bleeds.

Q. What typically does a patient who has a subarachnoid hemorrhage manifest or feel?

A. Well, they get a stiff neck, they get increased intercranial pressure, which can show up looking in the, through the eyes at the fundi where your eye doctors look at the disks. You can see swelling, you can see congested vessels. You get a stiff neck that, blood goes down into the spinal fluid, and you get stiff neck, and you get photophobia, you get like an irritable brain syndrome, because the brain is irritated. It doesn't like to have blood.

Blood is very irritating. If you have it in your stomach you vomit. So blood is

irritation. It causes a stiff neck, it causes deep coma. Eventually often it causes the kind of headache that's not, the headache is described, the classic headache -- not always classic, but the headache of a subarachnoid bleed has been called a thunder clap headache. It's like an acute onset and it's severe, and people don't like light, they get photophobia, a little like a meningitis, but they have a chemical meningitis in blood. Basically a chemical meningitis blood is irritating the brain. They get a neck ache, they have a headache, a real serious headache, and they want to be, they're sort out of it.

Q. Doctor, did [redacted] have any clinical presentation that you saw in the record of a subarachnoid hemorrhage at York Hospital?

A. No. And if anyone thought she did they should have called a neurosurgeon and done a spinal tap on it.

Q. Was there any reference you saw in the records to any concern that she had a subarachnoid hemorrhage?

A. No. Only after the fact.

Q. Now, was a CT scan ordered?

A. It was ordered and done.

Q. And doctor, we're going to take several of the records from, again from York Hospital, Joint Exhibit Number 1, page 14 first, and then page 207 I believe. Doctor, if you can see it?

A. Yes.

Q. Did you review that record?

A. Yes.

Q. And I'll wait until you've finished that.

A. Thank you. Yes, I did.

Q. Now, doctor, what was your understanding of what that document was in the York chart?

A. It was the radiologist's impression of the CAT scan of the head of [redacted] done on [redacted] in the morning.

Q. And did you have an understanding of when that was made available to the emergency department?

A. As I recall it was available like 10:36 or something.

Q. And what did that reveal? What did that indicate?

A. No abnormalities.

Q. So what did that mean?

A. It meant she had nothing abnormal, which in

the setting of her condition and everything else we've been talking about means that that is no contraindication. She doesn't have a bleed. She does not have a significant infarct, which is a case where if you've already see the infarct it suggests the time is longer. She has nothing that would exclude her being an excellent candidate for thrombolytic therapy, TPA.

Q. And this was, they didn't mention the part of the body, but this is of what part of the body?

A. The head. It's the CAT scan of the head.

Q. If we can put up the second report from the record that you referred to? Doctor, in your review did you also see this part of the chart?

A. Yes.

Q. And can you explain what that is?

A. This is a final report that's been reviewed, it's the basically the same x-ray that's been reviewed and re-reviewed, and it says that the CAT scan that we were just talking about has no evidence of any infarct, acute hemorrhage, or subdural hematoma.

Q. And what does that mean?

A. It means there is an absolutely normal CAT scan.

Q. Thank you. Now, doctor, did you review the blood studies that were done?

A. Yes, I did.

Q. What did they reveal?

A. They revealed that the tests were for all intents and purposes normal. There was nothing that -- we looked at platelet count, we looked at clotting times to make sure that somebody doesn't have what's called a coagulopathy. They don't have a prolonged ability to clot and have a normal platelet count. They were all, all the things we looked at were normal.

Q. Now, doctor, based upon the records you reviewed and what you learned from the record, were you able to arrive at an opinion with a reasonable degree of medical certainty as to whether the medical care and treatment given to [redacted] by the defendants Dr. Salib and Dr. Lynn Jensen when they treated her at York Hospital emergency department on [redacted], [redacted] met the required standards of medical care for emergency physicians and a resident in the emergency department?

A. Yes.

Q. And could you please set forth your opinion and the basis for your opinion?

A. I believe that the care of [redacted] did not meet the standard of care when she was treated by Dr. Salib and Dr. Jensen. I think that she was an excellent candidate in my opinion at the two-hour mark, which could even with expeditious managing had been reduced to probably an hour and forty, fifty minutes, giving her even better opportunity at a good result from what was accepted treatment, and she was not given that treatment.

In fact, as I alluded to in my report, I think it was on page 103 of Dr. Jensen's deposition when you deposed him, Mr. Radcliff, he said that even if she had made the time of three hours he would not have given her treatment with TPA, and I don't think he had the right to deny this patient the chance of a full or a partial good response from a medication that at the York Hospital was for over a year in protocol established as acceptable treatment at York Hospital where there were protocols to include or exclude

patients.

This patient was at the kind of hospital where it was appropriate to give TPA. It sometimes is not appropriate even if you're in the window, if you don't have, you're not at a good center where you know the x-rays are read and you can trust everything. This was a tertiary care hospital that had policies and protocols to do this treatment. It was not acceptable for anyone to deny [redacted] the chance of potentially full or significant response to what is the standard of care.

Q. And why is it that you feel that and have given your opinion that they deviated from the standard of care? What lends you to that --

A. The history --

MR. STUMP: Can I hear the whole question back, Your Honor?

THE COURT: Certainly. Would you care to just simply repeat it?

MR. ROTHSCHILD: I'll repeat it.

THE COURT: Very well.

BY MR. ROTHSCHILD:

Q. Doctor, can you explain how you arrived at an opinion that the treatment fell below the

appropriate standard of care?

A. Well, I believe the history that was taken was incorrect. I think there's for me overwhelming evidence, including the notes of other medical officers at the hospital who defined the time at 8:00, or around then, I think the EMS are very, very strict in how they document times and on route dispatch, return, and their time-line makes it inescapable for me to think that this happened around 8:00. It was a very defined event when she fell over an stopped singing and the bus pulled over and dialed 911, recorded by the EMS. It was really probably around 8:10, and logged as 8:14.

So Dr. Salib was a junior resident working in the emergency department. When a patient like this comes in, the staff doctor should have been at his side, at his side taking the history and validating the history, and if there's some confusion of language, then it's the responsibility of the emergency department at the hospitals to provide translators. That's policy, where the AT & T phone that translates, but the urgency is to define the time, define the history, which in this case is the

emergency.

And so I think the history was incorrect. It was written in fact after the fact, it was a dictated history. There really was no time recorded, and the protocol at the hospital says that an NIH stroke scale would be performed. I went through the whole record, I never saw an NIH stroke scale being performed, and there was no in my interpretation from depositions and because I know where CAT scanners are in hospitals, they usually when you do a CAT scan of the head it's almost always without contrast so you don't have to do an injection. You just have to take the image on the table.

As I understand the CAT scan is two minutes from the emergency department, two of them, and this is the kind of, we saw, it was noted at 8:41 the EMS, the ambulance people called York Hospital, because they knew what they were dealing with. They were giving York Hospital and the emergency department a heads-up.

MR. STUMP: Objection, Your Honor. Hearsay, and he's interpreting. We have the testimony of what those EMS people said, and he's going way beyond what they have said. I think it's

improper.

THE COURT: Mr. Rothschild?

MR. ROTHSCHILD: Your Honor, there's a reference, just he's taking it from that record that says "YH notified 8:41."

MR. STUMP: I don't mind him saying YH notified, but I think he's going beyond what they were doing.

THE COURT: I agree the testimony went beyond the mere recitation of the facts. It goes to interpretation, which is speculation based on hearsay. So the objection is sustained.

THE WITNESS: So the patient arrived at 9:03, and that kind of presentation with a stroke in evolution, and a presentation at 9:03 and the CAT scan is minutes away, this is the kind of patient where you get the history, drill into the history, make sure the patient is stable, and then the patient is then scooted to CAT scan to get the study immediately. It takes two minutes to get there. It takes three or four minutes to get a patient from a hospital gurney on to the table for the CAT scan, and another three or four minutes off the table and

two minutes back to the Ed.

We're talking ten or twelve minutes to do a CAT scan, and when a patient has the opportunity and is a candidate for this treatment, this is the kind of patient that you call the CAT scan doctor and say hey, Dr. Green, I have [redacted] here, who is a candidate for thrombolytic therapy. Give me, I need a report now, and that's the kind of patient, when these patients come in they take priority for most CAT scans. Even patients come off the table to put them on because time, this is where time equals tissue.

This is where time matters, and it matters in emergency medicine in certain circumstances, this is the most classic example. So the CAT scan could have been resulted the outside limit 40, 45 minutes, and the same thing about the blood. These are the kind of bloods that if you're treating patients the way the standard of care demands, those bloods are hand carried to the stat lab and they're called and they're told that we have a stroke in evolution who's a candidate for thrombolytic therapy.

That's why policies and things are in place, and that's why all of this has evolved

into stroke center. But in 1999 it was happening, in 2000, in 2001, and this patient was a perfect candidate, even if you accepted hypothetically the time of 7:00, which I don't think at all is correct. The EMS defines 8:14. This happened at 8:00, but even if you accepted that and she got in at 9:03, all this could have been done before the three-hour window.

And then it could have been explained to her and her family that we're going to do this treatment, which may change your outcome, and again I would have gotten the consent personally, although my doctors tell me don't fool around with the consent, just do it, it's the standard, and she would have been a candidate. But at 8:00 when it really happened and what the other notes in the chart say really, they all say 8:00, the other doctors, she was a perfect candidate with the expectation of getting a good result.

And yeah, TPA is dangerous. So is too much water. Chemotherapy is very dangerous, but it cures people. So she was a candidate for a drug that was by York Hospital's own policies a treatment. So I think she, the care did not

meet the standard of care because the history was incorrect by the first doctor. The senior doctor in the EDU should have been right at the bedside, was not immediately apparently. The times were wrong, and there was no urgency at all evident in making these things happen the way they could have, and it was clear from the deposition that even if the time was okay, they decided despite the policies of the hospital and all the literature that does support treatment, that she wasn't going to get it, and I don't think it meets the standards of care and I believe it was wrong.

THE COURT: Mr. Rothschild, I'd like to interrupt you at this time so that we can take our morning break. Ladies and gentlemen, we are going to be in recess until 11:00. Depending upon the manner in which, the length at which the cross examination of this witness goes, we may need to take a break early. I have a criminal matter that I need to handle over the lunch hour, and so we may -- it depends on how this testimony goes, but we may need to break for lunch earlier rather than later. Let's take a short recess. We'll reconvene at 11:00, and I

would like to speak with counsel briefly. Let's make that 11:05, Ms. McKinney.

(Jury recessed at 10:45 a.m.)

THE COURT: Doctor, you may certainly step down. For the record I just want to mention something briefly to counsel about the use of ELMO and video, and I'm going to do this off the record.

(Discussion held off the record.)

THE COURT: We're in recess until 11:05.

(Recess taken at 10:47 a.m. Trial resumed at 11:05 a.m.)

THE COURT: Please be seated. This is really a scheduling question, off the record.

(Discussion held off the record.)

THE COURT: Let's go back on the record, and please bring the jury in.

(Jury was seated at 11:07 a.m.)

THE COURT: Mr. Rothschild, before we begin, ladies and gentlemen of the jury, we've placed before you a new monitor. I wanted to let you know that we know there has been some problems in your ability to see what has been projected on the equipment, which we referred to as the ELMO, which allows counsel for the parties to

project the exhibits to you on a television screen. It's actually coming across quite clear in the smaller screens, and that's why we have placed it in front of you.

Hopefully this will be in an improvement, but I wanted to let you know that this is the U.S. court system's equipment. It's not the fault of either counsel for the plaintiff or defendant. This is really our problem, and we'll try to fix it. So I would ask that you bear with us. Thank you, Mr. Rothschild. You may continue.

BY MR ROTHSCHILD:

Q. Thank you, Your Honor. Dr. Mehlman, I'd like to next have us discuss the guidelines at York Hospital that you referred to, and we're going to put them up on the ELMO. First of all, have you reviewed the department of emergency medicine guideline of care for CVA or stroke at York Hospital?

A. Yes.

Q. And we've put it up and it's a two-page document that you had seen, is that correct?

A. Yes.

Q. And can you tell the jury whether or not

there's anything relevant here in these guidelines for our purposes?

A. Just that I think the striking thing is that at the bottom is that it notes assets for potential thrombolytic therapy.

Q. And thrombolytic therapy is?

A. TPA.

Q. Now, doctor, you've also referred to the --

A. That's a 9-A.

Q. You've also been referring to the York Hospital protocol for TPA in acute stroke inclusion exclusion criteria that was in effect on [redacted], and have you reviewed that document as part of what you have done?

A. Yes.

Q. Can you tell us what is relevant about this protocol?

A. Well, it's basically defining that there is a protocol that it's an accepted treatment for those patients who meet the criteria as noted, 18 years old --

Q. Maybe we can have you go a little slower so the jury can see what you're referring to. That's one of the limitations that we have here, so --

A. 18 years of age or older, an ischemic stroke with a measured NIH stroke scale greater than 4 and less than 20. 4 is, zero is like very little abnormalities, not a lot of abnormalities. 20 or more is a severe stroke with patients who would be basically unconscious, obtunded, and have lots of deficits that are either focal on one side and bilateral. So that's the stroke scale, and it's a very specific way that we check on function, face function, dysarthria, speech, sensory losses, alertness to questions. It's a whole number of twenty or so questions that address the stroke scale.

Q. Did you see that addressed in the chart for [redacted]?

A. It was never done, but I mean it was -- I think there was a copy there, but it wasn't ever completed that I'm aware of.

Q. And did you, in going through the records were you able to make an assessment of where she fell on the scale?

A. Yes, I made an assessment. I did an NIH stroke scale, I used the method, the tool, the equipment that, the tool, meaning a piece of

paper with certain categories defined, and it's actually here, it's a sheet that has a whole bunch of things that have to be responded to, and by my estimate she would be about an 11, NIH stroke scale of 11. So she would be sort of in the middle. In other words, she would be included as a candidate for thrombolytic therapy by her stroke scale.

Q. Then if we moved down on the protocol?

A. The three-hour time thing that we have talked about that it has to be clearly three hours or less.

Q. And then the next heading is contraindications. And is there anything relevant or significant about the --

A. Contraindications, mainly reasons that she shouldn't get it, and she had none that would have been excluded her according to the sheet from being a candidate for that treatment.

Q. Is there any significance to York Hospital's having this protocol on [redacted]?

A. I think the significance is that it's a validation of the fact that this is appropriate treatment in those patients who meet the

criteria, always meet the criteria. Like so much else in medicine, too, criteria for being treated for tumors, etc. I mean, these are criteria, it's very important, this is powerful good treatment when used correctly, and that's why it has to be spelled out, and it is, and it is everywhere where it's used, and certainly at York Hospital it was a treatment that was appropriate in those cases, patients who met the criteria.

Q. Now, doctor, did you arrive at an opinion with a reasonable degree of medical certainty to whether or not [redacted] should have been given TPA on [redacted]?

A. Yes.

Q. And what is your opinion?

A. I think she was an excellent candidate for TPA and should have been offered it.

Q. Did you, doctor, arrive at an opinion within a reasonable degree of medical certainty as to what the failure to give [redacted] TPA caused her?

A. Well, it denied her the only treatment that would have given her the possibility of possibly full and certainly significant recovery. So it

basically, it denied her the opportunity to be normal, or improved certainly significantly.

Q. Now, doctor, you described York Hospital as a tertiary care center and what that means. Is there a significance here to the fact that York Hospital being a tertiary care center?

A. Yes.

Q. And what is that?

A. It's the kind of center where TPA should be used most, where the systems are in place and the neuroradiologist and neurologist and all the people who participate in these kind of patients are available, are expected to be available, and I believe would have been available if they had been called, the process initiated.

MR ROTHSCHILD: Thank you, doctor. I have no further questions on direct, Your Honor.

THE COURT: All right. Thank you, Mr. Rothschild. Mr. Stump, would you begin your cross examination?

MR. STUMP: I will. May I move the screen, Your Honor, so it's not --

THE COURT: Certainly.

(Brief pause.)

CROSS EXAMINATION BY MR. STUMP:

Q. Doctor, let me just start with the concept you've just discussed in the ending, the idea of the chance. Dr. Mehlman, isn't it a fact that as many as 25 to 30 percent of all stroke patients get better, improve, without TPA?

A. A certain number of patients will improve, correct.

Q. So you weren't trying to suggest to this jury that TPA is the only way that a stroke patient can improve. In fact, a good percentage of stroke patients improve spontaneously, correct?

A. Right, and they don't get TPA if that's happening, correct.

Q. Right. So TPA isn't the only option for improvement?

A. It's the only drug, the only medication that we have that can affect the outcome.

Q. Well, patients are treated with Heparin as well, aren't they?

A. No evidence that Heparin, some patients do get treated, but there's no evidence that Heparin has efficacy.

Q. Well, do you treat stroke patients with Heparin?

A. I might on occasion if they're having what looks like a stuttering stroke where they're having ups and downs, they're getting better, they're getting worse, and I would get a neurologist involved in that kind of patient and I might, and she got Heparin, and [redacted] ultimately got Heparin at the two-day mark. I think if it's a stroke that's been completed and done, then it's questionable. But if you have what's looking like I would call and people would call a stuttering stroke, it can buy time and it might be useful.

Q. Well, I was going to cover this later, but since you brought it up why don't we talk about it for a moment. Strokes do have stuttering starts, correct?

A. They can.

Q. Strokes just don't all start at once with acute symptoms. They can start and evolve over hours, days, and weeks, can't they, sir?

A. They can. I don't know about weeks, but they certainly can be stuttering for an hour or two or three possibly, yes.

Q. All right. Well, and the concept of an evolving stroke, that's something that

progresses over time, correct?

A. Correct.

Q. And symptoms can change over time, correct?

A. Correct.

Q. And you would agree, wouldn't you, that headache can be associated with stroke?

A. Not typically.

Q. But it can be?

A. It's not impossible. I mean, 20 percent of the population has headaches.

Q. But we're talking about stroke here. Headache can be consistent with stroke, correct?

A. Not, I wouldn't say typically, but it could be.

Q. Okay.

A. Not typical.

Q. All right. How about chest pain? Can chest pain be associated with stroke?

A. Well, people can -- I mean, the cart and the horse, it's possible that a patient having chest pain is having angina, and that is decreasing blood flow, so that the cause of their stroke could be chest pain.

Q. Okay.

A. Or people having a stroke could be very

stressed, and if they have a baseline compromised cardiac status, getting a stroke is stressful, it could cause more chest pain. So it goes both ways, but certainly chest pain could be related to a stroke picture, either causative or a result.

Q. Okay, and you're aware that [redacted] reported earlier she had chest pain which resolved?

A. Right. She had some chest discomfort, correct.

Q. Okay. There are different types of stroke, aren't there, sir?

A. Yes.

Q. And without going into it too far, there's a bleeding stroke?

A. Yes.

Q. And there's an emboli, an embolic stroke?

A. Yes.

Q. And there's an, is it thrombolic?

A. Thrombotic.

Q. Thrombotic stroke, okay, and strokes can occur in different parts of the brain, can't they?

A. Yes.

Q. Isn't it fair, doctor, that the different types of stroke can cause a different constellation of symptoms?
A. Certainly, yes.
Q. And depending upon where the stroke is in your brain you can have different symptoms?
A. Yes.
Q. There's not a cookbook of stroke symptoms, is there? There's not one way that every stroke patient presents, is there, doctor?
A. No. It can be variable.
Q. Variable? Right? And when a patient comes into the emergency department, you can't look at them on their face and tell what type of stroke they might be having, correct?
A. Sometimes you can, but not typically.
Q. Maybe you can.
A. Yes.
Q. You can. Most doctors can't.
A. Right.
Q. Excuse me for turning my back, doctor. I want to go through a couple of general concepts that hopefully we can agree on. Dr. Mehlman, have you found that in the practice of medicine that it is not an exact science?

A. It's getting pretty exact.

Q. Has it been your experience that clinical judgment is an important part of every medical decision you make?

A. Certainly.

Q. Has it been your experience that the ability to see, talk to, and evaluate a patient is vital to forming a clinical judgment on a patient?

A. Yes.

Q. Is it fair to say that you have not had the opportunity, because you're a retained expert here, to actually speak with, evaluate [redacted] at the time?

A. Yes.

Q. And again I want to be fair, that's the same with all the retained experts in the case. You weren't there, they weren't there, you're relying on the records and the deposition testimony, correct?

A. Yes.

Q. In many situations in medicine isn't it true that your experience is there is more than one acceptable form of treatment?

A. In a lot of areas, yes.

Q. And on occasion do you find that you and a colleague can look at the same patient and reach different conclusions with regard to what you think is best for the patient?

A. Yes.

Q. And is it fair to say that there are controversies in medicine?

A. Yes.

Q. Just because you and a colleague can look at the same situation and exercise different judgments doesn't in and of itself mean that the other physician is committing malpractice, does it?

A. Correct.

Q. Doctor, you would agree, wouldn't you, that a malpractice case like this against physicians is a serious matter for both sides?

A. Yes.

Q. And as someone who comes into court and offers opinions, it's important that you understand the facts, correct?

A. Yes.

Q. Because you weren't there, and so you're only assuming certain facts to form your opinion, correct?

A. Yes.
Q. And if those facts aren't correct, then your opinions may well not be valid. Would you agree with that?
A. Yes.
Q. Would you agree, doctor -- let me back up. In your practice over the past ten years at the seven different hospitals you've worked at, how frequently have you personally seen stroke patients?
A. I couldn't begin to count the number. Many, many, many.
Q. It's fairly common --
A. Yes.
Q. -- in emergency departments?
A. Yes.
Q. And in fact wouldn't it be true, doctor, that even as of today hundreds of thousands of people in the United States die every year from stroke?
A. Yes.
Q. It's one of the top four or five killers in the United States?
A. It's an important disease, yes.
Q. So even though TPA has been around for ten

years, it's still one of the most largest killers of people in the United States, stroke?

A. Correct.

Q. And that's because TPA is very rarely given for stroke patients, isn't that true?

A. I wouldn't say rarely, but it's not given frequently.

Q. Well, go to your experience, sir. You've had more stroke patients than you can count in the last ten years, but you've only given it what, eight, maybe ten times?

A. Maybe ten times, correct.

Q. So you've rarely given it?

A. I don't know if that's rare, and I think about it with every stroke, but most strokes are not eligible because of all the criteria and stringent safeguards so that it does good and not harm. So it's defined.

Q. So you're highly selective about which stroke patients you give this medication to?

A. Certainly, yes.

Q. Because it's a dangerous medication?

A. It's dangerous if used inappropriately, correct.

Q. You made a reference, and you weren't

trying to suggest earlier that giving TPA is like giving water?

A. It's like -- well, too much water is dangerous. Hopefully I'm not having too much of it, but certainly chemotherapy is poison, Coumadin is rat poison originally, and how many patients are on Coumadin? There's a world of people with cardiac valves on Coumadin, or everybody in atrial fibrillation. It was originally rat poison. But if given correctly, in people without liver disease whose studies are done frequently, you know, it has to be used like many of the drugs we use, carefully.

Q. And as a physician, before you use this drug you exercise your medical judgment, correct?

A. And follow very strict policies and guidelines, yes. I mean, more than my judgment really. I'm doing everything to make sure that the criteria are satisfied, yes.

Q. Okay. And your hospital just actually became a stroke center a few months ago.

A. Right.

Q. All right. So actually when you wrote you report criticizing Dr. Jensen and Dr. Salib,

both reports actually, the place that you worked wasn't even designated as a stroke center, isn't that correct?

A. Well, actually the NYACK hospital wasn't, but where I was before, Mary Immaculate, we also applied and I participated as a director to get stroke certification. We didn't get it initially because we didn't have some of the pieces that would have, that the state of New York wants to see in place. But that's correct, where I was, NYACK, for the first year and a half, was not a stroke center.

Q. Now, let's go back to when you exercised your judgment on those selected patients that you believed should receive TPA. I assume that you speak to the patient?

A. Oh, yes, certainly.

Q. And patient history is a very important part of the diagnosis, isn't it?

A. Correct.

Q. Would it be generally accepted that the history the patient gives you accounts for about 70 percent of diagnosis?

A. I don't know if I would say that, but certainly the history is important.

Q. All right. It's not the standard of care to ignore the history the patient gives you, is it, doctor?

A. No.

Q. You're not suggesting to this jury that Dr. Salib or Dr. Jensen should have simply ignored the history that [redacted] gave them?

A. No.

Q. The next part of making your judgment decision on selecting patients would be the physical examination, correct?

A. Yes.

Q. And the history and the physical examination, things that you do at bedside, you would agree that that's the majority of the information that you need to exercise your judgment generally speaking in medicine?

A. Right, and then the tests like the CAT scan, etc., yes.

Q. Sure. And obviously as an expert you haven't been given that opportunity with [redacted] to speak with her or to examine her, correct?

A. Correct.

Q. So you're not in as good a position to

exercise judgment as the physicians who actually did speak with her and who did examine her, isn't that correct?

A. Theoretically, yes.

Q. Theoretically?

A. Well, it depends on, you know, was a correct full history taken, was it taken in a timely manner, but assuming all that happened that's the best of all worlds, correct.

Q. Now, before you considered administering TPA I think you have agreed and agreed with the protocols, the inclusion exclusion criteria of York Hospital, there must be clearly defined onset of symptoms, correct?

A. Yes.

Q. And if it's not clear when the symptoms started, you can't give TPA?

A. Correct.

Q. And in fact, if someone is just asleep and they wake up with symptoms, you can't give TPA because you don't know when they started, correct?

A. Assuming they went to sleep three or four hours ago or two hours ago, long enough so that -- if they went to sleep an hour ago you

might be able to, but typically yes.

Q. Now, when a patient comes in, before you administer this dangerous medication, if they tell you when their symptoms started, you don't say to them no, you're wrong, or I don't care what you say, or I'm going to give it to you anyway regardless of what you say. You don't do that in practice, do you, doctor?

A. On the time you do everything you can to drill down to what the times are. So it's not a cavalier passing, so when did this start. It's so what were you doing and when did you find this and that. It's drilling down, it's not a casual conversation. It should be, because it's critical, a very focused and repeated and trying to, it may, that conversation could be 30 seconds. If there's family there and they say she fell down, I mean it happened right at this point, she was in the kitchen, you confirm that, and that's a short simple conversation. If that's not the situation, then you drill and try to determine that, because it is critical time.

Q. And I think you even said in your direct testimony that giving TPA when it's not

indicated is potentially criminal?

A. Well, it would be dangerous to give somebody, I think I said somebody who might have a hemorrhage or a bleed would be criminal and --

Q. That's what you said.

A. -- I think is what I said.

Q. So if someone might have a bleed it would be criminal to give them TPA?

A. Yeah.

Q. Because you could kill them?

A. Yes, in a word, but it would be pretty bad.

Q. On this timing, if there's any reasonable doubt about when the symptoms of the stroke started, isn't it a fact, sir, that as an emergency physician you're required to err on the side of not giving the TPA?

A. If the time is questionable and you're not sure and it's clearly out of the three-hour zone, it shouldn't be given.

Q. So if Dr. Salib and Dr. Jensen were actually given information suggesting at least an ambiguity as to when the stroke started so it would have been outside the three-hour window, you agree that their decision not to give TPA

was appropriate?

A. If there was question, if there were questions it would be not appropriate to give TPA, if you could not be within a three-hour time limit.

Q. Because the first maxim of medicine is first do no harm, correct?

A. Correct.

Q. And when you're giving a patient a drug which has the type of significant side effects potentially that TPA does, you want to make sure you're right, don't you, doctor?

A. Yes.

Q. Doctor, would you agree that there is controversy within the medical community as to the appropriateness and efficacy of using TPA for acute stroke?

A. Not if, in my mind I think in the patients who clearly in the appropriate hospitals where scans are read correctly and appropriately and protocols exist, and it's a therapy that's correct, acceptable, and as far as I'm concerned the standard of care. It should not be given by people who are incapable of reading a CAT scan and who haven't, don't know what they're doing,

and it's, treatment to me not questionable or controversial when done appropriately as medicine should be done.

Q. That was a long answer, so let me try to drill down --

A. Not controversial in the correct use.

Q. So are you saying, doctor, then it's not the standard of care in all hospitals?

A. Correct. It shouldn't be in all hospitals standard of care unless they're prepared to do it correctly.

Q. So in many hospitals in the United States you would agree that it's not the standard of care to give TPA for acute stroke?

A. I didn't say that. I said in hospitals that are not focused on it, don't have radiologists who can read head CT's, CAT scans of the brain correctly and timely, and in which, in those hospitals it should be controversial.

Q. I just want to make sure I'm clear then. You're saying the standard of care of medicine is determined based upon which hospital you're at? Something might be the standard of care in the nation in one hospital but not in another hospital? Is that your testimony, doctor?

A. I'm saying that in the middle of nowhere in a community hospital you're not going to get, expect to have that to be a burn care unit or do chemotherapy for cancer. Nor it should it be the place that strokes would be managed, and those patients, if they are real early, should be flown or evacuated to an appropriate hospital, but in appropriate hospitals that have protocols and say they're doing it and do it, it's not controversial in those candidates, those patients who fulfill all the criteria.

Q. Again I'm not trying to be argumentative here, sir, but I wasn't asking about controversial. I'm asking about the standard of care. Are you saying that the standard of care is defined based upon a hospital by hospital basis? One thing can be the standard of care at one hospital and not the standard of care at another hospital?

A. I think that there's lots of little community hospitals that don't present themselves or advertise themselves as treating stroke, and I'm sure they refer those patients rapidly and they do not have protocols in place to treat stroke because they don't have somebody

reading a CAT scan correctly. Yeah, I mean, for that, just like some hospitals don't do cardiac catheterization, which would be angioplasty, which would be the best thing to do for an acute heart attack.

Not every hospital does that. They refer. So certainly every hospital takes care of the basic things, like supporting the airway and making the diagnosis, but no, I don't think every hospital presents themselves, nor should they, as being capable and competent to do the right thing for stroke patients. York Hospital certainly presented itself and it was a tertiary care center with policies in place.

Q. Did you ever see any policy which said that you had to give TPA at York Hospital?

A. No.

Q. There is no such policy anywhere that says you have to give TPA at any hospital, is there, doctor?

A. No. It suggests that this be considered as a modality in those appropriate patients.

Q. Exactly. The suggestion is that it be considered, but there's no requirement that it be given, isn't that a fact, sir?

A. I think it is the standard of care for patients who meet the criteria.

Q. Doctor, you said you're not a member of the American Academy of Emergency Medicine?

A. Correct.

Q. But you certainly recognize that as preeminent national emergency medicine professional society?

A. Yes. It's a society in emergency medicine, correct.

Q. And are you familiar with the American Academy of Emergency Medicine's position on use of TPA for acute stroke?

A. Yes.

Q. Would you agree that it is the position of the American Academy of Emergency Medicine that objective evidence regarding the efficacy, safety, and applicability of TPA for acute ischemic stroke is insufficient to warrant its classification as standard of care?

A. I think what they're saying in the --

Q. First of all do you agree that's their position?

A. You're giving me a sentence or two out of the whole policy, which I will look at if you're

going to ask me. I'm not going to let it be taken out of context and comment on it.

Q. Let me give you the entire --

A. Are you taking about the AEM position statement?

Q. Yes.

(Brief pause.)

A. Is that what we're talking about?

Q. Yes, sir. Under conclusion, the American Academy of Emergency Medicine concludes that insufficient data to establish use of TPA for acute stroke is the standard of care. That's what it says, doesn't it, doctor?

A. Yes.

Q. And you disagree with the American Academy of Emergency Medicine then because you said it is the standard of care?

A. The American Heart Association, the American Society --

Q. Objection, Your Honor.

A. Neurologists.

Q. Objection, Your Honor.

THE COURT: Stop your response, and I'll allow him to state his objection.

MR. STUMP: I object because there was

reference to this, and I asked for copies of what he's claiming things say, and I wasn't provided any.

THE COURT: Well, the answer was also non-responsive. The question is, doctor, you disagree with the American Academy of Emergency Medicine then because you said it is the standard of care. So is that correct that you disagree?

THE WITNESS: Yes, that's correct, Your Honor.

BY MR. STUMP:

Q. And you're also not a member of the society of American, society of academic American -- I'm sorry, the Society of Academic Emergency Medicine, correct?

A. Correct.

Q. But you would agree that that is a respected and reputable national organization, professional society, concerning emergency medicine?

A. Generally, correct.

Q. And are you familiar with the position of the Society of Academic Emergency Medicine regarding the use of thrombolytics for acute

stroke?

A. Yes, I've read it.

Q. And they also say that there's insufficient evidence to determine it's the standard of care?

A. Correct.

Q. So you disagree with the Society of Academic Emergency Medicine as well?

A. Correct. Can I add something, Your Honor?

THE COURT: You'll have an opportunity when Mr. Rothschild asks you additional questions.

Q. So you told us before you've never published a single article on emergency medicine, much less TPA, correct?

A. Correct.

Q. You've never taught emergency medicine in a dedicated program, correct?

A. Not an emergency program, correct.

Q. You've never written a textbook chapter or a textbook article, you've never been invited once to give a national scientific presentation to physicians on emergency medicine or TPA, correct?

A. Correct.

Q. You've never once been given a research grant to study TPA, correct?

A. Correct.

Q. But you're in here in court offering opinions that are contrary to the positions of major national academic emergency medicine societies, correct?

A. I certainly take issue with those. And may I add something, Your Honor?

Q. Let me ask you this.

THE COURT: Let him explain his answer. You may explain.

A. The American College of Emergency Physicians is the official organ that represents emergency physicians. That's the national official group. There is also societies, and it turns out that the societies that were mentioned are, have taken a position that's contrary to what the joint commission of a hospital accreditation is, the American Heart Association --

MR. STUMP: Objection. It's nonresponsive again, Your Honor.

THE WITNESS: Let me finish, please.

THE COURT: Hold on, doctor. If you'd please stop. Counsel, would you approach, please?

(Side bar at 11:46 a.m.)

(Discussion held off the record.)

THE COURT: Mr. Stump, your concern is that the witness is testifying about statements from societies that were the subject of your motion in limine, that you have not been provided with those statements.

MR. STUMP: Correct.

THE COURT: And therefore you object on the grounds of surprise and an inability to prepare cross examination on these subjects. Mr. Rothschild, are you familiar with these statements and why have these statements not been given to Mr. Stump?

MR ROTHSCHILD: First of all, Your Honor, I don't have these statements. Mr. Stump made his motion in limine, and he never, he objected to these being used because he felt that they were in his motion outside of the expertise of an emergency medicine physician. He never objected to them on the fact of not having them or saying that he didn't have them. So that was never an issue as the subject of his motion.

THE COURT: Well, but I clearly told you, and it may have been off the record, but I

clearly told you in chambers that I would not allow this witness to testify about statements that were not provided to opposing counsel, statement of professional societies that were not provided to opposing counsel.

MR. ROTHSCHILD: Your Honor, I think that wasn't quite it. What was sent to me in an e-mail last week, December 28th, from Mr. Bartos, Mr. Stump's associate, was a request for studies that we were going to use, which was different from this and it was different from the subject of the motion.

THE COURT: But I clearly indicated to you that if this witness is going to testify about positional policy statements, that is the statements of some organized medical association or group of physicians, that that needed to be provided to your opposing counsel in advance of the witness testifying. If you have not provided those to Mr. Stump, then I don't believe this witness, I'm not going to permit this witness to testify about those statements, but I thought I heard him speak of an organization of emergency physicians.

MR. STUMP: He did.

THE COURT: That clearly is outside the ambit of your motion in limine, and I think that would be acceptable for him to testify about what he considers to be the mainstream society of emergency physicians and their perspective on this issue of standard of care and the administration of TPA.

MR. STUMP: And I have no objection to that.

THE COURT: All right.

MR. STUMP: That was not part of my objection. It just seems he was going down the JCAHO and so forth, and I don't have the JCAHO standards.

THE COURT: All right. Mr. Rothschild, do you have a concern about that?

MR ROTHSCHILD: Well, I mean I think that what was asked for last week and mentioned again this week was not what he was testifying to. I mean, and he certainly didn't do it on his direct testimony. I think some of this he's opening by his cross examination, but these were not things that were requested that he's testifying to, and I guess at some point we all do our research of things that we want to use and put into evidence, and I think these are

separate from what he asked for, and therefore that Dr. Mehlman should be able to testify to them, and it wasn't the subject of what Your Honor was saying I needed to provide. There were studies he was talking about.

THE COURT: Well, we should be able to clear that up, because if it was the subject of Mr. Stump's motion in limine, and you haven't provided it, and clearly he's going to, I'm going to prevent him from further testimony. If it's something beyond the motion in limine, then maybe it's acceptable in response to cross examination questions. So, Mr. Stump, can you put on the record clearly what are the studies and what are the societies or medical organizations that were the subject of your motion in limine?

MR. STUMP: As I articulated in my motion, the American Heart Association, the American Academy of Neurology, and JCAHO, the Joint Commission on Accreditation Hospitals. I have no objection to the reference to ACEP, the American College of Emergency Physicians.

THE COURT: The joint accreditation?

MR. STUMP: Referred to as JCAHO.

THE COURT: I think this would also be an appropriate time for us to break. I recognize that this witness is on cross examination, and I would -- I'm sorry, Mr. Stump, you were going to suggest something?

MR. STUMP: I was going to ask if I could have sixty seconds.

THE COURT: Will you get us beyond this subject?

MR. STUMP: I think I will, Your Honor. I wanted to, he raised the American College. I'd like to ask him question or two about the American College. I have the policy pulled out right here in my right hand.

THE COURT: Well --

MR. STUMP: If you don't want to that's fine.

THE COURT: I've got people waiting on the this criminal proceeding. I'd like to move on.

MR. STUMP: I'm going to withdraw my request.

THE COURT: I'm going to excuse the jury and then advise the witness what the proper subject of his response can be and that the issue regarding statements of these other

organizations will not be permitted because it was the subject of Mr. Stump's motion in limine. Okay? Thank you.

(Discussion held off the record.)

(Testimony resumed at 11:54 a.m.)

THE COURT: Ladies and gentlemen, we will break at this time for our lunch recess, and I would ask that you return at 1:15. Again please abide by my earlier instructions, and that is that you refrain from any substantive conversations about the testimony and the evidence that you have heard so far. You'll have an opportunity to do that at the time of final deliberations.

Please do not conduct any independent research. You must make your decision on the facts of this case based solely on the evidence presented in this courtroom, and you will recall my other instructions I'm sure. Please have a nice lunch and return at 1:15 for the conclusion of this doctor's testimony. Ms. McKinney, would you escort the jury?

(Jury excused at 11:54 a.m.)

THE COURT: Please be seated. While we were at side bar, doctor, the subject of the

statements of JCAHO, the American Academy of Neurologists, and the American Heart Association came up. This was the subject of a motion in limine by the defendants to preclude any testimony about statements from these organizations. My ruling did not prohibit testimony concerning these statements, but required plaintiff's counsel to present those statements in advance of any testimony if it was to be referred to during the course of an expert's presentation.

Because those statements have not been provided to defense counsel I'm going to direct you and instruct you not to refer to the statements of the American Heart Association, the American Academy of Neurologists, or JCAHO. You may, however, refer to the American College of Emergency Physicians statement, because that was not the subject of the defendant's motion in limine, and my understanding is that those materials are available to defense counsel.

To the extent that additional statements are going to be introduced in the context of this case, I do want counsel to share them. The issue here is the opportunity for

preparation of cross examination and prejudice to the party who does not receive the statement. If it is provided in advance of the testimony, it is relevant and meets the other requirements for admission, it will be permitted. Is that clear, doctor?

THE WITNESS: Yes, sir.

THE COURT: All right. We're in recess until 1:15. Are there any other matters that counsel would like to address before we recess?

MR ROTHSCHILD: No, Your Honor.

THE COURT: Mr. Stump?

MR. STUMP: Your Honor, I believe that Mr. Bartos may have been able to secure some other equipment to use, and I told Mr. Rothschild that I certainly have no objection to him using any equipment that we bring in so that we get a clearer presentation to the jury.

THE COURT: That would be much appreciated. And again my apologies to counsel on this issue.

MR. ROTHSCHILD: Thank you.

THE COURT: One final matter, doctor. Unfortunately because you're on cross examination I have to instruct you to refrain

from any substantive conversations with plaintiff's counsel concerning the subject matter of your testimony. I'm not picking on you. This is a standard instruction when we take a break and a witness is on cross examination. Please abide by that instruction, and I thank you in advance for your cooperation.

THE WITNESS: Thank you, Your Honor.

THE COURT: We're in recess until 1:15.

(Court recessed at 11:58 a.m. Trial resumed at 1:20 p.m.)

THE COURT: Good afternoon. Please be seated. Dr. Mehlman, thank you for coming up to the witness stand already. I remind you that you're still under oath. Mr. Stump, you may continue.

CONTINUED CROSS EXAMINATION BY MR. STUMP:

Q. Thank you, Your Honor. Dr. Mehlman, before the lunch break we were talking about the position statements of the Society of Academic Emergency Medicine and the American Academy of Emergency Medicine, and you mentioned as well that there is an organization called the American College of Emergency Physicians, correct?

A. Yes.
Q. And you are a member of that organization, correct?
A. Yes.
Q. And I trust that you are aware that that organization as well has a position statement on the use of TPA for stroke, correct?
A. Yes.
Q. And are you familiar with that statement?
A. Yes.
Q. All right. Incidentally, doctor, when the American College formulated this position on TPA use in acute stroke, were you asked to participate in that debate?
A. No.
Q. Do you have that in front of you, sir?
A. Yes.
Q. I just want to make sure because I know there are different documents, I want to make sure that you and I are looking at the same thing. And I believe we are, aren't we, sir?
A. Yes.
Q. All right. And the position statement indicates that the American College endorses the following principles regarding the use of

intravenous TPA in the emergency department management of acute stroke, correct?

A. Yes.

Q. Under the second bullet point the American College says, "Further studies are needed to define more clearly those patients most likely to benefit from," if you could pronounce that next word for me?

A. Fibrinolytic.

Q. "Further studies are needed to define those patients most likely to benefit from fibrinolytic therapy in acute ischemic stroke." Isn't that what the position says?

A. Yes.

Q. And when we're talking about, we're talking about TPA right here, correct?

A. Correct.

Q. It also says, "Intravenous TPA may be efficacious therapy for the management of acute ischemic stroke if properly used incorporating the guidelines established by the National Institute of Neurological Disorders and Strokes," the NINDS study, correct?

A. Yes.

Q. So it says it may be, but also says further

studies are needed to determine who are the proper patients to receive it, correct?

A. That's what it says, yes.

Q. And incidentally, doctor, when was this statement approved? Would you tell the jury, please?

A. I believe this was, it was around 2005.

Q. I think you're looking at the wrong, I think you're looking at the print date, sir. Doesn't it say, "Approved by the American College"?

A. 2002, yes. Then 2005.

Q. This was approved in February of 2002?

A. Correct.

Q. A formal statement of the American College just eight months before the care in dispute, correct?

A. Yes.

Q. Now, when you spoke before about the subarachnoid hemorrhage in the use of CT scanning, do you recall that?

A. Yes.

Q. And you said that for the type of stroke that it was ultimately determined [redacted] had, that CT is 95, maybe even 97 percent

effective at picking up bleeding, correct?

A. Yes, overall a CT is 95 to 97 percent, probably a little higher in that area of the brain.

Q. In that area?

A. Yes.

Q. But you also said in other areas of the brain it's not as effective, correct?

A. In the posterior, or the old part of the brain, the brain stem, it's not quite as good, in the 95 or 94, 95 percent, because there's a lot of bone that can interfere a little bit with imaging with CAT scans.

Q. As an emergency physician taking care of a patient, when they walk in you can't tell exactly where their potential bleeding or infarct is, can you?

A. Well, not correct, because the brain stem has very specific presentations which are more often what's called cerebellar brain stem finding where nausea, vomiting, balance, finger nose that we do, that kind of thing, people who have posterior lesions typically have a different presentation. They have a lot more balance and nausea and vomiting type symptoms.

Q. So there may be some circumstances, but certainly not all?

A. No. But it's a different picture taken.

Q. Okay. Let's talk about timing of TPA administration and the potential benefit, and really with TPA use, like many other drugs, you as the physician have to go through a benefit risk analysis, correct?

A. Yes.

Q. And you would agree, sir, wouldn't you, that with TPA, even within that three-hour window, the sooner the better?

A. Yes, it's better to give it as early as possible.

Q. So you said thirty minutes was better than two hours?

A. Correct.

Q. So when you're weighing that risk benefit analysis, you as a clinician know that the further along in that, even in that three-hour window, the less likely benefit?

A. Well, under three hours is the cutoff. There is the earlier you give the more likely you'll get better results compared to potential complications.

Q. So if you're giving it two hours and 45 minutes, the chance of having any benefit is less than you give it at thirty minutes?

A. I don't know that that study has ever been done, but it's logical.

Q. You don't dispute it? You don't dispute that?

A. I don't dispute that it's better to give it earlier than, the earliest as possible.

Q. Did you testify earlier, sir, that the chance of some incremental improvement by giving TPA to an appropriate candidate is 12 percent?

A. Something like that, yeah.

Q. And that's according to the NINDS study, correct?

A. Yes.

Q. So if we accept that study, the most it's saying is as opposed to the, I think you said 25 to 30 percent chance people will get better just on their own, you're saying there's perhaps a 12 percent additional increased chance that they'll get better with TPA if they're an appropriate candidate?

A. Yes. I have to look probably at the study, but it's at least 12. I prefer to look at the

number, but it's 12 to 30, yet a variable improvement, which is variable.

Q. And in contrast, every patient who gets TPA, even an appropriate candidate, has an additional 7 percent chance of significant complications even under NINDS?

A. 6 percent increased chance of bleeding, but the mortality is still smaller in the group that's treated, regardless even if they get a complication they still do better.

Q. And to be clear, the NINDS study was a research project? It's a research trial. It wasn't a clinical trial in like actual hospital settings?

A. Well, it was a study performed by our nation's National Institute of Neurological Disease. It was not done, it was not cavalier. It was definitely a big national study done by the NIH and the neurologic division there.

Q. And who paid for that study?

A. Probably all of us.

Q. Are you aware that Genentech, the company that makes the drug, is the one that sponsored the study?

A. I'm not aware of that. I'm sure they've

probably provided TPA, but I'm not, I'd be surprised if they paid for the entire study.

Q. And you are aware, aren't you, sir, that since the NINDS study has come out there have been other studies come out which haven't been able to replicate those results?

A. I haven't seen them. If you provided them --

Q. You're not familiar with the literature?

A. I am familiar with the literature, and I don't think there's any studies that don't support the fact that TPA in the right circumstances is good treatment.

Q. Okay. Now, doctor, did you say earlier that even if a patient bleeds in their brain from TPA, it's your opinion they still have a better outcome than if they hadn't been given TPA?

A. The study shows that the overall mortality, the death of patients is greater still than the untreated group. Even though it's patients including the patients who have the complications, still the overall mortality is lower than the group that's untreated.

Q. All right, but that's a little different

though.

A. No, it's not different. It's mortality, mortality is improved in patients who are eligible and receive TPA.

Q. So if the patient develops a brain bleed, they're better off than if they hadn't, from TPA, they're better off than if they hadn't been given TPA, is that --

A. Now you're taking out individual circumstances.

Q. I thought that's what you were saying.

A. Yeah, statistics are based --

THE COURT: Excuse me, one at a time. Mr. Stump, please allow him to complete his answer, and doctor, if you could allow him to complete his answer. I believe, doctor, you were testifying.

A. Yes. No, there's nothing good about having a bleed. There's nothing good about being left paralyzed for life. The bottom line of the study is that even with those patients who have a complication, the mortality, the people who die is still less in the treated group even if they have the bleed.

Q. The NINDS study, doctor, didn't it break

out to patients given TPA in periods of 0 to 90 minutes, and then 91 to 180 minutes?

A. I have to look at the study and then I'll answer. I don't remember the specific --

Q. You don't remember that?

A. I looked at it. I didn't memorize it. I'll be happy to look at it if you want to.

Q. That's all right. If you're not familiar with it, we'll move on. Doctor, you made reference to getting a translator in the emergency department if necessary. Is it your understanding that [redacted] does not speak and understand English?

A. No, there was testimony though in depositions and somewhere in the records there was some question about language, and the point I was making is that it's an obligation of emergency departments, we even have special phones that exist through AT & T where we get any language translated that we can put someone on the phone. So my only point is that it behooves physicians, particularly when the history is so absolutely critical, and the patient comes in and is described as varying level of consciousness, it's important to do

every, to make every effort to be sure the history is correct.

On the one hand it's said that she's got an altered level of consciousness, and then on the other hand it's we're expected to say that if 7:00 is put out there as a time, that that's correct and somebody who is speaking a language that's questionably being understood. All I know is the black and white is when the EMS got called, and that was after 8:00, and they don't dilly dally, and those times are pretty solid and in stone.

Q. So is it your understanding that she could speak English or not?

A. I think English is not her primary language, but she did speak it. She worked in Washington, D.C. at a restaurant, but she was noted in the neurologic exam to be having a variable level of consciousness. So she was certainly not herself to say the least.

Q. You never spoke with her. So you're making an assumption, aren't you, doctor?

A. No, I'm looking at the neurologic picture in the note, which clearly described is not fully oriented.

Q. Which note?
A. The level of consciousness that was defined in the exams that exist in the neurologic and the reports that are dictated.
Q. All right. Well, let's then talk about those notes, because you've been referred to the EMS reports, haven't you, doctor?
A. Yes.
Q. And to be clear, as the treating physician in the emergency department, first of all you don't have a crystal ball, do you, doctor?
A. No.
Q. You've got to rely on the information you have, correct?
A. Right.
Q. All right, and it's correct, isn't it, sir, that those EMS reports that you've been showing to the jury were not even prepared until after all of the events in dispute occurred?
A. I haven't shown anything to the jury. I just --
Q. Are you aware of that that those reports were not prepared until later in the day?
A. What I have has been asked about reports that have been shown to me and I have commented

on them. I don't know exactly when they're prepared, but the times in EMS reports are pretty much in granite. Not only that, most systems --

Q. Sir, I'm talking about --

A. Let me finish, please.

THE COURT: I think this is responsive. I'm going to allow him to finish.

A. Most systems actually have mechanisms of recording the calls so they can go back on tapes and they have precise times, because this is very critical, response times. Communities are interested in that their ambulances respond within five minutes less. So there's recording and this data, I trust this data.

THE COURT: That actually wasn't his question, doctor. His question was do you know when the reports themselves were prepared in relation to the treatment at York Hospital.

A. I don't remember the exact time when they were prepared.

THE COURT: Okay.

Q. You said when you went through the documents that you reviewed that you reviewed the depositions of the various EMS personnel,

didn't you, doctor?

A. Yes.

Q. And do you remember them explaining that those reports are prepared later on after they get back to the station house and they do it on their computer, and they're faxed over to the emergency department later on in the day?

A. I certainly read those reports, but I don't remember them, I'd be happy to look at that if you want to refer me to it.

Q. So sitting here giving your testimony, you don't know one way or the other whether those EMS reports were even available to Dr. Jensen and Dr. Salib when they provided the care at issue, is that fair?

A. I believe the EMS were there when the patient came in to give any information that would have been asked.

Q. My question related to the reports. Is it fair, doctor, that you do not know one way or the other sitting here right now whether those reports were even available to Dr. Jensen and Dr. Salib at the time of the care in dispute?

A. I can't answer that.

Q. Okay. Now, you also referred to the

history and physical exam, or you were asked to refer to the history and physical exam prepared by Dr. Bedreshia. Do you recall that?

A. Yes.

Q. And that's Joint Exhibit 1. I'll start off with page 30. Do you see that doctor?

A. Yes, that one screen is a little bit in the way there, the TV. I see the top of it fine, the first paragraph.

COURTROOM DEPUTY: Does that help?

A. Thank you.

Q. Can you see that now, doctor?

A. Yes.

Q. Do you know who Dr. Bedreshia was?

A. She was the admitting resident for the patient.

Q. Okay. Do you know when -- did you read her deposition?

A. Yes.

Q. Do you have a recollection of whether Dr. Bedreshia actually ever spoke to [redacted]?

A. Did she speak to the patient?

Q. Yes.

A. I don't recollect. I imagine she must have tried to speak to the patient. She was taking

care of her.

Q. Do you remember her testimony, Dr. Bedreshia's testimony, that by the time Dr. Bedreshia was involved, [redacted] could no longer speak?

A. Yes.

Q. And the history that Dr. Bedreshia got she got from [redacted] isn't that correct?

A. I think she got the history from multiple sources, but certainly also from [redacted] correct.

Q. So when you're relying on this document to say that the symptoms started at 8:00, this is a document that contains information from someone who admittedly wasn't even there, isn't familiar with the onset of symptoms, isn't that a fact, sir?

A. Yes.

Q. And in fact if we go to the third page of this document, which is Joint Exhibit 1, page 32, we can see that this report wasn't dictated until the following day. Correct?

A. Correct.

Q. So again this information wasn't available to Dr. Jensen and Dr. Salib at the time of the

care in dispute, correct?

A. Yes.

Q. I'm going to show you what's marked as Joint Exhibit 1, pages 6 through 8. And this is the, this is the emergency medicine department dictated report of the visit with [redacted] correct?

A. Yes.

Q. And so there's no confusion, this was prepared at 1:41 in the afternoon on the day of [redacted] presentation, correct?

A. Yes.

Q. And it was signed by both Dr. Salib and Dr. Jensen, correct?

A. Yes.

Q. And it actually was transcribed by about 2:30 that afternoon, correct?

A. Yes.

Q. So she's in at 9:14. By 2:30 in the afternoon this report has been dictated and transcribed, at least according to its face, correct?

A. Yes.

Q. I'm going to turn to page 6 of Joint Exhibit 1 if I may under history of present

illness. Now, did you read this document before you drafted your reports for Mr. Rothschild?

A. Certainly.

Q. Would you agree with me, sir, that nowhere in either of your reports to Mr. Rothschild do you make reference to this history of left-sided weakness starting at 7:00?

A. That's correct, because I believe it was --

Q. You chose to ignore the history documented by the emergency physicians in this case?

A. I don't think as I said earlier that that was the time from the substance of everything that I reviewed.

Q. You don't think it was? You're making an assumption that the information the patient gave the emergency department physician was wrong?

A. It's nowhere noted in any of the documents, that are done in realtime, anything, there's no note this was brought out earlier from a nurse, from the doctor, from anything that was done in the chart, and from my review of all of the other material my conclusion is that it was really sometime 8:00 or after, and I also said hypothetically if you accept 7:00 the patient was still a candidate for thrombolytic therapy.

And I also referred to page 103 of Dr. Jensen's note where he said regardless of time or three hours of anything he was not going to give TPA.

Q. Well, we'll get to that, because he was asked a hypothetical question, wasn't he, sir?

A. I think he was asked about this patient, would he have given it, and he said no.

Q. So in order to write your report to Mr. Rothschild criticizing these doctors, you ignored this fact. You disregarded it. You assumed it wasn't correct, even though it's in the chart, it was prepared on that day.

A. It's the only place it's in the chart and a note that was dictated after the fact, and I thought it was incorrect. That was my conclusion, my medical opinion from the weight of everything else that I reviewed.

Q. Sir, we talked before about your involvement with stroke treatment and, you know, the fact you haven't published scientific articles or spoken and so forth. But you certainly have testified as an expert before, haven't you, in these kinds of cases?

A. I certainly have testified as an expert for the plaintiff and for defense, yes.

Q. How many times have you testified in cases like this, sir?

A. I couldn't tell you sitting here.

Q. Well, if I did a search Dr. Mehlman, that I was able to identify 139 times that you've written reports against health care providers, would you have any reason to dispute that?

A. In thirteen years, fourteen years it's possible, because if you just plain ask me I'd say I get asked to review cases about ten to fifteen times a year, or once a month, and so I guess that sounds like it would be possible over fifteen years, yes.

Q. And if I were to represent to you that of those 140 times that I'm aware of that you have written reports criticizing health care providers, that about half, or seventy of them, are for Philadelphia law firms?

A. I don't have any idea about that.

Q. How many times have you reviewed cases for Mr. Rothschild or his Philadelphia law firm?

A. I don't know, but I'd say maybe three or four possibly, maybe five at most, but I'd say three or four in fifteen years.

Q. Is it your practice in writing reports for

lawyers who sue health care providers to ignore facts you don't like?

A. That's a preposterous statement, Your Honor.

Q. Well, if you were treating [redacted] and she said to you, "You know what, my symptoms, I started getting weakness at 7:00," would you, being the approving physician, say it doesn't matter what you're saying, someone else is saying 8:00, so that's what I'm going by and I'm going to give you this dangerous drug?

A. There's nothing in the chart that says written 7:00. That note was written and dictated after the fact. There was a major discuss, because the patient's family were upset that their mother was denied the opportunity of recovery. I wonder about why 7:00 was written, because it wasn't written anywhere else, and the ambulance times were 8:00. There's a lot in the depositions about the family, who were educated and -- let me finish -- who were educated and had some issues with the fact that their mother was deprived of therapy that she was a candidate for, so I wonder about why 7:00 was written because all the times I can find would lead me

to believe this was 8:00, and even at 7:00 she would have been a candidate to get TPA if things were done as York Hospital intended them to be to move heaven and earth to treat patients, which is what we do in emergency medicine, and Dr. Jensen in his deposition, you may want to call it hypothetical, said he wasn't going to give it, no how, no way. Now, I don't know why he, anyone has the right to deprive somebody of the opportunity of a recovery, because it's not the standard.

Q. So you concluded that Dr. Salib and Dr. Jensen lied, that they made this up and put it in the records because the family was upset?

A. You said it. I didn't.

Q. Sir, there's been testimony in this courtroom that that meeting did not even occur until after this report was dictated and transcribed. Are you aware of that?

A. Dr. Salib --

Q. Are you aware of that, sir?

A. I'm not aware of that.

Q. Okay.

A. Dr. Salib --

Q. So you made an assumption --

THE COURT: Please allow him to finish his answer, Mr. Stump.

A. Dr. Salib was a junior resident, there's no evidence that the senior attending was immediately at the bedside when this patient came in. So I don't know about 7:00. Dr. Jensen saw the patient after, and the preponderance of evidence leads me to believe that Dr. Salib had the wrong time. That's my conclusion. I didn't say any more or less, and even if the time is hypothetically accepted as 7:00, there was a window to offer treatment in this patient which I believe should not have been denied.

Q. So if [redacted] testified that this meeting with Dr. Jensen and Salib did not occur until some 4:00 or later in the afternoon, after this note was dictated, then this concept that this was questionable because the family was upset is an incorrect assumption on your part, isn't it?

A. You're raising it. I'm not raising any assumptions. I'm just saying I believe the time was 8:00. You raised the assumption, sir.

Q. You said that symptoms can wax and wane and consciousness can come in and out, correct?

A. That's possible, yes.

Q. Okay. So it's entirely possible then, isn't it, that [redacted] time was confused and at other times wasn't confused?

A. Possibly, yes.

(Brief pause.)

Q. Doctor, you also said I believe that there was no evidence or any concern about brain bleeding that you could find in the chart. Do you recall that?

A. I'm not sure I recall that. What I said was, I mean the questioning was raised about headache and there was some discussion, and what I said was that the CAT scan was normal, and CAT scans are very good typically at picking up bleeding, and if there were, really if there was really concern then it's mandatory to do a lumbar puncture, a spinal tap. That's the standard of care.

Q. Fine. Dr. Mehlman, you're aware that she was admitted to the ICU --

A. Yes.

Q. -- later that day?

A. Yes.
Q. And she was treated by a neurologist?
A. Yes.
Q. Who's a brain specialist?
A. Yes.
Q. Are you aware that that neurologist withheld giving the patient anticoagulation because he was concerned about brain bleeding?
A. Well, that's the whole issue --
Q. Are you aware of that?
A. That's the whole issue about Heparin about whether to give it or not --
THE COURT: Did you answer his question were you aware?
A. Yes.
THE COURT: Then you may explain.
A. Sorry, yes. Yes.
Q. So even hours later in the face of this negative CT when the brain doctor specialist started treating her, he said we're not even going to give her Heparin now because we're still concerned she has brain bleeding?
A. I think the message is which I referred to earlier is that Heparin is unproven to have any benefit, and it does also cause bleeding, so

that there's no -- any efficacy in reversing a stroke and it does cause bleeding. So in general in most pictures if there's no stuttering, waxing and waning, there's no logic to giving Heparin because studies haven't demonstrated that it does any good, and there is a potential for bleeding. So neurologists in 2002 and now don't give Heparin typically. It's not going to make somebody better like TPA might, and it will cause bleeding as much.

Q. Let me show you Joint Exhibit 1, page 32. Again this is the physical history form dictated the following morning by Dr. Bedreshia. Under point number 1, the last sentence, it says, "Given patient symptoms of headache, a repeat CT may be necessary. At this point Heparin will not be started secondary to possible intercranial bleed." Correct?

A. Yes.

Q. So the neurologist taking care of her at the time was concerned, despite the fact that the CT was negative, of intercranial bleed, correct?

A. Yes. But that doesn't say having happened in the past or potentially happening in the

future, which is the point why we don't give Heparin typically.

Q. And this neurologist actually had the opportunity to speak with and examine or try to speak with and examine [redacted]

A. He was eventually brought, that's correct, but he was eventually I think saw the patient at 5:00 that afternoon, not in the early time when I believe he should have been engaged.

Q. And he didn't start Heparin until two days later until he was satisfied that there really was no brain bleeding, correct?

A. He didn't start it because in my opinion he was worried about bleeding, which did happen when the Heparin was started.

MR. STUMP: Thank you, Dr. Mehlman.

THE WITNESS: Thank you.

THE COURT: Mr. Rothschild, redirect?

REDIRECT BY MR ROTHSCHILD:

Q. Yes I do have some redirect. Dr. Mehlman, did any of the questions and your answers on your cross examination cause you to change any of the opinions that you offered in your direct testimony in any way?

A. Today?

Q. Yes.
A. No.
Q. Doctor, when getting a history from a stroke patient, do you often have to rely on others beside the stroke patient for that history?
A. Yes. I think I mentioned the family at home seeing somebody fall in the kitchen or people around, it's very often you're using every resource to try to create time zero because of the criticality of it, yes.
Q. And what about with stroke patients who have slurred speech and are confused?
A. Certainly.
Q. What about if a patient is difficult to elicit a history from?
A. Yes.
Q. Now, doctor, the fact that a hospital is not a stroke center, does that mean it's not able to administer TPA?
A. No.
Q. So for example when NYACK hospital where you work was not yet certified as a stroke center, were you able to administer TPA there?
A. Yes, we gave TPA the year before we were

a stroke center I believe eight times.

Q. Now, you talked about history being important in a stroke, time of onset. Is that important in getting that information in stroke?

A. Yes.

Q. And is recording it contemporaneously important?

A. It's mandatory.

Q. By the way, did you disregard the note dictated by Dr. Salib later that afternoon on [redacted]?

A. No.

Q. Did you factor it into all of the information that you had?

A. Yes, certainly.

Q. And did you -- doctor, I'm going to refer you to a point, Exhibit Number 8, which is and as agreed to by the parties it was a handwritten document prepared by one of the EMS personnel, Mr. Ross, on the [redacted], but at the top did you have the opportunity to see this as well?

A. Yes, I remember that.

Q. And does that have handwritten information as to the time they were dispatched?

A. Yes, it says dispatched at 8:14.

Q. Thank you. Doctor, you were just asked some questions on cross examination about the neurologist and not giving Heparin. Did you see from the records when the neurologist first came in?

A. I think around 5:00, 5:30 that afternoon.

Q. So this was well beyond the three- hour period of concern for giving TPA?

A. Yes.

Q. And when the neurologist came in the question of TPA was not an issue, isn't that correct?

A. Absolutely not, correct.

Q. Are there the same concerns or different concerns with TPA and Heparin?

A. Well, they're different concerns. Heparin has not proven to be efficacious in reversing, and it does have probably a relatively comparable bleeding risk. So there's not a lot of logic most of the time to give Heparin. It's a potential harm and no potential benefit.

Q. And this issue of bleeding that they referred to, what does that deal with?

A. Well, it deals with --

Q. With the Heparin.

A. -- future bleeding risks, which happened in [redacted] later.

Q. Is that the same as the bleeding risk from the, when you give the TPA?

A. No, it's a different thing. It's the risk of bleeding in a completed stroke, that tissue is very, very fragile and friable as I described when you have a stroke. That's non-vital tissue. I don't like to use the word dead, but it's dead tissue and it's more likely to bleed after. That's why the time is more important, Heparin will cause it to bleed, too.

Q. And you were, we just had up on the screen Mr. Stump put up the note dictated by Dr. Salib in the -- I'm sorry, by Dr. Bedreshia in the joint exhibit, and I'm referring to the last of the three pages in that note, and at point number 1, part of which was read, referred to by Mr. Stump, is there an indication there about TPA at point number 1?

A. Well, in the second line that the patient is out of the three-hour window and TPA is no longer indicated. Is that what you're referring to?

Q. Yes.
A. Yes.
Q. And that was noted in there?
A. Yes.
Q. So, doctor, in this case from all of your review, were you then able to determine to you the clear onset of the stroke symptoms?
A. Yes. I'm very convinced and impressed that the time was sometime around 8:00 shortly before the EMS were alerted when the bus pulled off, and so I believe it's around a little, 8:00 or a little after.
Q. And what were those clear onset symptoms?
A. She stopped singing, [redacted] was singing, she stopped singing. She slumped over on her brother and was clearly a very different person. They were sitting as I recall in the front of the bus. The bus driver was alerted, he pulled off the road, they immediately called 911 and that puts me firmly in the 8:00 to 8:05 time frame.
Q. Now, doctor, there were some questions on cross examination as to standard of care. Is it fair to say some hospitals aren't equipped to treat certain problems or conditions?

A. Certainly.
Q. So if for example a hospital were not a burn center, would it be able to treat a third degree burn victim?
A. Stabilize, hydrate, give antibiotics, and transfer to a burn center. We do that at my hospital to Westchester, across the river, or Columbia.
Q. And are all hospitals equipped to administer TPA?
A. A lot of hospitals are now, and certainly tertiary care centers like York are more than equipped, and as exemplified by their policies they, their intent is that they do it in the appropriate patients.
Q. And it's fair to say in those situations they have certain protocol they have to meet?
A. They had the whole bunch of protocols.
Q. Conversely if a hospital weren't equipped to, there are some hospitals that aren't equipped to administer TPA, is that correct?
A. Right.
Q. Those hospitals shouldn't administer it?
A. Right, but they usually are linked to bigger medical centers where they transfer

patients.

Q. And we have seen the York protocols. I want us to look at the contraindications to see if there were any there that, and going through it, that she would have acquired if she was a no for everything, and this is Joint Exhibit Number 7. You've already been through all the elements up top. I'm looking at the next portion, the contraindications.

A. Right.

Q. And as we look at that, some fourteen things, is there anything that she would have been a yes?

A. No, she had no contraindications.

Q. Okay. Mr. Stump asked you about SAEM, their position. Isn't it fair to say that the, it says the decisions on thrombolytic therapy are individualized based on clinical and operational circumstances?

A. Yes.

Q. By operational, that means we've got to look at the hospital, isn't that fair to say?

A. Correct.

Q. And likewise he referred you to and you brought up the American College of Emergency

Physicians, the board, that college that certified you as well, correct?

A. Uh-huh, yes.

Q. And what is it that they say about TPA?

A. Well, I think in their last bullet they say there's insufficient evidence at this time to endorse use of TPA in clinical practice when systems are in place to ensure that inclusion exclusion criteria established by the NINDS, the National Institute of Neurologic Disease, guidelines for TPA used in acute stroke are followed. Therefore, the decisions for an emergency department, an ED, to use intravenous TPA for acute stroke should begin at the institutional level with commitments from hospital administration, the ED, neurology, neurosurgery, radiology, and laboratory services to ensure that the systems necessary for the safe use of fibrinolytic agents are in place.

They're saying that every, what we have said that every place, every little emergency department shouldn't be using it, but that hospitals, tertiary care hospitals like York should put things in place, which they did, protocols, and that means training and training

nurses and doctors and having leaders, neurologists, who should have been involved at 9:00 in the morning, not at 5:00, means that a committed plan should be in place when this drug is used, just like when you go, the metaphor, to a cancer specialist, it should be with a committed plan in place, which is what happened, and which is what happens in TPA use, and in those circumstances it's a good, safe as used, effective medication that can make a family member or oneself not paralyzed and able to take care of themselves or certainly better than what happened with [redacted]

MR ROTHSCHILD: Thank you, doctor. I have no further questions on redirect, doctor.

THE COURT: Thank you. Mr. Stump, any recross?

RECROSS BY MR. STUMP:

Q. Briefly, Your Honor. The fact that [redacted] slumped over on a bus at 8:00 is not, does not rule out the possibility that she had developed left-sided weakness earlier, does it?

A. I don't know how to answer that. I associate her slumping over and stopping

singing as being an acute stroke, but I mean --

Q. You told us before there can be stuttering starts, so a patient can develop --

A. Yeah, I don't interpret it that way.

THE COURT: If you could let him finish his question?

A. Yes, I'm sorry, Your Honor.

Q. So a patient can develop certain symptoms, and then later additional, even more acute symptoms. That's a fact, isn't it?

A. I don't know if it's a fact. It's certainly possible. Going from singing to stopping sing and slumping over to me is not stuttering. It's an event that's just occurred, it's a stroke, but I mean, maybe what you're saying is remotely possible.

Q. Remotely? Okay. Well, we talked about embolic stroke, correct?

A. Yes.

Q. And that's when pieces of clot flick off perhaps from the heart and go to a brain?

A. Yes.

Q. It can be a big piece, it can be a little piece, can't it?

A. Yes.

Q. There can be multiple emboli, correct?
A. Yes.
Q. So a little piece can break off, can go to the brain, it can cause some headaches for example, correct?
A. I don't know about causing a headache, but it could certainly cause some symptoms, yes.
Q. Yeah, and then another piece hours later or a day later, another piece could flick off, that could go to the brain, and it can cause additional symptoms, correct?
A. Correct. It's hypothetically possible.
Q. All right, and then maybe a big piece breaks off and it goes in and causes an acute event like slumping over, correct?
A. That's correct.
Q. So, doctor, it's entirely possible that the constellation of symptoms which [redacted] reported over the days were related to a stroke which was evolving or stuttering or waxing and waning, just as you have talked about today, isn't it?
A. I can't accept that, no, I don't think --
Q. Not possible?
A. I don't think what you're presenting is

remotely possible, no.

Q. But you don't even know what type of stroke she had, do you?

A. She had an ischemic stroke.

Q. But whether it was embolic or thrombolic you don't know?

A. You have to do a brain biopsy or an autopsy to know that.

Q. That's right. You have to do an autopsy to know, wouldn't you?

A. The likelihood is that she had an embolic stroke because she was in atrial fibrillation. So that would be the likely thing, but nobody is going to do what you're asking to be done to show that.

Q. I wasn't asking that it be done. My point is you're saying you know what it was, and I'm pointing out you don't even know what type of stroke it was, and you can't know because no autopsy was done. You're speculating, aren't you, sir?

A. I don't think I'd call it speculating. I think I have 35 years of experience at practice, I think I'm talking from my knowledge, I don't think I'm speculating.

MR. STUMP: Well, I apologize. Those are all the questions I have. Thank you.

THE COURT: Anything further, Mr. Rothschild?

MR ROTHSCHILD: No, Your Honor.

THE COURT: I actually have one question, Dr. Mehlman. The CT scan that was conducted, is the CT scan in circumstances like this only done of the head area? Is that the only area that you're looking for bleeding?

THE COURT: Yes.

THE COURT: All right. Thank you, I don't have any other questions. You may step down.

THE WITNESS: Thank you, Your Honor.

(Testimony concluded at 2:10 p.m.)

[redacted]

1:04-CV-01081

Testimony of Dr. Ira Mehlman

4 January 2006

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the trial of the above cause, and that this copy is a correct transcript of the same.

s/ Wesley J. Armstrong

_____

Wesley J. Armstrong

Registered Merit Reporter

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