IN THE COURT OF COMMON PLEAS
CUYAHOGA COUNTY, OHIO

BARBARA D. GRASGREEN
etc., et al.,

Doc 441

Plaintiffs,

-vs-

JUDGE GRIFFIN
CASE NO. 263268

MERIDIA HILLCREST
HOSPITAL, et al.,

Defendants,

Deposition of ARTHUR E. VAN DYKE, M.D., taken as if upon direct examination before Colleen M. Malone, a Notary Public within and for the State of Ohio, at the offices of Arthur E. Van Dyke, M.D., 25701 N. Lakeshore Boulevard, Euclid, Ohio, at 1:00 P.M. on Wednesday, April 27, 1994, pursuant to notice and/or stipulations of counsel, on behalf of the Plaintiff in this cause.

MEHLER & HAGESTROM
Court Reporters
1750 Midland Building
Cleveland, Ohio 44115
216.621.4984
FAX 621.0050
800.822.0650

APPEARANCES:

Dale P. Zucker, Esq.
Zucker & Trivelli
600 Standard Building
Cleveland, Ohio 44114
(216) 621-3225,

On behalf of the Plaintiff;

Patrick H. Gaughn, Esq.
Hahn, Loeser & Parks
3300 BP America Building
200 Public Square
Cleveland, Ohio 44114
(216) 621-0150,

On behalf of the Defendant
Meridia Hillcrest Hospital;

John R. Scott, Esq.
Reminger & Reminger
7th Floor 113 St. Clair Building
Cleveland, Ohio 44114
(216) 687-1311,

On behalf of the Defendant
Physician Staffing, Inc.;

John V. Jackson, II, Esq.,
Jacobson, Maynard, Tuschman & Kalur
1001 Lakeside Avenue
Suite 1600
Cleveland, Ohio 44114-1192
(216) 736-8600,

On behalf of the witness.

ARTHUR E. VAN DYKE, M.D., of lawful age, called by the Plaintiff for the purpose of direct examination, as provided by the Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

DIRECT EXAMINATION OF ARTHUR E. VAN DYKE, M.D.

BY MR. ZUCKER:

Q. Dr. Van Dyke, my name is Dale Zucker. I represent the Grasgreen family in this matter. I'm certain you have had an opportunity to meet with Mr. Jackson and he has prepared you for the format of the deposition.

As you know, I'll be asking you a number of questions. If for any reason you don't understand a question, you will be certain to make sure that I clarify the question for you before answering it so you understand the question, okay? And you will have to answer so the court reporter can take down your response. If you answer the question, I will assume that you understood it and that you are answering it truthfully.

A. That's fine,

Q. Doctor, you are aware that the primary subject

matter of this lawsuit concerns the prescribing and administration of TPA to Arthur Grasgreen at Meridia Hillcrest Hospital on May 21, 1993, is that a fair statement?

A. No, I wasn't aware of that till this moment when you told me.

Q. You are aware of that?

A. Now I am. I am now,

Q. Consequently, doctor, I'd like to ask you a few questions, in general, regarding heart attacks, TPA, what it is and how it works. Okay?

A. That's fine.

Q. Then I'll get into some specific questions about Mr. Grasgreen and this case.

Now, TPA is one of several drugs which are known as thrombolytic agents, is that correct?

A. Correct.

Q. Also called clot busters?

A. By some.

Q. And the purpose of TPA is to stop a heart attack in progress and, thereby, limit the amount of damage to the heart muscle, is that correct?

A. And sometimes actually prevent the heart attack, if it's administered early enough.

Q. When a person suffers a heart attack, a blood

clot or a thrombus forms in the coronary artery, isn't that correct?
A. That is the most common cause.
Q. The coronary artery is a blood vessel that carries oxygen and other nutrients to the heart muscle, the myocardial, is that correct?
A, That's correct.
Q. And if the heart's blood supply is inadequate for any period of time, a condition exists which is known as ischemia, is that correct?
A. That's correct.
Q. And ischemia is a condition where the heart receives insufficient blood to do its work, correct?
A. That's also correct.
Q. And if the condition persists for a great deal of time, then the result is death of heart muscle called infarction, correct?
A. Partly correct.
Q. What part isn't correct?
A. Well, sometimes you can end up with having the ischemia be long lasting but without permanent death to a area of the heart, without a heart attack, so you could have chronic ischemia without the infarct.

Q. I understand. Now, the amount of heart muscle which is damaged during a heart attack is an important determinant of whether a patient lives or dies and what their quality of life will be if they survive, is that correct?
A. Yes.
Q. Doctor, in present day cardiology the goal of the cardiologist presenting a patient with a suspected heart attack is to first focus on the immediate cause of the heart attack, that is the blockage of the coronary artery by a blood clot, isn't that correct?

MR. JACKSON: Would you read that back again, please?

MR. ZUCKER: Me or her?

MR. JACKSON: Either.

- - - -

(Thereupon, the requested portion of the record was read by the Notary.)

- - - -

MR. JACKSON: Are you asking the doctor being presented with a patient who he believes is experiencing a heart attack or who's had a heart attack in the past?

MR. ZUCKER: Who may be

experiencing a heart attack.

A. I would not phrase it in --

Q. Excuse me, doctor, do you understand the question?

A. It has some implications that I don't understand and I think are open to interpretation. I'd rather you rephrase it and then you can ask me if I haven't thoroughly answered your question.

Q. Fair enough.

A. My goal when presented with a patient who is having a heart attack is to treat the patient appropriately in a manner that will give him the maximal chance of longevity, how long he lives, and the maximum chances of improving his quality of life.

That may interpret, may be interpreted in many ways and there are many ways I frame my actions to achieve those ultimate goals. Some of what you put in your question is certainly a part and parcel of what I need to do.

Q. Okay. You will agree that reperfusion, that is the restoration of blood to the heart muscle, is a major goal when you are treating a patient with a suspected myocardial infarction, correct?

A. Yes.

Q. And the purpose of reperfusion is to reduce the damage and improve the prognosis as you stated?
A. Reduce or prevent.
Q. We all have natural TPA circulating in our bloodstream, isn't that correct?
A, We have agents that work in the same way to dissolve clots, yes.
Q. Is that plasminogen, is that what you are referring to?
A. The TPA that is given, that we administer I believe is made by genetic engineering techniques and, as such, is not produced in our bodies and is not the exact identical substance in the sense that it's not made inside a human being, one human being and then administered to another.

But in terms of effect, the effect of our native clot dissolving agents and the TPA, they bear a lot of direct similarities.

Q. Okay. Doctor, when a patient develops symptoms that might indicate a heart attack, a doctor has to decide whether the patient might benefit from thrombolytic therapy?
A. Correct.
Q. And that decision has to be made rather quickly,

isn't that correct?
A. Absolutely correct.
Q. And the reason that the decision has to be made quickly is because thrombolytics are used to stop the heart attack in progress and limit the damage to the heart muscle before the heart attack fully evolves and destroys a great deal of heart muscle, correct?
A. That is one reason and probably the major reason.
Q. Okay. What other reasons are there?
A. There is evidence that is now being researched, and in our cardiac literature, talking about the fact that even after you have completed, the amount of permanent damage to the heart, in other words, the size of the ultimate heart attack, that if you restore reperfusion to that area, you can improve healing; and if you improve the healing process, you are not limiting the size of the infarct, but you can prevent sequelae that can impact on the patient's longevity, how long they live, or their quality of life, as well.
Q. Doctor, you mentioned before that thrombolytics can also be used to prevent a heart attack from

occurring in the first instance, is that correct?

A. Yes.

Q. And how does that work?

A. It works the same way, it's just a matter of the time involved. The earlier you get it there, the earlier it actually works. The earlier you restore adequate blood flow, the less the damage. There obviously reaches a point if you get it in early enough and it works early enough, that you can actually prevent the damage. In general, it requires at least a half hour or so of limitation of blood flow before you start having permanent damage to the heart.

Q. Well, how would you know to give a patient a thrombolytic agent prior to their having any symptomatology of a myocardial infarction?

A. You wouldn't, unless you were monitoring them continuously by an EKG or something like that.

But what I'm saying is if they come in -- let's say you right now, here in my office, started having chest pain and I got an EKG on you and it looked like you were starting to have a heart attack, then I could make the determination, after appropriate review of your

history, that you needed that.

If I got the medicine in within 10 minutes or 15 minutes of the onset of your pain, I have a very high likelihood of keeping you completely from having any permanent damage to your heart even though without the medicine you would have had permanent damage.

MR. JACKSON: Off the record.

- - - -

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

- - -

MR. ZUCKER: Back on the record.

Q. So, doctor, if I were sitting here in your office right now and I had chest pains, you would -- what would you do before you administered a thrombolytic agent to me?

A. Well, the first thing I would do, I would take you into my examination room and I would examine you. And while I was doing that I would be hooking you up for an EKG or having my technician hooking you up for a cardiogram and I would be taking a history from you.

Q. Thrombolytics cannot restore or bring back to life heart muscle which has already died, isn't

that correct?
A. Correct.
Q. Okay. Now, as with most medication, thrombolytics are associated with some risks, are they not, doctor?
A. Correct.
Q. So each time a doctor has to make a decision whether or not to prescribe TPA to a patient who may be having a heart attack, he must weigh the potential benefit against the potential risk, is that correct?
A. Yes.
Q. You wouldn't want to prescribe TPA to someone who there were no strong indications for TPA or where their benefit would or where the risk -- strike that.

You wouldn't want to prescribe TPA to a patient where there are no strong indications for TPA or where, or under circumstances where the risks may equal or even exceed the potential benefit, correct?

MR. JACKSON: Wait a second. You said two things and you kind of put them together there. Are you suggesting prescribing without indication for

prescription? I just --

MR. ZUCKER: I can ask those two questions separately. Thank you.

Q. You don't want to prescribe TPA for a patient where there are not very strong indications for the TPA, correct?

A. Incorrect. Not correct.

Q. My statement was not correct?

A. I do not agree with your statement.

Q. Okay. And what about my statement do you disagree with?

A. The implication of the word strong.

Q. Okay. We will get into that.

A. I'll rephrase it. I would wish adequate indications. Adding a word like strong, which is qualitative and has some certain connotations, I'm just not willing to include that in my answer.

Q. Fair enough.

A. I would wish an adequate indication for the drug.

Q. Fair enough. And you wouldn't want to prescribe TPA for a patient under the circumstances where the risks may equal or even exceed the potential benefit, correct?

A. I would not want to do it where the risks exceeded the potential benefit. I can envision a hypothetical scenario where if the risks were equal but were of a type that were more acceptable to the patient than the alternative where I might consider giving it.

Q. Okay. Speaking of the medical literature, doctor, the contraindications for TPA have evolved quite substantially and quite rapidly over the last decade, would you agree with that?

A. Yes.

Q. Whereas, there are still absolute contraindications to TPA, a lot of what were absolute contraindications have now become either noncontraindications or relative contraindications, isn't that correct?

A. Correct.

Q. And this means that in each individual case, each individual patient, a doctor has to do a thorough analysis, a thorough risk benefit ratio analysis before administering the drug, correct?

A. Again, I would rephrase that to say an adequate risk benefit analysis and then say yes, I agree with that statement.

Q. In retrospect, doctor, do you think Arthur

Grasgreen was a candidate for TPA when you prescribed TPA for him?

A. In retrospect, if I had had all of the information then which I now have available to me, I would not have prescribed TPA for this gentleman because I do not feel that he met the criteria that I then used to make such a judgment, and continue to use, by the way.

Q. So I think the answer to my question is no, correct?

A. You would -- could you rephrase it?

Q. Rephrase it?

A. Or restate it.

Q. At the time you prescribed TPA for Arthur Grasgreen, was he a candidate for the drug?

A. Again, you are asking me --

Q. I said in retrospect. I didn't say that when I repeated the question. In retrospect, looking back on it from now, was he, at the time you prescribed the drug, a candidate for the drug?

A. I am going to add to that in two ways. Okay. I am going to repeat what I think I've already said, which is that I would not have given TPA to this man.

I interpret was he a candidate, quote,

unquote, as you say it, as open to would any cardiologist anywhere consider him a candidate, should he have been considered for, and in that sense, yes, he should have been under consideration for the administration of the drug.

There may well be and probably are cardiologists that would have given it even knowing what I now know. But would I personally have given it? No, I would not.

Q. Do you think it was in accordance with good and accepted medicine to have given Arthur Grasgreen TPA in May of 1993?

MR. JACKSON: Given what, given the information that this doctor had at the time or given retrospective information? I mean I'm asking --

MR. ZUCKER: In retrospect.

Q. In retrospect, we will start out with in retrospect do you think it was in accordance with good and accepted medical practice to have prescribed TPA for Arthur Grasgreen in May of 1993?

MR. JACKSON: Given what he knew at the time? You can't -- Dale, I'm not

trying to be difficult, but you can't take a situation --

MR. ZUCKER: John, I appreciate what you are saying and I will get into those questions about what he knew then. But I'm asking him now in retrospect, as he sits here today. I think it's a fair question.

Q. As you sit here today, knowing what you have learned over the last year or so, in retrospect do you think it was in accordance with good and accepted medical practice to have prescribed TPA for Arthur Grasgreen?

MR. JACKSON: Go ahead, doctor, and answer. I object. I don't think it's a fair question as you are phrasing it, but answer it as best you can.

A. I would start out by saying again and repeating I would not have given it if I had had access to all of the information which I have access to now.

Talking about everyone else, there are and have been, and concurrent to the time of this man's death, I believe there are still ongoing studies where this medicine was given to people

for unstable angina, which he certainly was having, investigating into giving it precisely to people such as him so --

Q. Could, doctor --

A. -- I have to say that although I personally would not have given it, because my interpretation of the risk benefit ratio would have led me not to give it, there are other cardiologists that would have given it.

Q. Is it your testimony that in May of 1993 there are cardiologists in America who were still using TPA to treat unstable angina?

A. I am aware of studies being published in '92, '93 talking about TPA for unstable angina.

Q. And what were they talking about?

A. They were talking about whether it did any good for those people.

Q. And, in fact, the answer was no, isn't that correct, doctor?

A. My interpretation of the studies that I have read has led me to that conclusion.

Q. In fact, it was in 19 -- strike that,

Doctor, your May 22nd progress note, which, gentlemen, is marked in the top right-hand corner as Page Number 18 --

A. I now have that page in front of me.
Q. In one of the notes that you made on May 22nd, doctor, may I ask you, it's the third note down on this visitant's sheet/progress note, and you have put the date 5-22, is that correct? Is that your handwriting?
A. All right. You have asked me about three questions. Let me try and answer them, although I won't get the order right. There is a note on Page 18 where the, third note down, dated May 22nd at 0820 hours was written by me. That was not one of my notes. That is the only note I gave on this patient, and the prior two notes on this page were not written by me.
Q. That's the only progress note you made on this page?
A. To the best of my recollection, that is.
Q. What does it say under 5-22?
A. 0820.
Q. Doctor, in this progress note you indicate that you received a telephone call regarding Arthur Grasgreen, is that correct?
A. No.
MR. JACKSON: I think he is being precise in answering your question. Why

don't you ask him to just read it, if you want?

MR. ZUCKER: No, I know the progress note by heart.

Q. Doctor, how did you get in communication with Nurse Jordan regarding Arthur Grasgreen?

A. I was called on my beeper. My beeper was activated and my beeper gives a phone number to call back. I then called that number which happened to be the coronary care unit at Hillcrest Hospital and spoke to the nurse.

Q. And do you recall what time you received the beep?

A. I do not recall exactly what time, but I remember it was as I was driving home from this office and I can probably pin it down a little bit better for you by looking at some things through the records, but I can't give you an exact time. Early evening.

Q. In any event, your testimony is that you were beeped on your beeper, you returned the call and it was a call to the coronary care unit at Meridia Hillcrest Hospital?

A. Correct.

Q. And do you recall who the nurse was that you

spoke with when you first called the coronary care unit?

A. It was one of the few male nurses there. His name is Omar.

Q. Do you know Omar's last name?

A. I do not.

Q. Did you know it was Omar Jordan on 5-21 or are you saying in retrospect that it was Omar Jordan?

A. I knew it at that time.

MR. JACKSON: We are accepting the Jordan. I don't know that the doctor knew his name, last name was Jordan.

MR. ZTJCKER: You'll accept that?

MR. JACKSON: I will if you say so and these gentlemen don't object to that. He said Omar and you put Omar Jordan in there, and I didn't want it to be unclear.

Q. To clean up the record then, doctor, have you thus or have you since learned that Omar's last name is Jordan?

A. I have known Omar's name in the past, I just couldn't recollect it and I believe that's accurate.

MR. ZUCKER: We shall go off the

record.

- - - -

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

- - -

MR. ZUCKER: Back on the record

Q. Now, you told Nurse Jordan to check for contraindications for TPA and if there were none, to administer TPA to Mr. Grasgreen, isn't that correct?

A. I gave him multiple instructions. That is a part of the instruction that I gave him.

Q. Doctor, your note indicates that -- would you like to read that portion of the note for me?

MR. JACKSON: I'm sorry. You want him to read the whole thing for you, is that what you are saying?

MR. ZUCKER: No, that portion.

Q. But would you mind if I read it, doctor?

A. No.

Q. Was called in early p.m. yesterday while in my car and told patient persistent chest pain.

A. Has persistent chest pain.

Q. Persistent chest pain over 30 minutes, persisting despite increasing IV nitroglycerin

and told house doctor looked at new EKG and diagnosed acute anterior MI with new changes since that morning and more ST changes. I told nurse to check for contraindications to TPA and if no contraindications, to start TPA.

Did I read that accurately, doctor?

A. That is accurate.

Q. Did you have any personal work experience with Omar Jordan prior to May 21, 1993?

A. Yes.

Q. And did you at that time have an opinion of Omar's nursing skills and abilities?

A. Yes.

Q. And what was your opinion?

A. My opinion was that every interaction I had had with him in the past had always been very appropriate and excellent.

Q. Excellent?

A. I cannot recollect that he ever made an error with one of my patients, with my interactions with him, and I can't recall ever having had any of my partners or other colleagues indicating there had been a problem.

Q. I believe you started to say that you told the nurse other things, besides what you indicated

in your progress note that you told the nurse, is that correct?

A. That's correct.

Q. What specifically did you tell the nurse?

A. For example, one thing I recall very vividly is I said, check that there are no contraindications such as an old stroke, such as GI bleeding.

And we discussed the contraindication checklist, and he indicated that yes, he had it right there, and I was familiar with that contraindication checklist.

Q. Now, doctor, you say you went over the -- strike that.

You went over the thrombolytic therapy guideline sheet or a portion of it with Nurse Jordan?

A. What I'm saying is that I specifically stated to Omar that to check for contraindications, such as an old stroke, such as GI bleeding, and then we specifically discussed that he should go through the contraindications on the TPA checklist that is part and parcel of the orders available to him at Hillcrest Hospital.

Q. Now, you are referring to the Meridia Hillcrest

preprinted thrombolytic therapy guidelines, I believe, doctor, Pages 26 and 27.

This contraindicator check sheet that you are referring to, doctor, I believe you are referring to the Meridia Hillcrest Hospital preprinted thrombolytic therapy guidelines consisting of two pages, is that correct?

A. Well, I am referring to the top of Page 2. It says Page 2 of 2, your number is 27, where under item one it lists A through I and that is specifically what I am referring to, yes, sir.

Q. Now, what did you tell him to do with that portion of the guidelines?

A. I told him to check and make sure that the patient had none of those contraindications.

Q. And how did you tell him to go about checking that?

A. I'm not sure that I explicitly told him every way. And because I don't really remember the conversation in that much detail, I would assume that I would have had him check the chart and check the patient.

Q. You don't have an independent recollection of that conversation?

MR. JACKSON: That's not what he

said.

Q. Is that your testimony?

A. I have an independent recollection of aspects of the conversation. I don't have an independent recollection of this specific aspect, as to how I told him or if I told him how to go about that.

Q. It's your testimony that you told him to go over that portion of the guideline, is that correct?

A. Not just to go over it and read it, to check for and make sure that the patient did not have any of these problems.

Q. You told him to do that but you don't recall telling him how to go about doing that, is that correct?

A. I don't recall whether I told him to go about or how to implement that. I may have said check the chart and the patient, that certainly was my understanding and interpretation. And I may well have said it, I just don't recall.

Q. What was your understanding and interpretation of that?

A. That's what I would have expected him to do whether I'd said it or not. And I believe I, I may have said it and I may not have said it, I

just don't recall.
Q. Did you go over any part of these two pages with Nurse Jordan at that time?
A. No, I did not have them in my hands. I mean, I was in my car and he was in the hospital.
Q. But he didn't discuss Page 1 of 2 with you?
A. We discussed for sure the dosages of the TPA, for example, the 15 milligram bolus and the dose of the patient.

At that time and currently, as well, I treat my patients with what's called the accelerated version of TPA, which is proven to be more effective than this older protocol sheet, and I certainly discussed that with him.

We discussed Heparin and I told him not to implement Heparin at that time, and I have a direct and immediate recollection of that. We discussed Lidocaine. I said no Lidocaine at that time. We discussed the aspirin. So we would have discussed it, but I would not have had this directly in front of me.

Q. So you did prescribe the aspirin, is that correct?
A. Yes.
Q. Okay. Did you go over Page 2 of 2, Item 1, A

through I, with him?

A. Not item by item.

Q. You just told him to follow the instructions on the sheet and to determine if there were any contraindications, is that correct?

A. I also told him specifically no stroke, no active -- no history of GI bleeding or active ulcer problems.

Q. Did you instruct him to have a discussion with Mr. Grasgreen or with Mrs. Grasgreen, if she were present?

MR. GAUGHN: Excuse me. May I just have a continuing line of objections? I don't want to keep interrupting.

MR. ZUCKER: To what?

MR. GAUGHN: I think he already stated he doesn't recall telling Nurse Jordan specifically how to implement his directions. Again, I don't want to interrupt.

MR. ZUCKER Sure. Continuing objection is noted

MR. GAUGHN Thank you.

Q. Did you instruct him specifically to discuss the contraindications with Mr. Grasgreen?

A, I do not recall.
Q. Did you instruct him specifically to review the chart for contraindications?
A. I think this has been asked and already answered. I do not recall exactly what I told him, the precise words, but my understanding was that he would, at a minimum, have reviewed the chart and spoken with the patient.
Q. Now, Nurse Jordan told you in the conversation referred to in your May 22nd progress note that a house doctor had interpreted a recent EKG, is that correct, doctor?
A. That's correct.
Q. And told you that the doctor had interpreted it as indicating an acute anterior myocardial infarction with changes from earlier EKGs, is that correct?
A. Earlier that day, specifically.
Q. Right.
A. The same day.
Q. Right. And did Nurse Jordan tell you who the house doctor was that read the EKG?
A. Honestly, I do have a direct recollection that he mentioned who it was and at this point I don't recollect what the name was, but it was

one of the house doctors, probably either Dr. Attaran or Dr. Chentow and I don't remember which of the two, But he did, I do know specifically he did tell me the name, I just don't recollect which one it was.

Q. You have worked both with Dr. Chentow and Dr. Attaran in the past, have you?

A. Yes, sir.

Q. And in May of 1993 had you had any personal working experience with both of those doctors?

A. Yes, sir.

Q. And regarding Dr. Chentow, did you have an opinion on May 21, 1993 regarding his skills and abilities to practice medicine?

A. Yes, sir.

Q. And what was your opinion?

A. My opinion was that he practiced good medicine.

Q. You had worked with him in the past you say, is that correct?

A. Yes, sir.

Q. Did you ask the nurse to speak with the doctor?

MR. JACKSON: You mean the house doctor?

Q. Did you ask the nurse to speak to the doctor who interpreted the EKG?

A. Did I ask -- I knew the nurse had already spoken to the doctor. I mean if you are asking how did the --

Q. I asked very specifically did you ask the nurse -- I'm not going to badger you here, but you are carrying on, doctor.

MR. JACKSON: Wait a second.

MR. SCOTT: There are two interpretations.

MR. JACKSON: There are two interpretations. The question you asked could be interpreted did the doctor ask the nurse for the nurse to speak with the doctor, the house doctor, or it could be interpreted did the doctor ask the nurse for the doctor to speak with the doctor. I mean the way you asked the question.

MR. ZUCKER: Okay.

MR. JACKSON: Could have been two different things.

Q. Did you ask to speak with the doctor directly?

A. Did I ask for myself to speak to the doctor? No, I did not.

Q. So you were relying on Nurse Jordan's recollection of what Dr. Chentow or Attaran told

him about the EKG, correct?
A. I was relying on that which would have been told to him just within minutes before.
Q. Did you speak with Dr. Chentow at any time during the ordeal?
A. Not --

MR. SCOTT: Objection to classification, characterization. *Go* ahead, doctor.

A. I did not talk to Dr. Chentow at any time while I was making decisions about the TPA. Whether I spoke to him later in the evening when the patient had his later event, I don't recall directly.
Q. Did you ask the nurse if the doctor had compared EKGs that were done earlier in the day?
A. I'm not trying to avoid your question. I have a direct recollection that the EKG from early that morning was specifically compared to the new acute EKG and that the comments from the doctor were as I indicated in my notes. Whether that came up in a conversation because I asked the nurse or whether the nurse volunteered it in giving me the history, I don't, it could have been either way, but specifically the two were

compared.
Q. So, doctor, you were under the impression that the patient, Arthur Grasgreen, was in the process of having an acute myocardial infarct, isn't that correct?
A. Yes.
Q. Did you instruct the nurse to get an attending physician to attend to Mr. Grasgreen?
A. I'm confused. I am the attending physician and I was attending to him.
Q. From your car phone, is that correct?
A. Yes.
Q. You don't think it's good medicine to have a doctor in the hospital with the patient tending to him when he is having a heart attack?
A. He did.
Q. Who was that?
A. The house doctor. There is a fully licensed, practicing for many years doctor, fully qualified.
Q. And to your knowledge, Dr. Chentow stayed at the bedside with Mr. Grasgreen while he was going through this?
A. I don't believe so. It's not standard of care for us to do so in these situations.

Q. You don't believe it's standard of care?
A. It is -- I do not believe that it's standard of care for a doctor to stand by the bedside for minutes, hours, whatever, when somebody is having a heart attack.

It's standard of care for a doctor to make an adequate assessment of what's going on, but to say you are going to sit at the bedside for everybody while the person is having a heart attack is ridiculous.

Q. Do you recall how many times you spoke with Nurse Jordan the evening of the 21st, starting with the initial call up until the time that you called to discontinue the TPA?
A. There was the initial phone call. There was a phone call when I asked the EKG to be faxed to me as soon as I got to a fax machine.
Q. The first EKG or second?
A, Both, I asked for both EKGs to be faxed and indeed received both.

There was the phone call after I had reviewed those EKGs and then there was the phone call where the TPA was actually stopped. So I count four, counting the initial.
Q. Doctor, what was your interpretation of the

first EKG that was faxed to you?

A. There were two EKGs faxed to me. Are we talking temporal?

MR. ZUCKER: Gentlemen, we are referring to, we are going to be referring to all the EKGs there are. They are Pages 46 through 56.

Q. The first EKG that was faxed to you, if I'm not mistaken, doctor, was the May 21st, 1750. That would be 5:50 p.m., is that correct?

MR. JACKSON: Which number?

MR. ZUCKER: You want -- well --

MR. JACKSON: I think what he was trying to say to you before was he doesn't know which one he got first, but in terms of interpreting, if you give him a specific one, he will give you his interpretation.

MR. ZUCKER: I'm in the process of doing that.

MR. JACKSON: He doesn't know which one came across the wire first.

A. I had two EKGs faxed to me, one before the other, but both coming over in one transmission. I don't know which one came first. That's why I asked whether it was

temporal.
Q. Doctor, you indicated that when you talked to the nurse over the phone you told the nurse to fax you an EKG.
A. No.
Q. Well --
A. I asked the nurse to fax me the two EKGs.
Q. That's not what your note says, doctor.
A. It's -- well, that's what I did and that's what happened.
Q. Would you read your note pertaining to the faxing of the EKGs, or would you prefer that I read the note?
A. I'll be happy to read. It says EKGs, plural, more than one, sent to me. I believe that's the way you read it when you read it back to me.
Q. Wait a minute, doctor. If you go on in the note, you told nurse to get one more EKG and send to me stat.
A. That is now the third EKG that would have been sent to me.
Q. Doctor, would you review the EKG indicated beginning on Page 46 and ending 56 and tell me which three, tell me which two you got first and then which one you got over the third fax

transmission?

A. All right. The two that were faxed to me initially are both dated May 21st, the first being 0717 hours, Page number 48 in your records.

And May 21, 1993 at 1750 hours, numbered 49.

As it turns out, I had stopped the TPA prior to the next EKG being faxed to me and I do not have direct recollection whether or not that one was ever faxed to me because intercurrent events changed what was going on. It may have been, I just don't recall.

Q. What were those events, doctor?

A. After I told the nurse to repeat one last EKG and fax to it me and indicated to him that I was probably going to stop the TPA early because I did not think I saw significant acute changes from the one from the morning, the nurse called me back within minutes to say that the patient had dropped his blood pressure.

At that point and prior to my getting any other EKGs I said, stop the TPA.

Q. Doctor, you haven't indicated that you had read the EKG that was done in the morning. Excuse

me, doctor.

A. Could you restate or rephrase your question?

Q. When did you read the ERG that was done in the morning of the 20th?

A. The morning of the 20th or 21st? I'm saying that the --

Q. Excuse me.

A. The EKGs of the 21st.

Q. The evening of the 20th, did you ever read the EKG that was done after Mr. Grasgreen was admitted to the hospital around 10:00 or 10:04 in the evening on the 20th?

A. I do not believe I got that one faxed to me.

Q. So it was your belief after looking at both of these EKGs that there were no significant changes from what, doctor?

A. Between the one at 0717 hours and the one at 1750 hours,

Q. And how did you interpret the EKG at 717 hours?

MR. JACKSON: 0717.

A. I understand, Page 48 we are talking about?

MR. JACKSON: Yes.

A. I would interpret that as being normal sinus rhythm. I would interpret this as anteroseptal myocardial infarct, either old with left

ventricular aneurysm or acute.
Q. Or acute?
A. Or acute.
Q. Why did you discontinue the TPA?
A. Because I was not consulted and had no knowledge of the patient at 0717 hours. My partner was taking care of him. I was many hours later.

The discussions about the risk benefit ratio that we had before, we have to, one of the factors is how long the patient has been having the pain, and I was consulted in the evening, which would have been, oh, at least, let's see, five hours brings us to noon, another six hours, at least 11 or 12 hours.

Q. Doctor, 1750 military time is 5:50 in the afternoon -- I'm sorry, is what time in the afternoon? 1750 military time is --
A. 5:50 p.m.
Q. -- is 5:50 p.m.
A. Which is over 10 hours from the initial EKG and I was not called at 1750 p.m., I was called at somewhat after that, after the nurse had the time to review this.
Q. I'm sorry, doctor, I don't quite understand what you just said regarding that EKG that was done

10 hours earlier. Which one was that?
A, 0717, 7:17 in the morning.
Q. I asked you to interpret that and you said that you saw either a remote infarct or an acute infarct, correct?
A. A remote infarct with left ventricular aneurysm or an acute infarct, correct.
Q. That reading was done at 5 -- I'm sorry, at 7:17 in the morning on May 21st, correct?
A. Correct.
Q. Okay. The EKG on page 48, that was done at 1750. How did you interpret that?
A. I interpreted that as, in the same way.
Q. Either remote infarct or an acute infarct, is that correct?
A. And unchanged from the record that morning.
Q. Then why did you discontinue the TPA?
A. Because I didn't think it was indicated.
Q. Well, if you thought he was having an acute myocardial infarct, why wouldn't it have been indicated?
A. Because the time at -- well, several answers to that. The immediate answer is I discontinued the TPA because he dropped his blood pressure and was concerned about a bleeding problem.

Okay. That's number one.

Number two, as part and parcel of that I discontinued it because the indication for giving TPA depends on the number of hours that the patient is having their acute infarct.

Q. Why is that, doctor?

A. Because the longer you wait, the greater the likelihood that all the damage that is going to be done is already done. And therefore, that leaves the risk of the TPA unchanged but lowers the possible benefit.

Q. I got you. Doctor, at any point did you review the EKG that was done on the evening of the 20th after Mr. Grasgreen's admission?

A. Yes.

Q. And did you find any changes between -- strike that.

From that EKG and the two that were faxed to you on the 21st?

MR. JACKSON: That's Page 46?

MR. ZUCKER: Page 46.

A. I would say there were no significant changes between that May 20th at 2200 hours EKG and the EKG on May 21st at 0717 hours in the morning and the EKG at 1750 hours on May 21st with the

exception that there are perhaps some subtle, slightly deeper T wave inversions which may have been related to lead placement, l-e-a-d, placement, where they put the electrodes on the chest wall.

Q. Prior to prescribing the TPA did you ask the nurse any questions about Mr. Grasgreen specifically?

A. I'm sure I asked him some questions and I'm sure he volunteered some information, yes.

Q. Well, would those questions be regarding information contained in the hospital chart?

A. Yes, sir.

Q. Nurse Jordan testified that he never looked at the hospital chart prior to administering the TPA; that he never discussed it with you; that you never told him to look at the chart. Are you aware of that?

MR. GAUGHN: Objection. I believe you are mischaracterizing.

A. No.

MR. ZUCKER: You object. Strike that.

A. No, I'm not aware of that.

Q. Omar Jordan testified -- strike that.

He looked at the bedside portion of the chart and that said, that would be the assessment portion of the chart, but other than that, he said he never reviewed Arthur Grasgreen's hospital charts for contraindications to TPA. Are you aware of that?

A. I am now, if you tell me so, but I was not prior to this instant.

Q. Have you ever discussed this case with Omar Jordan?

A. No, sir.

Q. Were you aware before today that Mr. Grasgreen died of a cerebral hemorrhage?

A. Yes, sir. Actually, I believe it was a cerebellar hemorrhage.

Q. Cerebellar?

A. I could be wrong.

Q. You mean you don't recall specifically any questions that you asked the nurse about Mr. Grasgreen prior to ordering the TPA?

A. I recall the imparting of knowledge between us and how much he volunteered to me and how much I directly asked him, I don't know. We would have reviewed and I recall reviewing the medicines he

was on, because that's part and parcel of how we treat people with chest pains.

You know, I have, I mean, I recollect the imparting of knowledge, but again, whether he volunteered, it's unlikely he volunteered that. It's highly likely that I asked him what medicine this man was on.

Q. So it's your testimony, doctor, you don't recall specifically any questions that you asked him, is that correct?

A. I don't recall what I said, but I do have direct recollections of the knowledge that came to me, whether it was volunteered by him or a question asked and answered.

Q. What was that?

A. Entire aspects and we have covered much of it.

Q. What was that again, doctor?

A. Without being absolutely complete, there were the aspects of the medicine he was on, the aspects of what his past history was, the aspects of contraindications to therapy, the aspects of his EKG findings, the aspects of the house doctor's assessment. Again, there are others I could probably think of, given more time.

Q. How about his prothrombin?
A. I don't recall whether we talked about that.
Q. How about his enzymes, laboratory enzyme findings?
A. I believe we talked about the enzyme findings.
Q. Doctor, the medical literature that I have read indicates that once a person suffers hemorrhage as a result of TPA, the death rate is 61 to 66 percent. Do you agree with that?
A. I would agree that it's a serious problem that often eventuates in death. Without looking at the specific articles, you give the numbers.
Q. You would say there is a high incidence of death in people who suffer hemorrhage as a result of TPA, correct?
A. Absolutely.
Q. You say you had planned to discontinue the TPA after reviewing the EKGs that were faxed to you, correct?
A. Correct.
Q. But you knew it would be too late, didn't you? With the high incidence rate indicated in the literature, didn't you know it would be too late after you administered 65 milligrams of the medicine?

A. Too late for what?
Q. Too late to discontinue it.
A. Again the question is, too late for what? There was additional dosage going. TPA works to dissolve clots. Sometimes it works in lower doses, sometimes it works in higher doses.
Q. Doctor, you had administered the accelerated dose, is that correct?
A. Yes.
Q. And are you aware of how much TPA Mr. Grasgreen was actually administered prior to the time you discontinued it?
A. 65 milligrams, give or take a couple milligrams.
Q. What was your original -- how many milligrams of the TPA did you want him to have before you discontinued it?
A. Assuming I was not discontinuing it early, he would have had 100 milligrams. Does that answer your question?
Q. No. You said you had a plan to discontinue the TPA early in your progress note, correct?
A. Yes.
Q. And how much TPA were you going to allow him to get before you discontinued the TPA if, in fact,

there were contraindications that you were to learn about when you interpreted the EKG that was faxed to you?

A. The EKG was not a contraindication. The reason I was reevaluating was a lack of indication as opposed to a contraindication.

Q. Explain that to me.

A, Well, there are two things we weigh, if you need a drug, I'm -- it -- you need it for a reason.

Q. So are you saying, doctor, he probably wasn't having a heart attack in your opinion, is that correct?

A. No, that's not correct.

Q. What would the lack of indication be? I'm sorry I interrupted you. What would the lack of indication be?

A. Okay. The best established criteria for the administration of TPA includes as one factor the new elevation of ST segments in more than one lead in a given anatomic area --

Q. I understand that.

A. -- within a certain period of time.

Q. I understand that.

A. That's open to interpretation, what that period of time is. Different physicians feel

differently.

It was my opinion that those two EKGs did not show any new elevation, going from the one in the morning at 07 whatever hours to the one approximately 10 hours later, and since there was no new elevation, he did not meet those criteria to get the drug, in my opinion.

Q. Where were you coming from when you received the beep and returned the call?

A. From here, from this office.

Q. Where were you going to?

A. I believe I was on my way home.

Q. Where do you live?

A. In Cleveland Heights.

Q. Do you remember the location that you were in when you received the call?

A. No.

Q. Did you consider going to the hospital?

A. Yes.

Q. And why didn't you?

A. Because I was closer to my home, to a fax machine where I could get the EKG.

Q. You have a fax machine at your home, is that correct?

A. Yes, sir.

Q. You were on call for your associate, Dr. Grinblatt, when that occurred, is that correct?
A. Correct.
Q. And he was Mr. Grasgreen's attending physician, attending cardiologist, is that correct?
A. Correct.
Q. Did you ever consult, prior to prescribing the TPA for Mr. Grasgreen, with Dr. Grinblatt regarding Mr. Grasgreen?
A. No.
Q. Had you personally, prior to prescribing TPA for Mr. Grasgreen, reviewed his medical chart at the hospital?
A. No.
Q. When did you and Dr. Grinblatt arrange for you to cover for him that afternoon or that evening?
A. It's an automatic thing. At 5:00 the secretary signs out the phones and the answering service then calls the doctor on call.
Q. And what day of the week did this event occur?
A. It was a weekday. I don't really recall.
Q. Was it a Friday, is that correct?
A. I have no idea. We can look it up on a calender, I'm sure, easy enough.

Q. Dr. Grinblatt is an orthodox Jew?
A. Yes.
Q. Does he wear a yarmulke?
A. Yes.
Q. Does he observe the sabbath from Friday to Saturday?
A. Depending on what you mean by observe.
Q. Does he work between the beginning of the sabbath on Friday evening until the end of the evening on Saturday?
A. Yes, at times.
Q. Do you recall if you ever asked Nurse Jordan to review Dr. Grinblatt's routine coronary care orders that were issued the evening of the admission?
A. No.
Q. Did you ever tell Nurse Jordan that you were planning to discontinue the TPA early?
A. Yes.
Q. Do you recall, not the exact conversation, but whether it was in the first or whether it was in the second or third?
A. I remember exactly. It was when he had faxed me the two EKGs and I called him back and I said I do not see any ST change from this morning's

EKG. I want another EKG to make sure he hadn't evolved one, because I thought at the time and I continue to think that he was indeed having an acute ischemic event and probably was starting to have a heart attack and if I saw new ST changes at the time, I would have continued the TPA.

Q. Doctor, approximately how long does it take for a nurse to do a 12 lead EKG?

A. Five minutes perhaps.

Q. What's the infusion time of 50 milligrams of TPA?

A. Whatever you set it at.

Q. What did you tell him to set it at?

A. It was set at two different rates.

Q. You told him to give the 15 milligram bolus dose, correct?

A. Correct.

Q. Which you take orally, correct?

A. No.

Q. I'm sorry. How do you take that?

A. You don't take it, it's administered intravenously by injection.

Q. I'm sorry. How long does that take?

A. Minute or two.

Q. And then the second 35 milligram dose that you ordered administered, how long did you order that administered over?
A. The second what, please?
MR. JACKSON: This one.
Q. I'm sorry. The 50, the second 50 milligram dose you ordered to be administered over how long a period of time?
A. 30 minutes.
Q. 30 minutes. So, doctor, when you contrived the plan in your mind to discontinue the TPA early after you had an opportunity to review EKGs that were being faxed to you at your home, you knew, because you had already ordered the infusion times, that it would be -- strike that. That Mr. Grasgreen would receive at least 65 milligrams of the drug before you had an opportunity to discontinue it, isn't that correct?
A. That's correct.
Q. Doctor, in your opinion, if in fact Omar Jordan recorded properly what Dr. Chentow told him regarding the EKG that he interpreted, then Dr. Chentow misinterpreted the EKG in your opinion, is that correct?

MR. SCOTT: Objection.

MR. JACKSON: Wait a second. Would you clarify? Are you asking -- let me ask and then you can tell me if this is the question, because I want to understand.

MR. ZUCKER: You don't have to waste your breath. The objection is noted as to doctor, as to his opinion about Dr. Chentow's interpretation of the EKG.

MR. JACKSON: EKG.

Q. In your opinion, Dr. Chentow, if it was he who interpreted that EKG the nurse told you about, he did, in fact, misinterpret the EKG, is that correct?

MR. SCOTT: Objection.

MR. JACKSON: Assuming the information given the doctor from Omar Jordan was accurate as to what Dr. Chentow did.

MR. ZUCKER: That's what I said in the first place.

MR. JACKSON: That's not the way you said it. That's why I was asking you to clarify.

MR. GAUGHN: Objection.

A. The question has been changed so many times. Let me try and answer it.
Q. Let me start all over.
A. I think I understand.
Q. You didn't speak directly with the doctor to get his interpretation of the EKG, you learned of his interpretation from Nurse Jordan, correct?
A. Correct.
Q. If what Nurse Jordan told you was accurate regarding what Dr. Chentow told him, is it your opinion that Dr. Chentow misinterpreted the EKG?
A. Yes.

MR. SCOTT: Objection. Move to have it inserted prior to the answer.

MR. ZTJCKER: I didn't hear you.

MR. SCOTT: I simply objected and moved to have the objection inserted prior to the answer.

Q. Doctor, did you at any time consider asking the house officer, whoever it may have been, to review the chart and speak with the patient before prescribing the TPA?
A. It was not the house officer, it's a house doctor, which is different. House officers are in training, house doctors are licensed,

practicing physicians. And no, I did not.
Q. Would you agree that it's in accordance with good and accepted medical practice to review a patient's medical chart before prescribing TPA?
MR. GAUGHN: Objection.
MR. JACKSON: I will object also. You may answer.
MR. SCOTT: Objection.
A. It is good medical practice to be acquainted with appropriate aspects of the history. Whether that is from the source of a chart or a family member or a patient is irrelevant. The obtaining of the data is relevant.
Q. Would you agree that it's in accordance with good and accepted medical practice for a physician to speak with a patient to obtain a medical history, to explain the risks of the intended procedure, and to get the patient's permission prior to administering TPA?
MR. JACKSON: I will object. You may answer that.
A. Since time is of the essence in the administration of TPA, although in the best possible of worlds it would be -- I would infinitely prefer to be there instantaneously,

and do what you say, the practical reality is that does not lead to good patient care and that the patient suffers by the delay.

Q. Doctor, if you had been at the hospital on May 21st, about the time you received the telephone call from Omar Jordan, would you have reviewed the medical chart?

A. Yes, sir.

Q. If you were at the hospital at that time, would you have spoken to the patient and obtained a history and explained the risks and the benefits of the TPA?

A. I would have spoken to the patient, I would have obtained a history and I would have talked somewhat of the risks, yes, sir.

Q. Would you have obtained the patient's informed consent then?

A. I would not have obtained a written informed consent.

Q. A verbal informed consent?

A. Not necessarily. I would have explained to the patient the situation and if they had indicated that they didn't want it, then we would have discussed things further.

But my experience with these people is

putting an acute stress on them, number one, by putting them in the mentally anguishing position of trying to make a decision when the vast majority of them go and say yes anyway because it's the right thing to do, number one, delays the administration of the drug, which causes their patient care to suffer.

Number two, increases their adrenaline level which may, in turn, increase their infarct, which causes their suffering.

So I don't dwell on the risks with my patients. This is a standard, well accepted procedure of standard, well accepted and recommended treatment.

And just like you would expect to get, you know, any other drug in the hospital if you had something that needed it, or, well, not surgery, but any other medicine, you would give it because that's good care.

Q. It's your testimony that it isn't in accordance with good and accepted medicine to obtain consent -- strike that.

To obtain informed consent from a patient prior to administering TPA.

MR. JACKSON: Objection. That's

not what he said, but go ahead, doctor.

MR. ZUCKER: That's my question.

MR. JACKSON: You implied that's what he just said to you and that's not what he said. That's your interpretation perhaps.

If you want it read back, you can do that. You want to read it back?

MR. ZUCKER: No.

Q. The question is, is it your testimony that it is not necessary to obtain informed consent from a patient before administering TPA?

A. Yes.

Q. Okay. Now, bleeding is the most serious risk of TPA, is that correct?

A. Correct.

Q. And that's because TPA acts to inhibit the body's blood clotting system, correct?

A. Incorrect.

Q. Incorrect, did you say incorrect?

A. Not correct.

Q. TPA does not act by inhibiting the body's blood clotting system?

A. TPA acts by dissolving the clot. It doesn't inhibit the disposition of the clot, it

dissolves the clot. It activates the factors in the body that cause that dissolving of the clot.

Q. So it inhibits the body's --

A. It doesn't inhibit anything, it dissolves the clot.

Q. As TPA is dissolving this clot in the coronary artery, it's also dissolving clots in the other areas of the body, is that correct?

A. If there are some and depending on their age.

Q. Aren't there always blood clots, aren't there good, you want to answer the question first, aren't there blood clots throughout our body?

A. No.

Q. Aren't there some blood clots in our body out of necessity?

A. Intermittently we all at times form good blood clots.

Q. And TPA can't distinguish between the good clots and the bad clots, isn't that correct?

A. Correct.

MR. ZUCKER: Off the record.

- -

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

- - - -

MR. ZUCKER: Back on the record.
Q. Doctor, age is a important factor in determining whether or not to prescribe TPA for a patient, is that correct?
A. No.
Q. Not at all?
A. It's one of the factors considered, but whereas it used to be a contraindication, the data has now unequivocally shown that although more elderly people get complications from TPA, you save more lives by giving TPA to the elderly and they are precisely the population you need to --
Q. Older patients are more likely to have bleeding complications, isn't that correct?
A. That's correct.
Q. Why is that?
A. I'm not sure that anyone knows the answer.
Q. Well, does it have anything to do with the breakdown of the vasculature, of the vascular system as we age?
A. This would be speculation.
Q. Okay. So in this elderly age group a careful risk benefit ratio analysis has to be done with each individual patient, would you agree with

that?
A. Any age group,
Q. Doctor, what is a bleeding diathesis?
A. A bleeding diathesis is when someone has an intrinsic abnormality with their bloodstream and their clotting mechanisms and the structure of their blood vessels are such that they have an increased likelihood of bleeding due to a primary abnormality of their body.
Q. Were you aware at the time that you prescribed TPA for Arthur Grasgreen that he was on Coumadin lifelong?
A. He was not on Coumadin at the time I prescribed it to him.
Q. Well, I believe his last dose was at 9:00 the day before, 9:00 p.m. the day before you prescribed TPA, is that correct?
A. If you tell me. I don't know when his last, the exact time and hour of his last dose was.
Q. Well, what do you mean when you say he wasn't on Coumadin at the time you prescribed TPA?
A. Because Coumadin had been stopped.
Q. But prior to the admission in the hospital he had been on Coumadin lifelong, is that correct?
A. Not since he was not a baby, no, not lifelong.

He had been on it at the time, as of the time he came in.

I don't mean to badger you, but I'm just trying to answer an accurate question accurately.

Q. Have you reviewed Arthur Grasgreen's medical charts since May 21, 1993?

A. The one from Hillcrest Hospital, this admission, yes, sir.

Q. Did you notice in the chart that Mr. Grasgreen had been on Coumadin lifelong?

A. Again, he was not on it lifelong.

Q. What is the --

A. Lifelong means from the day you are born until the day you die.

Q. My understanding in prescription medicine is that lifelong means you'll be on it for the rest of your life, is that incorrect?

MR. SCOTT: Let's go on. I just say let's go on. What difference does it make? Ask him what his knowledge was.

Q. Do you have an answer to that?

MR. JACKSON: Does that mean lifelong, is that what it means to you?

A. That's not what it means to me.

Q. But you state that prior to his admission Mr. Grasgreen was on Coumadin, correct?
A. Correct.
Q. And you knew this at the time that you prescribed the TPA?
A. I do not recollect directly whether I knew that or not.
Q. At the time you prescribed TPA for Arthur Grasgreen did you know that he had a prolonged prothrombin time?
A. I do not recall directly whether I knew that it was. Depends on what you mean by prolonged. It was in the reasonably therapeutic range for someone who was on Coumadin.
Q. It was 24 seconds, isn't that correct?
A. From prior to the time when he got the TPA. In other words, there were a number of hours that lapsed it would have been less than 24 seconds.
Q. Isn't it proper protocol to do a prothrombin time test before administering TPA?
A. No.
Q. Was it protocol in May of 1993 to do a prothrombin time test before administering TPA?
A. Depends what you mean by do one. We used to get them on everybody. Okay. But you still

initiated them. before you ever got the results of the test. So again, with that background, ask your question again. I'll answer it as best I can.

Q. Well, were you aware when you prescribed the TPA for Mr. Grasgreen that he had had a prothrombin time test approximately 20 hours before you decided to prescribe the TPA?

A. I would have been aware of that, yes.

Q. And would you also have been aware of the results of that test?

A. I would have had a general knowledge of that. I don't know whether I can tell you I remember an exact number.

Q. And if you had known that his prothrombin time was prolonged to 24 seconds at the time you prescribed TPA, would you have still prescribed the TPA?

A. Yes, sir.

Q. You wouldn't have found that to be any type of contraindication?

A. It is one of many factors that you assess, but I would not have found, I would have still prescribed the TPA.

Q. In and of itself it is a relative

contraindication, is that correct?
A. It is one of the factors you consider but we give these people full anticoagulant doses with Heparin. And Heparin and Coumadin do many of the same things and I believe the reason I didn't start the Heparin on this man when I started the TPA was because of the affect of the Coumadin.
Q. And why is that?
A. Because they act in the same way. They act in very similar manners.
Q. Doesn't Coumadin act in a similar manner as TPA as well?
A. It does not. There are multiple effects to different drugs. The primary modality and the primary way TPA works is to dissolve a blood clot. And the primary way that the Coumadin and Heparin work is to prevent a clot. So again, the answer to your question is really no, it's not correct, but they do have some overlap.
Q. Okay. How about Isordil, does that work in the same way as TPA?
A. No.
Q. Does it work in the same way as Coumadin?
A. No.

Q. Would you agree that at the time Mr. Grasgreen received the TPA that -- strike that.

Would you agree that prior to receiving TPA Mr. Grasgreen's blood was already over anticoagulated?

A. No.

Q. Why not?

A. Because of your statement of what over means.

Q. Well --

A. His prothrombin time was anticoagulated but not over anticoagulated.

Q. Prothrombin time of 24 is not an indication of over anticoagulated blood?

A. The way we used to prescribe Coumadin was to take the hospital norm and to go anywhere around two times that norm.

Now, over the years those values have been narrowed and we now shift to other techniques such as what is called the INR or international normal ratio, but at that time a prothrombin time of two times normal would have been an accepted range.

Q. In Arthur Grasgreen's case would you consider the fact that he was on Coumadin to be a relative contraindication to be taken into

consideration in determining whether or not to give him TPA?

A. It certainly should be taken into consideration.

Q. Would you agree that it was a relative contraindication to be taken into consideration?

A. It's one of many factors that you weigh. I mean if you, do I agree that you shouldn't give to it people with Coumadin? No, I give to it people with Coumadin.

Q. Doctor, the literature talks about contraindication absolute and relative, is that correct?

A. That's correct.

Q. Is Coumadin a relative contraindication in the medical literature regarding TPA?

A. In that framework it would be considered as one of the relative contraindications.

Q. Is a prolonged prothrombin time a relative contraindication in the medical literature?

A. I'm not aware of that primarily by itself as being on the usual list, but I would consider it as so, but identical to the use of Coumadin.

Q. Okay. And that would, those relative contraindications would fall under the category of known bleeding diathesis, is that correct?

A. No. Because this is, this is in a different area.
Q. What area would that be in?
A. To me a known bleeding diathesis is an intrinsic abnormality of the bloodstream. This is something that is administered to people extraneously and is reversible.
Q. But the slight over anticoagulation of his blood would have been an intrinsic relative contraindication under the category of --
A. He was not over anticoagulated.
Q. Okay. Doctor, at the time you prescribed TPA for Arthur Grasgreen were you aware that he had a history of seizure disorder?
A. Yes.
Q. You were aware of that?
A. I believe so.
Q. And how did you become aware of that?
A. Through conversation with the nurse.
Q. And did you consider that to be a relative contraindication to the prescription of TPA for Mr. Grasgreen?
A. No.
Q. Why not?
A. Because it depends on what causes the seizure,

and that's one of the reasons why I specifically asked the nurse to check for a history of stroke"

Q. At the time you prescribed the TPA for Mr. Grasgreen were you aware that the hospital chart indicated in numerous locations that he had a questionable history of cardiovascular disease?

A. No,

Q. You just testified that you told the nurse to check for a history of old stroke, is that correct?

A. Yes.

Q. It was written all over the chart, doctor, isn't that correct?

A. No.

MR. JACKSON: That's not what you just asked.

MR. SCOTT: No.

Q. Have you learned from your review of the chart that the chart indicates in a number of places that he has a questionable history of cardiovascular disease?

A. No.

Q. Do you want to explain your answer?

A. No.

MR. JACKSON: No.

Q. Are you distinguishing between cardiovascular, CVA and cardiovascular disease in answering that question?

A. No.

Q. Page 15 is part of the admitting history and physical examination, is that correct, doctor?

A. Correct.

Q. Near the top where it says past medical history, does it not state CVA?

A. Yes.

Q. What does CVA mean?

A. Cerebral vascular accident.

Q. Will you believe me, without me going through the rest of this chart, that CVA is located in numerous places in this chart?

A. If you tell me so.

Q. Okay. Did you see that when you reviewed the chart subsequent to the May 21st incident?

A. Yes.

Q. I thought you just said a few minutes ago that you didn't see that in the chart?

MR. JACKSON: You said cardiovascular disease. That was the

question specifically.
Q. Is there a distinction between CVD and CVA?
A. Yes.
Q. What is that?
A. CVD increases the heart, for example, where we knew this man had a definite old heart attack. That's one difference.
Q. Cardiovascular, A, would mark the heart?
A. No, no that's --
MR. JACKSON: Cerebral there, CVA stands for cerebral vascular.
Q. Excuse me.
A. That does include the heart.
Q. This CVA stands for what?
A, Cerebral vascular accident.
Q. And cerebral vascular accident is a remote -- strike that. Remote cerebral vascular accident is a relative contraindication to TPA, isn't that correct?
A. Yes. And if I had known about that, I would not have prescribed the TPA, that's why I advised the nurse to check for it.
Q. If you had known what, doctor, that it was in the chart?
A. If I had known that the patient had had a remote

cerebral vascular accident, I would not have prescribed the TPA.

Q. If you had seen it in the chart, you would not have prescribed the TPA, is that correct?

A. I wasn't there to look at the chart.

If I had seen it in the chart, I would have expected that it was there because it was true, and if it was there, it was true, I would have probably talked to the patient, but I would not have given it, if there was any doubt in my mind, if the patient was confused and couldn't confirm or deny it, then I would not have given it. Again, that's why I asked the nurse to check for it specifically.

Q. Were you aware at the time you prescribed TPA for Art Grasgreen that in numerous locations of his hospital chart the words bleeds easily were present?

A. I was not familiar with his hospital chart or what was or wasn't in his chart at that time. I was aware of what my conversation with the nurse was and the conversation we had.

Q. You told the nurse to check for contraindications, correct?

A. Including specifically old stroke, such as old

stroke or GI bleeding or peptic ulcer disease,
Q. In your review of the hospital chart since the incident, did you notice where the chart indicates bleeds easily?
A. No. I don't doubt you, but I just don't recollect having seen it.
Q. Will then you believe me when I tell you that including the nurse's notes, in three or four different places it indicates that Mr. Grasgreen bleeds easily?
A. I have no reason to doubt you.
Q. Had you been at the hospital and reviewed the chart prior to administering the TPA, would you have administered the TPA had you seen that Mr. Grasgreen bleeds easily?
A. Probably, yes. But if I had seen CVA, no. I'm drawing a distinction between the cerebral, the old stroke and bleeds easy. A lot of people bleed easily and this is not a contraindication, not an absolute contraindication to that.
Q. However, Mr. Grasgreen was on Coumadin, isn't that correct?
A. Correct.
Q. And that would be a, if a person bleeds easily, that would be a known bleeding diathesis, isn't

that correct?
A. No.
Q. Were you aware when you prescribed TPA for Mr. Grasgreen that he had once had a pulmonary embolism?
A. I believe so.
Q. And did that have any affect on your thinking to prescribe the TPA?
A. No. Just explains the reason for the Coumadin.
Q. Is that a bleeding diathesis, a pulmonary embolism?
A. No.
Q. Would a venous thrombosis, a history of VT, be a known bleeding diathesis?
A. No.
Q. When you prescribed TPA for Mr. Grasgreen were you aware that he had a well documented history of hypertension?
A. Yes.
Q. And did that have any affect on your thinking to administer the TPA?
A. I would have asked what the blood pressure was at the time. Again, if the nurse didn't tell me at the time, I would have been aware of what his blood pressure was then. That's the immediate

importance of hypertension.
Q. What's that, doctor?
A. One of the contraindications to TPA administration is a markedly elevated blood pressure at the time when you are administering the drug.
Q. When you said markedly elevated, what would that mean to you? I don't mean in Mr. Grasgreen's chart, I mean what does a markedly elevated blood pressure mean to you.
A. As defined on Page 27 by your numbers, severe uncontrolled hypertension is a systolic blood pressure greater than 180 and diastolic greater than 110.
Q. And you say that's a thrombolytic guideline sheet you just read from is based on some of the older protocols, is that correct, doctor?
MR. JACKSON: What do you mean by that?
Q. You testified earlier that the Meridia Hillcrest Hospital preprinted thrombolic therapy guideline sheets were based on old, much of it was based on old protocol, isn't that correct.
A. No.
Q. Doctor, the TPA bolus dose was first

administered at 6:40, according to the nurse's note on Page 78, isn't that correct.

MR. JACKSON: Where are you on, page 78?

MR. ZUCKER: At 6:40.

A. Yes. According to the note, it would indicate that the orders were received around 6:30 and that the dose was given around 6:40.

Q. On Page 89, part of the nurse's flow sheet, if you would.

A. This, of course, all assumes the accuracy of the times written down by the nurse, because I have no direct recollection.

MR. JACKSON: Page 89?

MR. ZUCKER: Yes.

Q. At 6:40 Mr. Grasgreen's blood pressure, as reported by the nurse, was 179 over 94, correct?

A. As indicated on this flow sheet, yes, sir.

Q. You agree that that's a high blood pressure?

A. Yes, sir,

Q. Okay. You would agree that that would be a relative contraindication to take into consideration in making the determination to prescribe TPA to Mr. Grasgreen?

A. No, sir.

Q. Okay. Doctor, you agree that older people are more susceptible to bleeding, in general?
A. Yes, sir.
Q. Okay. And you agree that people with high blood pressure have a tendency to bleed in their brain?
A, Yes, sir.
Q. You agree that hypertension is the most important risk factor predisposing someone to cerebral hemorrhage or stroke?
A. I believe that's accurate.
Q. Okay. At the time you prescribed the TPA for Mr. Grasgreen were you aware that in the 20 hours, approximately, that he was in the hospital he had had some wide fluctuations in his blood pressure?
A. I would have been aware that his blood pressure had been up and down, but he was on IV nitroglycerin which has a impact on blood pressure.
Q Are you aware that when he was admitted to the hospital his blood pressure at 10:10 was 195 over 96?

MR. JACKSON: Are you asking me if we accept that?

A. I'm sorry. I thought you were going on.
Q. Are you not aware -- Page 12?
MR. JACKSON: Are we aware that's on Page 12?
MR. ZUCKER: John.
MR. JACKSON: That's what you asked.
Q. I asked if you were aware, upon admission you were aware that his blood pressure was 195 over 96?
A. Yes.
Q. Okay. You were aware at the time of that, at the time you prescribed the TPA?
A. No, I don't believe I was aware at the time.
Q. At the time that you prescribed the TPA are you aware that shortly after his admission his blood pressure was 193 over 115?
A. Maybe.
Q. Yes or no?
A. Yes or no?
MR. JACKSON: At what time?
A. I have no idea --
Q. Shortly after admission.
A. -- whether I was aware of any individual, one individual blood pressure, other than the

specific blood pressure when I spoke to the nurse, which I definitely was aware of. Yes, I would have been aware of the range, general range of his blood pressures, but to ask me whether I knew a specific one at a specific time.

Q. Dr. Van Dyke --

MR. JACKSON: Excuse me. Let him finish his answer.

Q. Dr. Van Dyke, the nurse testified that he did not review this chart, How could you have been aware of blood pressures that Mr. Grasgreen experienced during his admission?

MR. JACKSON: Wait a minute. Didn't you say earlier that the nurse indicated that portions of the chart by bedside were reviewed by the nurse?

MR. ZUCKER: One portion was the nurse's assessment sheet that is kept at bedside.

MR. GAUGHN: I'm going to have to object.

MR. ZUCKER: Of course.

A. There is a flow sheet kept at the bedside generally that records blood pressures and those

blood pressures would have undoubtedly been available to the nurse, and, indeed, part of it you already referred to that the nurse is actually written on, and a lot of those blood pressures were written down by the nurse.

The nurse would have been aware of those general blood pressures and I would have been aware of those general blood pressures.

Q. Based on the blood pressures that we just discussed from the time of his admission to the moment before he received the TPA, would you consider that to be a wide fluctuation in blood pressures?

A. It's a substantial fluctuation in blood pressures.

Q. Is a substantial fluctuation in blood pressure over a 20 hour period a contraindication to prescribing TPA for a patient?

A. Not if they are on a medicine which is bringing their blood pressure down to acceptable ranges and has already had that effect.

Q. What if they're taking that medicine yet they are still experiencing the fluctuation in their blood pressure?

A. Then you increase the medicine.

Q. And give the TPA?
A. If the blood pressure is controlled at the time and the indications are there, yes, sir.
Q. Would you say that Mr. Grasgreen's blood pressure was controlled at the time he received the TPA?
A, Yes.
Q. Doctor, myocardial infarctions, I'm going to refer to them as MIs or as MI to save time, are typically diagnosed by two criteria, correct, serial electrocardiographic findings and serum enzymes, would you agree with that?
A. No, I do not agree with that.
Q. Tell me how they're typically diagnosed.
A. Usually you meet two. Those are two. The third one is the history of the chest pain.
Q. Chest pain. Now, in regarding the enzyme criteria, the CK and the CK enzyme and the enzymal factors are of particular interest, isn't that correct?
A. Correct.
Q. Now, as I indicated or as his chart states, Mr Grasgreen was admitted to the hospital approximately 10:00 p.m. the evening of May 20th, is that correct?

A. If you indicate that, I have no reason to doubt you.

Q. The first enzyme test --

MR. ZUCKER: Which is located on Page 114, gentlemen.

MR. JACKSON: Do you have a Page 47?

MR. SCOTT: I don't have that either.

MR. ZUCKER: You don't have Page 47?

MR. JACKSON: I just noticed that.

MR. ZUCKER: None of you got that?

MR. GAUGHN: No.

MR. ZUCKER: Off the record.

- - - -

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

- - -

MR. ZUCKER: Mr. Jackson would like to make a statement.

MR. JACKSON: Page 47, we didn't have the copies that he referred to earlier, and apparently it doesn't contain anything but I don't want any confusion

there.

A. I now have in front of me Page 114 and your notation that lists CPK values on Mr. Arthur Grasgreen.

Q. Okay. Now, the first enzyme laboratory examination was done at approximately 10:39, is that correct, on the evening of the 20th?

MR. JACKSON: You are referring to .. okay.

A. Referring to this page that is the, that is the first lab recording on this page. That is correct.

Q. So Mr. Grasgreen is admitted at 10:00. The first enzyme laboratory examination is done at 10:39?

A. Correct.

Q. What was the result of that first laboratory examination?

MR. JACKSON: What, in what regard?

Q. What was the result?

MR. JACKSON: Result of what?

Q. What were the findings of the first enzyme laboratory test?

MR. JACKSON: Which enzyme are you

talking about?

MR. ZUCKER: There is one done, CK.

A. That's not true. There was more than one done. The initial CK value was normal on May 20th at 2239.

Q. The MB wasn't tested, isn't that correct, doctor?

A. That's not correct, That's not correct. It would have been ordered, it may have been run, but the policy of the lab is they don't report out MB fraction if the total CK is less than 100.

Q. They don't fractionate the CK, they don't fractionate the CK if it's less than 100, right?

A. All I'm saying is I'm not familiar with the modus operandis in the lab. Often times you don't report out a value but the machine spits it out because it's part of a battery in there.

Q. Doctor, based on your experience --

MR. SCOTT: Let him finish.

A. I have, the CK-MB value was not recorded at that time and indeed would have been irrelevant at that level of total CK, even if it had been reported.

Q. I understand what you are saying. The fact is based on your experience most hospital laboratories will not fractionate a CK where the CK is less than 100, isn't that correct?
A. Yes, sir.
Q. Let's look at the next examination of Mr. Grasgreen's enzymes that occurred on 5-21 at 5:13 in the morning, correct?
A. As judged by this list, yes, that's correct.
Q. And what were the findings of that examination?
A, There is a CK value listed as a total value of 103, which is a normal value.
Q. Okay. And the CK -- the CK-MB?
A. And the CK-MB at 0513, the total CK-MB was 6.0 which is at the upper limits of normal, what's called the CK index, which was a ratio, was abnormally elevated at 5.8.
Q. Was that high abnormal?
A. Yes, sir. It's elevated and suggestive if not indicative of some myocardial damage.
Q. And the next examination was done on 5-21 at 1101, correct?
A. As judged by this, yes.
Q. And findings of that examination?
A. Now the total CK-MB is elevated, as well as the

CK index. Lot total CK is still normal.

Q. By enzyme criteria do you think Mr. Grasgreen had a myocardial infarct between 5-20, between 5-20-93 and 5-21-93?

A. I'm not totally familiar with all the other aspects going on at that time. I would interpret this as highly indicative of underlying symptomatic coronary disease, if given a patient as Mr. Grasgreen was having chest pain.

There is some debate, and, again, I don't mean to be picky, but I like to be accurate. There is some debate in the literature if the total values are normal and there is just a very slight elevation of the MB ratio whether you have some enzyme liberation from some damaged cells but they will heal up and there will be no permanent damage.

Q. No necrosis?

A. No, no necrosis. Or whether some cells, actually a few cells actually die, which is what we call heart attack so I would interpret this, if you will, as a teensy, tiny --

Q. Micro infarct?

A. A micro infarct or a bad angina.

Or you are going to catch it early and it will continue to go up, and you see evidence of a larger infarct.

Sometimes we don't see it for hours after the initial event.

Q. We already discussed the EKG findings in this case, coupled with the EKG finding -- strike that.

Taking the EKG findings and the enzyme criteria, the enzyme laboratory examination by those two criteria, it's highly doubtful that Mr. Grasgreen suffered a myocardial infarct between May 20, '93 and May 21st, isn't that correct?

A. I thought we just said he may have had a micro infarct. So the answer to your question is no, it's not correct, I disagree with you.

Q. He may have had a micro infarct?

A. He may have had a micro infarct.

Q. And would you say, doctor, that that was apparent all along -- strike that.

Would that have been apparent all along to a physician who had been at the hospital and who had reviewed this chart?

MR. JACKSON: What would have been

apparent?

Q. That if he had a infarct at all, it was a micro infarct.

A. Okay. At that time? No, it wouldn't have been apparent because these you check, first of all, it's not all along because he didn't have all those values all along. They come in over a period of time, and if you pick a moment in time and look at it, you can say that maybe all of these are going to continue up and I'm going see the big elevation of the CPK in 6 more hours or in 12 more hours, so at that time you, one would not know that.

Q. It would have the appearance as if it was a small infarct if at all, though, correct?

MR. SCOTT: Objection.

A. Assuming they went no higher, that's how it would appear, but that's an assumption that wouldn't be known at that time.

Q. Doctor, from your review of the chart are you aware that Arthur Grasgreen had no chest pains from the time he was admitted into the hospital until 5:40 the evening of the 21st?

A. I'm not directly aware of that, but again, I have no reason to doubt you if you tell me

that.

Q. Well, if you take into consideration that that's the third criteria typically use to diagnose MI, along with enzyme laboratory findings and EKG, he would have, a doctor would have a very low level of suspicion for MI in this case, isn't that correct?

MR. JACKSON: During what period of time?

Q. During the period of time from the time he was admitted on the 20th until the evening of the 21st at approximately 5:40, 5:30?

A. Again, I disagree with that statement. I believe these are consistent with a very bad angina or a micro infarct. If we, to try and be helpful here, if you are talking, to talk about a new event from the time he came in, as opposed to an event that occurred, that indeed prompted his admission, that's part of my distinction here. He may well have had a micro infarct as he was being admitted then, with no additional new damage between the time of the admission and the event we are now talking about.

Q. You certainly wouldn't have prescribed TPA for Mr. Grasgreen at the time of admission, is that

correct?

A. I wasn't there at the time of the admission.

Q. Based on the chart.

A. I don't feel that I have adequate information from the chart to answer that question.

Q. You have looked at the EKGs, you have looked at the enzyme laboratory findings and you have taken my word for the fact that there was no chest pain. Now, you certainly wouldn't have risked giving him TPA upon admission, isn't that correct, doctor?

MR. JACKSON: He was admitted with chest pain, was he not?

Q. He had it in the ambulance. They gave him nitroglycerin. He gets to the hospital and the first thing he says is I'm fine. I have no pain. I want to go home. And he doesn't complain again until 5:40 on the 21st, correct, doctor?

A. Again, I don't know the time, but I'll take your word for it.

Q. Then you certainly would have given him TPA upon admission, isn't that right?

A. I wouldn't have given it to him because of the history of the stroke, which hopefully takes

care of that.

There is other information. His EKGs, as we talked about, could be interpreted as either an acute heart attack or they can be interpreted as an old infarct with an aneurysm.

I have been told subsequently by Dr. Grinblatt that this man had had an old attack and it is in the records he had had an old heart attack, but I was not sent the old EKGs to compare them to these.

Q. Okay. Let's take a look at that EKG now. I have the one or two EKGs. Page 56, Page 55 and Page 56 are EKGs that were taken during Arthur Grasgreen's hospital admission after his heart attack in 1986, Pages 55 and 56.

A. I have those pages in front of me. I'm just looking for the date on them.

Q. Sure. Take your time.

A. But again, I'll trust you if those were done in 1986 you said?

Q. They are dated right here. Page 56 talks about 11-13-86.

A. Again, that's referring back, it says there have been changes since 11-18. That doesn't tell me the date.

Q. It's marked 11-18?
A. The '86 is not there, but during the time --
MR. JACKSON: In writing?
MR. ZUCKER: Yes, this was given to me by the hospital.
A. 1 see all that you are referring to. If you tell me it's '86, I'll believe it.
Q. Now, you were available --
A. I can't independently come to that conclusion from what you have handed me.
Q. That's fine. Hypothetically these are EKGs from the admission during his, during his admission from his heart attack in 1986. Now, what were you saying before about you didn't have his EKGs from 1986 so you couldn't tell whether or not it had anything to do with his EKGs in 1993?
A. You were asking me a hypothetical question if I had been in his presence when he first came into the emergency room.
Q. Correct.
A. All I was indicating was in part of my determination about whether he should get TPA, which I would not have given anyway because of the stroke, but if I didn't have the history of the stroke, one of the things I would want to do

was to look at his old EKG and his new EKG

Q Is that the only reason you wouldn't have given Arthur Grasgreen EPA, because of that stroke?

A Which time are we talking about, the hypothetical when he first comes in or when I eventually give it to him?

Q At the time you prescribed the EPA -

A Yes.

Q -- for Mr. Grasgreen.

A Okay Was that the only reason? No, I already told you H believe H dictated to you before that the lack of new E changes from that morning was what indeed led me to want to scoop it early because it didn't fulfill my criteria

Q But were there any factors in his medical history, present medical condition?

A The past --

Q Other than the past stroke this would have prevented you from prescribing the EPA?

A There are many potential possibilities none that I'm aware of right now.

Q This case, in this case --

A And without going page by page through the record and reading it in great detail

Q Had you been at the hospital on May 21st, the

day you prescribed TPA for Arthur Grasgreen, had you reviewed the medical chart, the only reason you wouldn't have given him TPA was because of a history of stroke, is that your testimony?

A. No, that's not my testimony.

Q. Well, then, explain it to me.

A. Okay. For the third or fourth or fifth time, the lack of EKG change from the morning.

Q. Besides that.

MR. JACKSON: Besides everything else? Besides.

Q. Excuse me, my question was in his medical history or medical condition, correct?

A. The EKG is part of his medical condition.

Q. Was there anything in his medical history besides stroke?

A. Again, if I would, if you would like me to reread the chart and look for it, to my current remembrance those were the two major factors and since either one of them would have been enough to leave me not administer it, I find it a moot point.

Q. What's the difference between a transmural and nontransmural MRI?

A. A transmural MRI are usually associated with

Q-waves, which is an EKG findings. It tends to be a larger heart attack, although it's not always the case, and it often is what they call through and through heart attack, going from the inside all the way to the outside of the heart.

Now, in general usage we make that distinction based on the EKG, although pathologically there is not a complete concordance.

Q. And a nontransmural?

A. I'm sorry, a nontransmural would be a partial thickness of the heart which is usually not associated with Q-waves on the EKG.

Q. Do you have an opinion with a reasonable degree of medical probability as to whether it is more likely than not that if Arthur Grasgreen had not received TPA, he would not have suffered a cerebral hemorrhage? First, do you have an opinion?

A. Yes.

Q. What is your opinion?

A. That he would not have had the hemorrhage if he had not received the TPA.

Q. What is the basis for your opinion?

A. Because it's well described in the literature

that bleeding is a complication of TPA and the most devastating one is intracerebral or intracerebral hemorrhage. It's well described in the literature, and it is since temporally these events were related, it then becomes likely that there was a causative relationship.

Q. Okay. Doctor, do you have an opinion with a reasonable degree of medical certainty as to whether the TPA that Arthur Grasgreen received was the cause of the cerebral hemorrhage which he caused? First, do you have an opinion?

A. You want to define what you mean by cause?

Q. Was it the competent producing cause of his?

A. He would not have had it without the TPA.

Q. So it is your opinion that the TPA caused the cerebral hemorrhage, is that correct?

A. He would not -- he could have had a small leak in the vessel that wouldn't have been a problem without the TPA.

Q. Based upon a reasonable degree *of* medical probability?

A. Yes, sir.

Q. It was your opinion that the TPA was the competent producing cause of Arthur Grasgreen's cerebral hemorrhage?

MR. JACKSON: He is trying to answer that question.

A. I'm not sure of the legal definition of competent producing cause. I think without the TPA he would not have had the cerebral hemorrhage. It was a direct causative relationship.

Q. Okay. Doctor, were there any alternative methods of treatment available to you besides the TPA at the time you had to make that decision?

A. Yes.

Q. And what were they?

A. Flying him or transporting him by land ambulance emergency to a hospital where we could have done an emergency cardiac catheterization.

Q. What type of catheterization would you have done?

A. I would have gone in to do an angiogram of the vessels of his heart and to see if a balloon angioplasty might open up the occluded vessel. This, of course, all presupposes that there really was ST changes which I don't belief there were.

Q. Now, had you known about the questionable

cerebral vascular history, would you have taken that measure you just described to me?

A. That would have been one of my options. Again, 1 would have wanted to look at the EKG. I probably would have taken a little bit more time to see how he was responding and it is likely I would have, almost definitely I would have talked if not to him, to his wife by phone, probably to his wife by phone or direct family members, because sometimes families request if their parents are being moved, that they go to a specific hospital, rather than staying necessarily with our group at the hospitals where we go.

Q. Were you aware at the time that you prescribed TPA for Arthur Grasgreen that the nurse had indicated his chest pains were two to three on a scale of one to ten?

A. I would have been familiar with the degree of the chest pain.

Q. And that's not a real high degree of pain, is it?

A. As sensed and described by the patient, that is correct. You can have heart attacks without any pain, by the way, or very mild amounts of pain,

you can have severe and life threatening attacks.

Q. Sure.

A. Going back to a prior answer would have been the placement of an intraaortic balloon pump.

Q. Which would have been an invasive procedure, correct?

A. That's another different type of invasive procedure from a catheterization and a coronary angioplasty.

Q. Hillcrest Hospital has a cath lab available, is that correct?

A. We have a cath lab but we do not have the ability to do cases like this.

Q. In other words, a low risk cath lab, is that correct?

A. That is correct.

Q. What would you have done had you been at the hospital while all of this was going on, what course would you have followed?

A. I would have talked to the patient, I would have examined the chart, I would have looked at the EKGs myself. The likelihood, and again I'm speculating, but I never did get to ask the patient how much pain he was having personally,

but with --

Q. But the nurse told you, correct?

A. Yes.

Q. I mean, doctor, you already testified you wouldn't have given him TPA if you were there, based on the documents. What would you have done?

A. The likelihood is I would have put his nitroglycerin up to higher doses. I may well have given him some sublingual Procardia.

I would have talked to him and his wife about transferring him to a hospital that had the ability to do balloon angioplasty, if indicated, and if the patient and the wife had agreed I would have eventuated, I mean I would have made that transfer.

That would not have committed us, by the way, to the angioplasty, because it takes time to transfer him and you reassess them all along the way.

Q. Doctor, don't you think it would have been good medicine to have a doctor examine Mr. Grasgreen and review his chart and discuss his history and his symptomatology at the time this crisis occurred?

MR. JACKSON: That was asked and answer, I believe.

Object, but go ahead, doctor.

A, There is a matter of time involved. Okay. I knew certain facts. I knew that if he was having an acute heart attack with a major anterolateral ST elevations, that the longer I waited the greater likelihood that he would be dead. Okay. So whatever I'm doing has to be done expeditiously, if it's going to have a chance to help him.

Q. Well, that's all the more reason --

A. It takes time to do all these things. The doctors who are there in that hospital at that hour and are available to me are not trained cardiologists as I am. I had access to my partner's notes and the history from the nurse, as indicated to me by the nurse, that the patient had had an old heart attack. I had access.

Q. Wait. You testified that you did not have access to your partner's old notes and never discussed the case with him, isn't that correct?

A. My partner's -- that's why I started to change my answer there. As indicated to me by the

nurse, as indicated to me by the nurse that we knew this man had an old heart attack. Okay. So I knew he had coronary disease. I knew that my partner was treating his coronary disease. I knew this man was having chest pain.

Q. Did you know he had high blood pressure?

A. I knew his blood pressure, I would have been aware of the blood pressure range at that time.

Q. From the time of his admission or the time of his --

MR. JACKSON: We've been through all this.

Q. Or the call from the nurse?

A. And he described that earlier, too.

Q. It's in a different context?

A. I could do it again.

MR. ZUCKER: I'm not badgering him.

A. I would have been aware specifically of the blood pressures that were at the time that I was talking to the nurse and I would have been aware of the general range *of* those, at least that day and the ones in front *of* the nurse that the nurse had access to.

Q. Okay.

A. I would not have been necessarily aware of what it was at the time of admission. Okay. And I've lost my line of --

Q. In all likelihood, doctor, if a trained cardiologist had been present during this crisis, Mr. Grasgreen would still be alive, isn't that correct?

MR. JACKSON: Objection.

MR. GAUGHN: Objection.

A. Again, I think he was probably starting to have a heart attack and it's speculation whether he would have died from the heart attack without the TPA, The TPA was taking the pain away.

Q. From the heart attack?

A. Consistent chest pain and because we have evidence by the MB fractions that we just went through that there was evidence of an actual myocardial event taking place.

Q. But you don't give TPA to a high risk person who's having a small myocardial infarction, doctor?

A. I would not have given TPA to this gentleman.

Q. The risks were too great for the potential benefit, right?

A. That is correct.

Q. Doctor, what is your home address, please?
A. 2504 Marlboro Road, Cleveland Heights, Ohio, 44118. I have a copy of my CV here, if that would help on some of these questions.
Q. You know, it would save a lot of time.
MR. ZUCKER: Jim, would you mind?
MR. JACKSON: No, I've got it right here.
Q. You are board certified, doctor, is that correct?
A. Yes, sir.
Q. When did you become board certified?
A. 1981, I believe.
Q. What's your birth date?
A. 11-23-49.
Q. By what organizations are you certified?
A. American Board of Internal Medicine.
Q. Did you pass your written examination the first time you took them?
A. Yes.
Q. Did you pass the second part of the certification process the first time?
A. Yes, sir. I'm not sure what you mean by the second part of the certification. Everything I took I passed the first time.

Q. The interview process.
A. There wasn't an interview process.
Q. Oh, there wasn't?
MR. ZUCKER: Off the record.
- - - -
(Thereupon, a discussion was had off the record.)
- - - -
MR. ZUCKER: Back on the record.
Q. Doctor, have you ever had your medical license suspended or revoked as a result of your medical practice?
A. No, sir.
Q. Has the care that you have ever rendered to a patient been subject to review by your peers?
MR. JACKSON: You don't have to answer that.
MR. GAUGHN: Objection.
MR. ZUCKER: Just the fact of whether or not it ever has, that's admissible.
MR. JACKSON: You don't have to answer that.
MR. ZUCKER: Why not?
MR. JACKSON: I don't think it's

an appropriate question.

MR. ZUCKER: You know the case, I gave it to you.

MR. GAUGHN: I don't think -- I didn't look it up. Give us the cite again.

MR. ZUCKER: That's okay.

Q. Doctor, you have been sued before, isn't that correct?

MR. JACKSON: Objection, but you may answer.

A. That's correct.

Q. I didn't hear the doctor's answer.

A. That is correct.

Q. And in two or three of those suits the end result was the death of a patient, is that not correct?

MR. JACKSON: Objection, but you may answer.

A. There is one that I bring to mind immediately where the patient died months afterwards of pneumonia.

Q. Tell me the allegations of the complaints, if you would, in that case.

A. There was a patient upon whom I was performing a coronary angioplasty as of the lab at University

Hospitals and the patient had a successful coronary angioplasty but then developed bleeding related to the insertion of the sheath, technically, into his groin which a cardiology trainee had inserted. Because of that he bled and he dropped his blood pressure and then he occluded his blood vessel and he went to the operating room and after a very long and extensive process died of his lungs.

Q. Didn't, in fact, one of those cases that you have been sued on also, another one of those cases that you have been sued on occur in the cath lab?

MR. JACKSON: Excuse me. This doctor is not a party to this lawsuit. He is here strictly as a fact witness. It's a serious question whether you have any right to actually cross-examine him. I let you ask just about any question you want. Given that setting, how are any of these questions relevant to what you are here for today?

MR. ZUCKER: I'm not going to argue with you at this time.

MR. JACKSON: I'm not interested

in arguing either.

MR. ZUCKER: I'm going to reserve the right to call the doctor back for deposition if and when he is a party to this lawsuit and we can ask him those questions at that time.

MR. JACKSON: But, I mean, to go through his history of cases that have been filed against him, if you tell me how that's relevant.

MR. ZUCKER: John, I think the doctor may have a habit of practicing casual medicine and I think that's the relevance as far as this deposition is concerned. I don't say habit, but on occasion the doctor has practiced some casual medicine which has resulted in a number of deaths. One of which, one of whose was Arthur Grasgreen.

But again, I reserve the right to recall him if and when he becomes a party to the lawsuit. And I'll defer from asking him any of those questions at this time.

MR. JACKSON: Okay.

THE WITNESS: May I confer with my

lawyer?

MR. JACKSON: That's all right, doctor. That was an insulting comment he made to you and I appreciate that, but we will address that later.

Q. Doctor, you have taken your required continuing medical education courses, is that correct, over the years?

A. Yes.

Q. Have you taken any courses that included the subject matter thrombolytic agents?

A. Yes.

Q. Have you taken any recently?

A. I would have to check my records, but if you take as recently as the last couple years, yes, and I read continuously on this matter.

Q. Do you recall what courses in thrombolytic agents you have taken in the last couple years?

A. There was a Boston course I know I went to.

Q. In Boston?

A. In Boston.

Q. Who sponsored that?

A. These were all certified for CME and I don't recall exactly who sponsored it. I also attend when I go to the American Heart Association and

American College National meetings, I virtually always go to courses where thrombolytic therapy is discussed and talked about and that would have definitely been within the last year or two.

Q. Do you save your literature from these courses norma11y?

A. Some, but not most of it.

Q. Okay. You just talked about keeping up with the medical literature in this area, correct?

A. Correct.

Q. Which of the major studies have you read in recent, in the last couple years?

A. If you would like, in five seconds I can pull from my office a two or three inch thick stack of them.

Q. Let me ask you, have you ever read the TIMI research group investigation studies?

A. Yes, I read some of TIMI.

Q. Some of them?

A. I believe there are up to five of them now.

Q. But you definitely read phase one, phase two?

A. I read several of them, if not all.

Q. The Gusto trial studies?

A. Yes, definitely I read that.

Q. You read that in its entirety?
A. At one point or another I have had the entirety in front of me, whether I read absolutely every word in it or skipped over portions, I don't know.
Q. The ISIS studies?
A, Again, there were several and I'm familiar with several of them,
Q. Do you know specifically if you read two and three of those?
A. I'm sure if I haven't read them, I have at least read the summaries of them and I probably have read them and have the actual articles in my files, if you would like me to bring them out.
Q. Not at this time. Thank you.

Are there any particular authors who you consider to be authoritative in the area of thrombolytics?

MR. JACKSON: Define authoritative as you mean it.

A. The answer is no.

MR. JACKSON: Never mind. You don't have to define it.

Q. I don't have to define it.

Doctor, I apologize to you for what Mr.

Jackson referred to as an insulting comment which wouldn't have been made would he have not precipitated the conversation.

MR. JACKSON: Let me respond to that, Mr. Zucker. Normally that's fine to do but to sit in a doctor's office or in a deposition and say to a doctor that he performs casual medicine which has killed people is really a very insulting thing and I think that's very wrong to do that to him.

MR. ZUCKER: I apologize.

MR. JACKSON: He is a good doctor and saying something like you're mad at me is one thing, but to do that to him is just not right.

Don't say anything, just answer the question,

Q. You have been practicing cardiology since what year, doctor?

A. Well, I completed my training in 1980. I would have been in my training between 1978 and '80 in cardiology and between 1975 and '78 in internal medicine and for four years prior to that in medical school but would have been dealing with

cardiac cases during that training period,
Q. You have a great deal of experience in dealing with thrombolytic agents, is that correct?
A. Yes.
Q. How often do you use TPA -- strike that.
How often in the last 90 days have you used TPA?
A. Although I can't give you an exact number, I have used it two or three times this week and that's not that unusual.
Q. So would you say annually on the average you use it two to three times a week?
A. Probably not over the entire year. And I'd say anywhere between 25 and 75, I really don't know, but --
Q. Have you ever had a patient develop a bleeding such as Mr. Grasgreen as a result of thrombolytic agents being used?
A, Not to my current recollection, although some other cardiology physicians I'm aware of certainly have and I'm aware of those cases.
Q. Are you aware of any of those cases that took place at Meridia Hillcrest Hospital?
A. Yes.
Q. And when?

A. I can't tell you exactly.
Q. In the last year?
A. I've only been at Meridia Hillcrest five years.
Q. The last five years?
A. So it would have been there the last five years.
Q. What is the name of that cardiologist who you referred to as having had a problem with a patient developing the cerebral hemorrhage?
MR. JACKSON: You don't to have answer that.
Q. Doctor, do you have any criticism of the care and treatment that was rendered to Arthur Grasgreen by Omar Jordan on May 21st, 1993?
MR. JACKSON: Objection. But you may answer, doctor.
A. Yes.
Q. And would you tell me what your criticism is?
A. I should have been informed and he should have been aware of the fact that this man had had an old stroke.
Q. Any other criticism?
A. Based on my knowledge, my direct knowledge, no. Based on some of the things you have said to me today, perhaps, although I'm not assert in nursing practices.

Q. Do you have any criticism, doctor, directed toward the hospital regarding the care and treatment rendered to Arthur Grasgreen during his admission of May 20th to May 22nd, 1993?

MR. JACKSON: Objection, but you may answer.

A. If you are asking relative to the house doctor, yes. If are you asking -- I'm not sure what you're asking in terms of the hospital itself.

Q. I wasn't asking that question. I was, I am asking the question directed toward the hospital and any of their employees.

A. With reference to this case?

Q. Yes.

A. My concerns? Yes, the house doctor is one of their employees.

MR. SCOTT: Objection.

Q. Well, can you tell me what criticism you have of the house doctor in this case?

MR. SCOTT: Objection.

MR. JACKSON: Objection. You may answer.

A. Assuming what I was told was correct by Omar, the nurse, in my opinion, as we discussed earlier, the house physician misinterpreted the

EKGs.

Q. Which was a major factor in leading you to prescribe TPA for Art Grasgreen, correct?

A. Correct.

Q. The fact that the nurse, Omar Jordan, didn't tell you that the chart included reference to a previous stroke was also a precipitating factor to you prescribing TPA, is that correct?

MR. GAUGHN: Objection.

A. Again, to rephrase it, but I think to answer your question, I would not have given the TPA if Omar had told me about that information and I consider that he should have been aware of that, should have told me of that and should have made that known to me. And the explicit orders above and beyond the checklist from me saying that if this man had had an old stroke, I would not give the TPA.

MR. ZUCKER: I have no further questions at this time.

MR. JACKSON: These gentlemen may have some questions.

MR. GAUGHN: Let's take a break.

- - - -

(Thereupon, a recess was had.)

- - - -

CROSS-EXAMINATION OF ARTHUR E. VAN DYKE, M.D.

BY MR. SCOTT:

Q Doctor, let me just ask you a few questions first.

A Sure.

Q I represent Dr. Chanto, actually Physician Staffing, Inc

Will you tell me if you agree with the interpretations of the EKGs which are contained in the chart here, those of May 20th and May 21st?

MR JACKSON: Which are which numbers?

MR ZUCKER: 46 to 56

A I think there was one on the 20th and there were three on the 21st Which ones are we talking about now?

MR JACKSON: That's what I'm trying to find out

A I have May 20th in front of me

Q. Will you tell me if you agree with that interpretation?

MR JACKSON: So we agree, what number?

THE WITNESS: Page 46.

MR. SCOTT: Correct.

MR. JACKSON: Okay. That's 46. The question was whether you agree with the computer interpretation, is that what you're asking?

MR. SCOTT: Correct.

A. There is a computer and a typewritten addendum under Dr. Nickel's signature and I'm trying to read the whole thing because there are two interpretations of this simultaneously, one that was physician generated and one computer generated.

Q. Can you indicate to me which was physician generated?

A. My presumption is the lower one was physician generated.

Q. Beginning with sinus rhythm?

A. Correct.

Q. I can't say that with 100 percent certainty at this time but that is what I believe.

A. I do disagree with that,

Q. In what respects?

A. The main one as it is reads here as Q-waves and V1 through V4 with ST elevation, that I agree

with.

It says, "Now on this EKG there are changes of an acute anteroseptal wall myocardial infarct," as I testified earlier. This could be an old myocardial infarct with left ventricular aneurism.

MR. ZUCKER: What page are we on?

THE WITNESS: We are on Page 46.

Q. Doctor, will you look at the EKG on May 17th?

A. May 17th?

Q. I'm sorry, it's actually May 21st at 5:17.

MR. GAUGHN: There was a 5:17 p.m. and a 7 something a.m., which one are we talking about?

Q. On page 48.

MR. ZUCKER: Both are on the 21st.

A. Which one do you want me to go through, the morning one?

Q. Exactly.

MR. JACKSON: It's page 48.

A. Page 48, May 21st at 0717 hours. I do not disagree with that.

Q. Will you look at the next one then on May 21st at 5:50 in the morning?

MR. ZUCKER: In the afternoon?
A. There wasn't a 5:50 in the morning.
Q. I'm sorry. In the afternoon.
A. I disagree with that.
Q. In what respects?
A. Again, it reads acute anteroseptal wall MI.
Q. You believe it could as well be removed?
A. It could be old and indeed the fact that there has been no change from the prior EKGs makes you start thinking it's either very old or even subacute and maybe has been there for several days.
Q. Doctor, will you now look at your progress note?
MR. ZUCKER: Page 18.
A. Yes, sir, I have it in front of me.
Q. Where you indicate that there was a diagnosis of acute interior MI with new changes since that a.m. and more ST changes. Would you tell me initially when you say with new changes what you meant?
A. It meant specifically that the, I was told that the house doctor had looked at the morning EKG and the EKG taken during chest pain and he had said that this was an acute heart attack, with that, actually I didn't put it down here, I was

told that he said it looked quite large and it was anterior wall and that it was, it showed new changes from the morning.

Q. When you say with new changes, can you tell me what you meant?

A. That there were, that the evidence of the infarct, the ST elevations were new.

Q. The new changes means the ST elevations?

A. At least that they were higher than what they were in the morning.

Q. Does your language of new changes mean anything else besides the higher ST changes which you implied?

A. It may have involved the T-waves, but I know we specifically talked about the ST elevations. I mean, I have direct remembrance of that with the ST elevations. But again this wasn't with the doctor.

Q. I understand that.

A. This is what the nurse told me the doctor said,

Q. I understand. All I really want to know when you wrote new changes in this progress note what you were referring to. Do I understand that it's, that you were referring to an increase in the ST?

A. Well, there are two parts to my sentence. It says new changes since a.m. and more ST changes. The ST changes refers to ST, the more ST elevations. The new changes is that presumably it was T wave inversion as well. I know I was told that there were Q-waves but at this late date I don't recall whether I was told the Q-waves were all new from that morning or not.

Q. When you indicated that you were critical of Dr. Chentow, you made the assumption or you made your statement based upon the assumption of what Omar Jordan told you was true?

A. Absolutely.

MR. SCOTT: That's all I have, doctor. Thank you.

- - - -

CROSS-EXAMINATION OF ARTHUR E. VAN DYKE, M.D.

BY MR. GAUGHN:

Q. My name is Pat Gaughn, I'm the attorney for Meridia. I promise --

A, Another four hours.

Q. Maybe one or two dozen.

What I would like to do is quickly go through and ask you questions from my notes. It may be repetitious, but I want to make sure my

notes are correct. I want to just go right through this and get this over with.

Doctor, is it your testimony that if a patient is suffering MI, a quick response is crucial, maximizing the likelihood of preserving longevity and quality of life?

A. That is my testimony.

Q. And in choosing which procedure is appropriate to treat the condition there are a number of things that a doctor must do, right, where you stated you have, if you had been there you would have examined him, you would have done an EKG, taken a history, and if appropriate -- strike that whole question.

Doctor, would you agree that the decision to take a particular course of action to treat a MI is done prospectively, not retrospectively?

A. I'm not sure what you mean by that.

Q. You don't know what all the information is when someone is having a heart attack, correct?

A. That is correct. Time matters, time is of the essence, and if you were to take the time to do an absolutely complete history and physical, people would be dying because of it.

Q. So if someone is having a MI, you have to take

whatever information is available that you are aware of and make a decision based upon it, correct?

A. You take relevant history that is available and there are certain minimums that you need.

Q. And determining what's relevant is in somehow coming to a decision when you have what I believe you called adequate, an adequate history?

A. Yes.

Q. And is it also your testimony that the process of obtaining additional information, because it takes time, can work to the detriment of the patient?

A. Anything that takes time can work to the detriment of the patient in that particular kind of situation.

Q. I believe you also testified earlier, and if my notes were reliable I wouldn't be asking, that something about 30 minutes, a person has been in constant pain for 30 minutes or more?

A. That's when you start having permanent cell death in many patients.

Q. And when you were called in this case, more than 30 minutes had already passed?

A. Yes, and that's part of the reason why I documented that in my notes and part of the reason I acted as I did.
Q. So this would be possibly even more pressing to make a decision?
A. Exactly. True.
Q. And I believe you also stated that when you spoke with Nurse Jordan, you gave him a number of things that you wanted to have done as quickly as possible?
A. That's correct.
Q. And you would agree he was also under the same time constraints of trying to act as quickly as possible to preserve the health of the patient?
A. True.
Q. Now, earlier this afternoon, let me see if I can ask this clearly. An easier way is just to ask this as a hypothetical. 1 want you to assume everything in this case, everything that you know about this case is exactly as you testified today -- strike that,

If you were presented with the situation that you were presented with with Mr. Grasgreen on May 21, 1993, where you have received a phone call from a nurse saying it looks like a MI, you

would presumably give the exact same instructions you gave to Omar on 5-21, correct?

MR. JACKSON: Are you asking if he was given the same set of circumstances today as he was that day, would he do the same thing, is that what you are asking?

MR. GAUGHN: Right. Right. Yes. Thank you.

A. Even in retrospect, and I think this will answer your question, even in retrospect I am convinced in my own mind everything I did was exactly right. I couldn't have changed it or done anything better. I think I did what needed to be done and appropriately, and if I was given the same information today I would acted exactly the same way as I acted that evening.

Now, I have subsequently learned some other things, but given the limited knowledge that I had at that time, I would have given the same instructions. If my instructions had been carried out, the TPA would not have been given.

Q. In fact, didn't you also state there are some cardiologists who in retrospect would still prescribe TPA?

A. There may have been but it certainly wouldn't

have been me and since I was the one making the decision at that night it would not have been given.

Q. There are other cardiologists even in retrospect?

A. There may have been,

Q. And would you agree with me that I think you already stated retrospect didn't influence the way you are making the decision, you are under the gun and you have to make a decision to try to save the person's life?

A. Time is of the essence, that is correct.

Q. If on 5-21, 1993 Omar Jordan, after you had given him the instructions to be done came back to you and said, look, I've talked to Mr. and Mrs. Grasgreen and they both are alert, attentive, you know, obviously Mr. Grasgreen is having distress but he is certainly aware of his surroundings and neither one of them says that he has had a stroke; in other words, if you had a situation where the patients were alert and aware of the surroundings and verbally told the nurse that there was no stroke, would that have affected the treatment that you prescribed, the TPA?

MR. JACKSON: Can I understand you? Are you saying that after the initial call he gets a second call from Omar Jordan saying I've talked with these people and they are telling me there is no stroke, is that essentially what you mean?

Q. What I'm trying to do is make sure the record is clear; that plaintiff's counsel has presented the facts as he understands them and has left out testimony from Nurse Jordan that, in fact, he went to Mr. and Mrs. Grasgreen and, in fact, they were alert and, in his opinion, could give answers to the questions asked and he did, in fact, follow through with your orders and asked, have you ever had a stroke.

Now, my question is if that is the evidence, would you have prescribed TPA?

A. Again, I want to answer indirectly. If I had a patient that came into me in the emergency room, I would not have waited for a chart to come from medical records, I would not have asked are there old records there. If I had a patient that was alert and a patient even without his wife, and they are oriented and their memory seems intact and they told me there was no

evidence of old stroke and never had an old stroke, I would believe them and I would still give TPA if all other indications were clear and accurate. Again, I'm not a specialist in nurses --

Q. That's why I specifically, under the facts of this case, you know, in the sense as we have been discussing this afternoon, if Nurse Jordan came in and said, well, they are alert, they are oriented. They both say he hadn't had a stroke.

A. I mean. I would have been, expected him to be familiar with the chart, if that's what you're asking. I don't, again, **I** don't know --

Q. so you --

A. --what your asking.

Q. You don't know what you would do?

A. I really don't, don't, I'm not --

MR. JACKSON: Excuse me. The question that you are asking seems to be there were certain instructions, that you were suggesting he carry out those instructing?

MR. GAUGHN: Correct.

MR. JACKSON: And that his process found there was no contraindication, he

talked with the family?

MR. GAUGHN: Right.

MR. JACKSON: There would be no reason to call the doctor back and --

THE WITNESS: Go ahead and give it.

MR. JACKSON: If there is no contraindication. So what you are suggesting is it wouldn't have precipitated --

MR. GAUGHN: It --

MR. ZUCKER: May I? The question is although the chart indicated questionable CVA, the nurse said he asked Mr. and Mrs. Grasgreen if he ever had a stroke and they told him no, he never had a stroke, he had seizures, correct?

MR. GAUGHN: That's another question and that's good, too.

MR. ZUCKER: That's the question you asked.

MR. JACKSON: There is no call back to the doctor?

MR. GAUGHN: Exactly as the facts occurred here. You had three phone calls,

whatever, not changing that at all.

MR. JACKSON: All right. He gets no additional information. Does it make any difference to him? I guess --

MR. GAUGHN: Right.

Q. And just so the question is clear, because I think I've almost forgotten it. Assume the facts exactly as we have here. You tell Omar Jordan to go and check for stroke, I think you said gastrointestinal bleeding, and check for the checklist for TPA. Okay. He goes ahead and gives TPA, would you have any criticism of Nurse Jordan's conduct in doing that?

A. Yes.

Q. What would your criticism be?

A. That he should be familiar with the chart as well.

Q. Okay. The next question: Assume that he was familiar with the chart. If he calls you back and says, well, we have a situation here. I have spoken with the patient who is alert and oriented. I have spoken with his wife who is also alert and oriented. They both say there was no stroke. However, the admissions form says he did have one. What would you have told

him to do?
A. By that point I would have been at a fax machine, presumably, and I would have had the EKGs and he wouldn't have gotten it. It takes time.
Q. Assuming Omar Jordan can speak clearer than I can ask questions.
A. I would have been much less likely and again, you know, I'm trying to answer you honestly, but I would have been much less likely to give the TPA and much more likely to pursue other avenues such as give more Procardia, up on the IV nitroglycerin and maybe drag our feet for 15, 20 minutes and I probably would have turned my car and come directly to the hospital, so that I could ascertain in my own mind directly what was going on.

MR. GAUGHN: Thank you, doctor. No further questions.

MR. ZUCKER: Real brief.

- - - -

FURTHER DIRECT EXAMINATION OF
ARTHUR VAN DYKE, M.D.

BY MR. ZUCKER:

Q. Number 47. The EKG, under EKG, doctor, there

was a document that was provided to me when I asked for the medical records from Hillcrest Hospital and can you identify it?

MR. JACKSON: What do you mean identify it?

A. I have a piece of paper that says page 47 and Arthur Grasgreen's name written on it, it has a date 5-20-93.

Q. It would appear to be an EKG?

A. It's a rhythm strip, telemetry strip, what's called a rhythm strip or telemetry strip.

Q. The purpose of it being?

A. When people are in the intensive care unit we watch their rhythm.

Q. Their heart rhythm?

A. Sure.

Q. It's part of the monitor in the room?

A. Sure. Part of monitoring a person, sure.

Q. Seizures, seizure disorder as in Arthur Grasgreen's case, hopefully you will take my word for it, based on the medical records I have reviewed, he had a seizure disorder for approximately 10 years where he had had pretty much constant seizures, almost annually, then there would be a few years where it abated, and

I think his last seizure was about six months before, I'm not exactly sure. No idealogy was ever determined. What significance does that have to you regarding what you said about not giving him TPA because of the old stroke?

A. I was with you until you added your last statement there.

Q. Do you understand the question?

MR. JACKSON: No, I didn't --

A. If all I knew was the seizure disorder. Okay. That would not stop me from giving TPA to a gentleman with the other features of Mr. Grasgreen, assuming --

Q. He --

A. --that I knew that the EKG --

Q. Right.

A. --was said to have shown what I was told it showed.

Q. Now, seizure disorders, ideology unknown, wouldn't that indicate to you, though, that something is going on inside the head, if a person is having seizures for a decade, there is something going on in there, does that make sense?

A. Yes, there is an electrical instability.

Q. Electrical?
A. That's what a seizure is.
Q. Electrical and not cerebral vascular?
A. Correct, electrical.
Q. That's the distinction. That's not the type of contraindication to TPA that is --
A. An old stroke.
Q. --significant or indicative of stroke, CVA, CVD?
A. Incidently, the way I practice, I would not have given the TPA, as we were talking earlier about the evolution.

There are doctors that give TPA to people that have had old strokes, as long as they are far enough in the past.

It just hadn't been the way I practiced, it was not at the time and still is not. But it's again one of those, if you will, relative contraindications.

Q. And in addition to that you have to look at all the relative contraindications in any given patient, correct?
A. You try and look at all the knowledge you have. Some people are experimenting with giving TPA to treat an acute stroke.
Q. So if I'm interpreting correctly your testimony,

even if he didn't have a stroke, you have criticism of Dr. Chentow because he misread the EKG and that's why you gave Arthur Grasgreen or ordered Arthur Grasgreen to have TPA?

MR. SCOTT: Objection.

A. Assuming that what I was told by the employee was correct.

Q. Right.

A. Was indeed what the house doctor --

Q. Right.

A. --said.

Q. Right.

A. I have criticism with the interpretation of the EKG and that directly led me to administer the TPA that I would not have otherwise done.

MR. ZUCKER: I have no further questions. I would move at this time --

MR. GAUGHN: I have one other short and I promise just one question.

MR. ZUCKER: Okay.

- - - -

FURTHER CROSS-EXAMINATION OF

ARTHUR VAN DYKE, M.D.

BY MR. GAUGHN:

Q. During the end of questions by plaintiff's

counsel you stated that you had another criticism of Meridia Hillcrest Hospital about the house doctor being an employee. If I were to tell you that the house doctor was not an employee, do you have any knowledge that would prompt you to disagree that he was actually an independent contractor of Hillcrest?

A. No, if you tell me that, I have no reason to think otherwise,

Q. So if he were an independent contractor, would you have any other criticism of Meridia Hillcrest Hospital?

MR. JACKSON: Assuming he is not going to understand the legal significance of independent contractor.

I think he was saying earlier assuming the house doctor is an employee of the hospital, that would cover the question he had about criticism of the hospital.

I didn't mean to put words in your mouth. Do you know the legal significance of independent contractor?

THE 'WITNESS: I do not.

MR. ZUCKER: I would move to stipulate between counsel to remove from

the record so as not to appear any comments that I made regarding the doctor's casual practice and any deaths that resulted therefrom. Would you agree to that?

MR. JACKSON: Well, no, I don't agree to that because I don't know where are you leading with this thing. If you stipulate you are not going to make this doctor a defendant in this action, sure, I will go along with that.

MR, ZUCKER: Where I'm coming from is I just would prefer that it didn't appear in the record.

MR. JACKSON: I'm sure you would. I understand. You tell me you are not going to bring him into this case and you guys can work that out. I don't care if it's in there or not. Are you willing to say that?

MR. ZUCKER: No.

MR. JACKSON: Well, you should be.

MR. ZUCKER: Unless they're willing to say that they will settle with me tomorrow for --

MR. JACKSON: That's between you

and them.

THE WITNESS: Are we done?

MR. ZUCKER: You're done.

ARTHUR VAN DYKE, M.D.

C E R T I F I C A T E

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

I, Colleen M. Malone, a Notary Public within and for the State of Ohio, authorized to administer oaths and to take and certify depositions, do hereby certify that the above-named ARTHUR VAN DYKE, M.D., was by me, before the giving of his deposition, first duly sworn to testify the truth, the whole truth, and nothing but the truth; that the deposition as above-set forth was reduced to writing by me by means of stenotypy, and was later transcribed into typewriting under my direction; that this is a true record of the testimony given by the witness, and was subscribed by said witness in my presence; that said deposition was taken at the aforementioned time, date and place, pursuant to notice or stipulations of counsel; that I am not a relative or employee or attorney of any of the parties, or a relative or employee of such attorney or financially interested in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office, at Cleveland, Ohio, this ____ day of _____, A.D. 19 __.

_____
Colleen M. Malone, Notary Public, State of Ohio
650 Engineers Building, Cleveland, Ohio 44114
My commission expires August 4, 1997

W I T N E S S I N D E X

LAWYER'S NOTES

PAGE	LINE	