IN THE CIRCUIT COURT OF BROOKE COUNTY, WEST VIRGINIA

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JEFFREY STEVEN KONNOVITCH and KAREN SUE KONNOVITCH, individually and as parents and natural guardians of JEFFREY TYLER KONNOVITCH, JR., a minor,

Plaintiffs,

vs. Civil Action No. 96-C-6-R

WEIRTON MEDICAL CENTER, a West Virginia corporation, ROGELIO S. MUPAS, M.D., MICHAEL CROSS, a nurse anesthetist, NARONG CHINAKARN, M.D., and MUPAS-CHINAKARN ASSOCIATES, a professional association,

Defendants.

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Deposition of JOHN J. KANE, M.D.

Thursday, May 15, 1997

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The deposition of JOHN J. KANE, M.D., called for examination by the Plaintiffs, taken pursuant to Notice and the West Virginia Rules of Civil Procedure pertaining to the taking of depositions, taken before me, the undersigned, Jamie J. Fagen, Certified Court Reporter-Notary Public in and for the State of West Virginia, held at Magee Women's Hospital Womancare Associates, Suite 2-C, 1300 Oxford Drive, Bethel Park, Pennsylvania 15102, commencing at 4:00 o'clock p.m., on the day and date above set forth.

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APPEARANCES:

On Behalf of the Plaintiffs:

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On Behalf of Defendants Weirton Medical Center and Michael Cross:

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Jacobson, Maynard, Tuschman & Kalur
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Morgantown, West Virginia 26505

On Behalf of Defendants Rogelio S. Mupas, M.D., Narong Chinakarn, M.D., and Mupas-Chinakarn Associates:

RICHARD STUHR, ATTORNEY-AT-LAW (via telephone)
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PROCEEDINGS

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(4:00 o'clock p.m.)

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JOHN J. KANE, M.D.,

called for examination by the Plaintiffs, having been first duly sworn, as hereinafter certified, was deposed and said as follows:

EXAMINATION

BY MR. COHEN:

Q Will you state your name, please?

A John J. Kane.

Q Dr. Kane, you reviewed records in the case of Konnovitch versus Weirton Medical Center, et al.?

A I did.

Q You have provided expert opinions for the defense?

A I did.

Q Doctor, do you have a copy of the fetal monitor strip in front of you?

MR. COLUMBO: These are yours here (handing).

MR. STUHR: Nick, is that you asking questions?

MR. COLUMBO: It's Harry.

MR. STUHR: Harry, could you speak up just a little?

MR. COHEN: Sure. I will try.
A Okay. I do.
Q Would you look at --
MR. COHEN: Can you hear me?
MR. STUHR: I can hear you now.
MR. COHEN: You can?
MR. STUHR: Yes.
BY MR. COHEN:
Q Would you look at strip 55695?
A On 9-22; correct?
Q Yes, sir.
A Okay, I've got it.
Q All right.
Looking at the strips before and after that -- and I just used that number to reference you around the time of 6:50 p.m. on September 22nd -- do you see fetal bradycardia?
A No -- 55695?
Q Or the strips before or after it.
A After, yes.
Q When do you see fetal bradycardia starting?
A 55701.
Q Would you, with a pencil -- is this a copy that we can mark, that you have in front of you --
A Sure.

Q -- or is that Mr. Columbo's records?
A These are the ones he gave to me.
MR. COLUMBO: Right.
BY MR. COHEN:
Q Can you put a pencil mark where you see it?
A (Indicating.)
Q You have circled it.
Can I see what you have circled?
A (Indicating.)
Q What is it about what you have circled that leads you to believe that that was the start of fetal bradycardia?
A Well, it's the first place where I can clearly tell on the fetal monitor record that the fetal heart rate would qualify as being bradycardic.
Q Let me see it.
(Brief pause.)
MR. COLUMBO: Go back a page (indicating).
BY MR. COHEN:
Q Your circle is actually on 55700?
MR. COLUMBO: I think that's the beginning of 701.
BY MR. COHEN:
Q Is that the beginning of 701?
A Yes.

Q Okay.
Is there any evidence of fetal bradycardia on 55699?
A No. There is, really, nothing that's definitely fetal heart rate on that. If you take a look at 55698, just in front of that, there is some heart rate, but I'm not sure if that's maternal or fetal. If it would be fetal, it would be bradycardic, yes, but I don't think you can tell what that is.
Q How about 55700?
A The same thing. This (indicating) is a lot of electrical interference here, presumably electrical anomaly on the basis of fetal movement. It is not a good contact between the external electrode and the fetal head, so you have got all of this artifact (indicating), and it is really hard to tell -- it is impossible to say with any degree of accuracy that there is anything in there.
Q All right.
Now, 55698, you said that you could barely see a a heartbeat of any kind, you didn't know whether it was maternal or fetal?
A 98, the portion that I have --
Q Is that all of it?
A Yes, I think that's probably all of 98 there. It looks like a minute. Yes, that is right.
Q The only heartbeat we see is right above 60; isn't

that right?
A Right.
Q What is the fetal heartbeat at 55697?
A It's not recorded.
Q What is the fetal heart rate at 55696?
MR. COLUMBO: Just look off of mine (indicating).
A Again, it's not recorded. There is nothing in that block.
Q What is the --
A Excuse me, Mr. Cohen.
Are you referring to this one block where the blocks -- you are including all three blocks?
Q No.
55696.
A Okay.
I think that really includes three blocks, looking at it now. I was doing the same thing you were. Do you see what I mean? 95 is three blocks, 96 is three blocks. Do you see what I mean? It's really three minutes. I think 96 goes from here to here (indicating).
Q Right.
Looking at 96, what is the fetal heart rate?
A The fetal heart rate in 96 is about 80 with a depth of just under 60.

Q What is it in 95?
A There is a baseline of about 145 with a deceleration to 80 which continues into the next block.
Q What is it at 94?
A At 94 it's a baseline of 140. There is a recovering deceleration at the beginning of the first block of 94.
Q How far did it drop down?
A The deceleration occurs in 55693. There is no way to really tell how far the depth is.
Q How long did it stay low?
A Again, it is not possible to tell. Probably --
MR. COLUMBO: Don't guess at it.
A Well, you have three centimeters per minute -- two-thirds of a minute. Forty-five seconds.
Q Where are you looking at the forty-five seconds?
A If you take a look at 55693, where the deceleration begins, at the beginning of that block and each centimeter being -- this is three centimeters or a minute, instead of one centimeter. So you have a three-centimeter block. You have some heart rate that descends to 120 in the block just under 55693, then you have got what looks like an acceleration of the heart rate, where it goes up to about 170 in the next block.
Q You are at 593?
A This here up to here (indicating).

See, I think we are confused, because I'm considering this (indicating) to be three blocks.
Q Go ahead.
What do you see at 93?
A What I'm saying here is: If we begin here (indicating), we have got a baseline heart rate of about 140, we have got what looks like the heart rate going up here (indicating), accelerating to about 160, 170 -- it is hard to read upside down -- you have got another thing up here around 2:10, which may be part of the heartbeat, then from here you have got another deceleration that brings it down to here. Whether it went lower in here, there's no way to tell because there is nothing recorded.
Q Can you tell whether the line that you are looking at that goes up to 170 is the fetal heartbeat?
A Well, it would be very unlikely that it would be anything other than that, because the maternal heart rate is nothing like this at this point, it is under 100.
Q You don't know how low the heartbeat goes?
A No. It is not recorded.
Q Is this a late deceleration?
A There is no way to tell what kind of a deceleration it was. It's, probably, not a late deceleration, though, if you take a look at, again -- it is better if I show you this way (indicating). On 55693, we have the

deceleration, a deceleration beginning here (indicating), and it looks like it begins with the beginning of the contraction. There is some depth to it. There is recovery, there is good recovery, with an acceleration heart rate going up here, so I would say that one is, probably, an early deceleration.
This one, it is impossible to tell what kind it is because you don't even know where it begins, all you are catching is the end of it, the return.
Q Would it be fair to say that this strip isn't clear enough to tell us whether it would be non-reassuring or reassuring?
MR. COLUMBO: Based on this one panel?
MR. COHEN: That is right.
A No, at that particular point in time there is no way to tell.
Q Is there anything about strip 95 and 96 which would tell us that it is reassuring or non-reassuring?
A No.
Q Is there anything about strip 97 or 98 -- I am talking about 55697 or 55698 -- that would tell us whether we have a reassuring or non-reassuring fetal heartbeat?
A I think the 98 here, looking at it, because the panels aren't contiguous, they overrun pages -- I think it begins to be non-reassuring, definitely, in 55698 because

I think that has to be fetal heart rate which they are recording at 60 at that point, 55698, second block, 1900.
Q All right.
Moving backwards, look at panels 55690 and 55691.
Are these late decelerations?
A No.
I think these are head compressions, decelerations from head compression. The patient is sitting up for this epidural anesthetic, the deceleration has the uniform wave form. It begins early in the contraction and comes back after the contraction. I think these are probably decelerations from head compression.
Q Is this a reassuring pattern to you?
A No.
It is neither reassuring or non-reassuring. Head compression is frequently seen, but I would classify it as neither.
Q When you see a head compression, is that cause for alarm?
A No.
That's, again, thought to be a normal physiologic process, that as the baby's head comes down the birth canal and pressure is put on the head and it squeezes, it produces a vagal response, which is a response whereby the tenth cranial nerve from the head slows the heart rate in

response to head compression.
Q Why wouldn't these strips be reassuring?
A Well, because for a a strip to be reassuring, I would consider that to be a tracing without any decelerations, whatsoever, that lasted over a minute. I think any tracing that has a deceleration lasting longer than a minute, no matter what the type, is cause for observation.
Q For that reason, it is not reassuring to you?
A Right.
Q On panels 55688 and 55689, is there enough information on these panels to have a reassuring or non-reassuring reading?
A No.
Q On panels 55686 and 55687, is there enough information for there to be a reassuring or non-reassuring reading?
A I would consider that to be reassuring, through those panels, through those six minutes.
Q Do you see any decelerations there, any subtle decelerations?
A Yes. There is a mild variable deceleration here at the very, very end of what I have on my page of 55687, right here (indicating).
Q Does that appear before or after the contraction?

A There is no way to tell because there are no contractions recorded, but it wouldn't matter.
Q Well, if it was a late deceleration; wouldn't it matter?
A Well, no. If I am saying it is a variable deceleration, I can't be saying it is a late at the same time.
What I'm saying is that a variable deceleration has a variable wave form and a variable time of onset during the contraction, so a variable deceleration can occur late in the contraction. All decelerations that occur late in a contraction I would not consider a late deceleration.
Q You would consider them a variable deceleration with a late component?
A Not necessarily.
I think that you can have pure variable decelerations and that would be a good example of one, if that did occur late in the contraction. You can have pure variable decelerations occurring late. By variable deceleration, I mean one that is variable in wave form, they don't all look the same, although they tend to have a V-shape pattern, but they are also variable in onset, sometimes they occur in the middle of the contraction, sometimes they occur at the end of the contraction.
Q For there to be a reassuring sign, don't you have to

see where these decelerations occur in relation to contractions?
A No, because on this -- and we are talking about these panels right here; correct?
Q I guess my question is this: For a completely reassuring sign, you want to see the fetal heart rate in relation to contractions; isn't that a fair statement?
A Not necessarily.
I think that if you have a fetal monitor tracing that looks perfectly normal without any significant decelerations, it doesn't matter whether there are contractions present or not. That's how we can read fetal monitor tracings on people who are not in labor. When you look at non-stress tests as you have seen in this case, these are, generally, tests done on people who may not have any contractions at all. You can still say that there are decelerations present there, tachycardia, bradycardia, a reassuring or non-reassuring tracing. The presence of contractions is not necessary.
Q You don't see any reason to monitor a woman's contractions?
A No, I didn't say that at all.
I think you get a lot of important information from monitoring the contractions, but I think if the contractions are not present and the tracing looks

perfectly normal, you don't need to see the contraction.
Q Why do you monitor the contractions at all, if you can tell reassuring strips without contractions?
A Well, there is a lot of reasons to monitor the contractions. First, the reason is to see if somebody is in labor; that would be the first reason. The second reason would be to see how long they last. The third reason would be to see how frequently they are. Without going into a lot of others, another reason would be to see if, in the presence of contractions, how they relate to the decelerations, but if you have no significant decelerations, there is no real reason to monitor the contractions.
Q On panels 55685 and 55684, do you have enough information to have a reassuring or non-reassuring pattern?
A That looks reassuring to me.
Q You don't see any decelerations in that pattern?
A Well, I think that there are decelerations, but I'm saying that I think decelerations are a normal process of labor. If you look at the literature, people having babies have well over ninety-eight percent incidence of decelerations in the second stage of labor alone, so the vast majority of women have decelerations in labor. The presence of decelerations does not mean that the tracing

is non-reassuring.
Q Just so I understand your position here, the first time that you see a reassuring pattern is at what panel?
MR. COLUMBO: Wait a minute.
A A reassuring?
Q That is right, a reassuring panel.
MR. COLUMBO: You want to go back to the beginning?
MR. COHEN: No. With respect to the panels that we have discussed.
MR. COLUMBO: Let me object to the form of the question.
MR. COHEN: Why?
MR. COLUMBO: When you say the first time he sees a reassuring pattern, you are saying from -- what? You have gone, obviously, backwards.
MR. COHEN: The earliest reassuring pattern that he sees.
A The earliest?
MR. COLUMBO: From the end?
MR. COHEN: From the panels that we have discussed.
A The earliest panel that you named -- and I forget. I think it is 55683.
MR. COLUMBO: Let me place an objection to

the form of the question on because I think it can be construed as confusing.
BY MR. COHEN:
Q Would you agree with me, just to clear up your position here, that on panel 55683, which you say is a reassuring panel -- is that right?
A Yes.
Q How long can you monitor the fetal heart rate?
MR. COLUMBO: In what sense?
MR. COHEN: In 55683.
BY MR. COHEN:
Q The reason I am asking is because it appears as though on 55681 and 55682 you can't read what the fetal heart rate is.
You would agree with that; wouldn't you?
MR. COLUMBO: Well, wait a minute.
THE DEPONENT: Let me try to do the first question.
MR. COLUMBO: Yes.
A On 55683 there is continuous monitoring for 75 seconds from the beginning of what I see here -- I'm sorry. Not 75. 80 seconds.
MR. COLUMBO: Are you going back, though, to the --
THE DEPONENT: I'm going forward towards --

well, no, I am not.
MR. COLUMBO: Let's make sure you get the entire panel.
THE DEPONENT: All right.
A I'm not looking at the whole panel.
There is a previous panel here. Do you see what I mean? Look, Mr. Cohen (indicating). Here is what I was talking about. Now, turning a page, I see that there is more to it, there is this (indicating). Okay? Is that what you meant when you were asking?
Q Yes.
A Okay. I didn't see that because that was on the back page.
MR. COLUMBO: Let's go over the question again to make sure he is clear.
A This is what you meant and I didn't see that.
Q Your answer is that in between 55682 and 55683 you see the beginning of a reassuring pattern; is that correct?
A No.
I'm changing my answer because I didn't see what was on the previous page here, and that's this deceleration (indicating).
Q All right.
A That was not in what I was looking at.

Q All right.
A I would say this is something which, again, would be a deceleration lasting a minute, which is, as I said previously, to me, cause for concern and cause for further investigation.
Q All right.
A I would look at the length of it, which looks to be about 60 seconds, maybe 65 seconds, I would look at the depth of it. The deceleration goes from, oh, what looks like --
MR. COLUMBO: Turn it around so you can see it, Doctor.
THE DEPONENT: Yes. That's probably better than reading it upside down.
A The deceleration appears to drop from about 150 down to 100, and then to return. Now, at the bottom of the deceleration, at the top of it, there is variability in it, it's not a flat line down there, so that's a good sign and then I would watch the way the response is. As it comes back to baseline, there is not a loss of variability and there is no rebound tachycardia, the baby does not begin a tachycardia. While I would not call this reassuring, I wouldn't be worried about this (indicating).
MR. COLUMBO: And by that, you are referring to 55683?

THE DEPONENT: 55683, right.
BY MR. COHEN:
Q Now, is there some point after that that you get a reassuring pattern?
A Again, I think that I would look at the pattern as a whole, the tracing as a whole, and I would say that it is reassuring up to the point that we talked about earlier, where the patient has what I think are head compressions from early decelerations.
Q At what panel?
A 55690 and 91, where the head compressions are.
Q You think that panels 55683 to 55690 are reassuring?
A Well, with what can be read in there, yes.
Q Well, that's why I asked the question.
Can you read enough to tell whether or not it is reassuring or non-reassuring?
A Yes.
Q You can?
A Yes.
Q There is enough information on these pages to tell you that it is reassuring?
A Well, again, I'm looking at the whole context of the tracing. I don't think that it would be accurate to separate one panel out and say this is reassuring or non-reassuring. It is whether the whole tracing, the

pattern of the recent tracing, is reassuring or non-reassuring. I mean, to look at ten seconds of a tracing is not a valid way to examine it.
Q Well, how many seconds do you have to look at a pattern to tell whether it is reassuring or non-reassuring?
A Well, I think it depends on the circumstances, it depends upon what you see, but, generally, you try to judge the tracings as a whole or over a long period of time.
Q Well, the deceleration that you looked at just after 55682 gave you cause for suspicion, I think were your words.
MR. COLUMBO: Let me object. I don't think those were his words.
A It gave me cause for concern.
Q Okay.
At what panel is that concern alleviated?
A Partially by 55682 and 55683.
The things that I think look good about this are the fact that there is variability in the bottom of the tracing and the way the deceleration recovers. When this deceleration ends, there is not a tachycardia or a loss of variability that would indicate hypoxia.
Q The same deceleration that is giving you cause for

concern, then, is also alleviating that concern?
A That, and the period afterwards, sure.
Q What is it about the period afterwards that alleviates any concern you had by a deceleration --
A I'm sorry. I apologize if I'm not making myself clear.
In looking at a deceleration, you have to look at a number of things: the wave form, the time of onset, the depth of the deceleration, the amplitude, the length, and what happens after the deceleration, also the degree of variability during the deceleration. Putting all of those factors together, I would not be concerned about this, after seeing --
Q So now you are not concerned?
A No, it is not a question of "now." It is a question of semantics here.
What I'm saying is to look at an isolated panel with a deceleration that would last a minute would concern anyone. What you have to do is look at that and the tracing afterwards, the rest of the tracing. Now, what I'm saying is the way the baby, the fetus, recovers from that deceleration is reassuring and the way it responds during it.
Q After that deceleration that you initially told me gave you cause for concern --

MR. COLUMBO: At 55682?
MR. COHEN: Yes.
A As I have said before, any deceleration lasting a minute would give me cause for concern and cause to study it.
Q After panel 55683, the mother's contractions are not recorded?
A That's correct.
Q Despite that --
MR. COLUMBO: Wait a minute.
BY MR. COHEN:
Q Are not recorded until -- when?
A Oh, I'm sorry. I thought you meant that specific panel.
Q No.
When is the first time that contractions are recorded?
A Again, 55689.
Q 55689, okay.
Despite that, you believe that --
MR. COLUMBO: For purposes of the record, it says that she was off of the epidural --
MR. COHEN: I understand that.
MR. COLUMBO: -- at 55684.
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BY MR. COHEN:
Q What does that mean; "off for epidural"?
MR. COLUMBO: I think they're hand holding.
MR. COHEN: I am asking Dr. Kane.
MR. COLUMBO: Oh, I'm sorry. I thought you were asking me.
A I don't know what they mean.
I think we would have to ask the nurse, Denise, what she means by that.
Q Well, if you are telling us that this panel was reassuring and yet we see that somebody's off for epidural and you don't know what that means, how does that fall into your opinion that this was reassuring?
A Because I don't need to know what it means to say this is reassuring. There is enough evidence here to say that. This much of it that we are looking at (indicating), 55682, with the recovering 55683 and the period you are asking me about, 55683 to 55685, I would call that reassuring, there is enough there to judge.
Now, the only thing that would make a difference would be if -- well, that wouldn't make a difference. There is plenty there to judge. There is nothing here that would be of concern. There is nothing here -- I mean, how do you define a reassuring tracing? I would define a reassuring tracing as one that lacks the

characteristics of a non-reassuring tracing, and those are well-defined.
Q Say that again. You would define --
A A reassuring tracing is one which lacks the characteristics of a non-reassuring tracing, and those are well-defined.
What they're saying here is that they're holding the fetal monitor on by hand and it is recording.
Now, I don't know what "off for epidural" means, but what you see here is absolutely reassuring. There is no --
Q In the absence of defined patterns of fetal distress, you assume that the fetus is fine?
A No.
MR. COLUMBO: I would object to the form of the question.
BY MR. COHEN:
Q Well, you told us that in the absence of non-reassuring signs, you assume that the strip is reassuring. Did I accurately state your position here?
A Yes.
MR. COLUMBO: Why don't you let him state his position as opposed to you doing it?
THE DEPONENT: Well, I think that was it.
A I would define this as reassuring because of the

absence of non-reassuring signs.
Now, your subsequent question was in the absence of patterns of fetal distress, and non-reassuring fetal monitor tracings are not the same as fetal distress, they're very different.
Q Can I see your copy? You circled -- let me see.
What was the first thing I asked you to circle?
MR. DITTMAR: The bradycardia.
THE DEPONENT: Right, the bradycardia.
MR. DITTMAR: 701. 55701.
BY MR. COHEN:
Q Now, I want you to circle the strip previous to the bradycardia where the strip is reassuring.
A Okay.
MR. STUHR: What bradycardia are we referring to, what pattern?
THE DEPONENT: What occurs at 55700.
MR. STUHR: Okay.
MR. COLUMBO: It is really at the end of 00, the beginning of 01.
MR. STUHR: All right.
MR. COLUMBO: The question is circle --
MR. STUHR: We are going backwards?
MR. COLUMBO: Right.
MR. COHEN: Going backwards, where the strip

is reassuring.
BY MR. COHEN:
Q I am not referring to a panel where you can't tell whether it is reassuring or non-reassuring.
Where do you first see, working backwards, a reassuring panel?
A 55688.
Q 55688, as I understand it, doesn't have enough information to tell you whether it is reassuring or non-reassuring. Is that right?
A I thought you were asking me for the retrograde beginning.
Q Okay. I am.
A I'm saying if you start there and go backwards into 55687, that's where the reassuring pattern begins.
Q Where you are starting, just so I understand this, is between 55687 and 55688; is that right?
MR. COLUMBO: No.
A See, again, I'm calling 55688 three separate panels.
Q Well, circle what you are calling --
A The beginning of it?
Q Yes.
MR. COLUMBO: No. That would be the end of it.
MR. COHEN: Well, actually, if we go from the

earliest to --
A The retrograde beginning?
Q Yes.
A All right.
I did it.
Q Just to make this clear, that would be the end of a reassuring panel; is that right?
A That's correct.
Q That's what you have circled.
Why don't you put your initials where you circled that, just so we are clear?
A (Deponent complies.)
Q What time is that?
A 6:28.
MR. STUHR: Are you referring to the first panel of 55688?
MR. COLUMBO: Yes.
THE DEPONENT: Correct, 6:28 p.m.
MR. COLUMBO: Are you hearing all of this okay?
MR. STUHR: Yes.
BY MR. COHEN:
Q Between 5:00 -- I'm sorry.
From 6:28 --
A 55 -- give me the whole number,

Mr. Cohen.
MR. COLUMBO: 55688.
THE DEPONENT: Oh, "88."
A I thought you said "28."
Q From the time --
A 6:28.
Q Working towards delivery, when is the next time that you see a panel that is reassuring?
MR. STUHR: Going forward from 55688?
MR. COLUMBO: Yes, towards delivery.
THE DEPONENT: Forward in time, okay.
BY MR. COHEN:
Q Again, I am not referring to panels that are neither non-reassuring nor assuring.
A Okay.
Well, 55692, the second panel -- I guess it is the third panel of that, we have two minutes and twenty seconds of a reassuring tracing.
MR. COLUMBO: Do you want him to continue?
MR. COHEN: Yes.
A The last time that the tracing looks reassuring would be in 55693.
I'm going to circle that point (indicating).
Q What you are using as a basis for the reassuring fetal monitor pattern is the markings between 55692 and

55693; is that right?
A That's correct.
There is just about two minutes and -- now that I marked it, I can't tell -- twenty to two minutes and thirty seconds of reassuring tracing there.
Q Just so we are clear here, the markings at 55693 to 55694, are non-reassuring, or you don't know?
MR. COLUMBO: Let me object because the question has been asked and answered. He said you can't tell one way or the other.
Go ahead and answer the question.
THE DEPONENT: Okay.
A Well, there is no tracing here to judge, so I don't think you can tell one way or the other up until 55698, the third panel.
Q Dr. Mupas, in his deposition, told us that he walked into the patient's room at 6:50, exchanged pleasantries with the family, and left the room without looking at the fetal monitor strip.
In your opinion, is that a deviation from the standard of care inasmuch as Dr. Mupas hadn't seen this patient for hours?
MR. COLUMBO: Let me object to the form of the question.
Are you assuming in that question that Dr. Mupas was

aware of problems with the fetal monitoring strip or was he not aware of any problems with the fetal monitoring strip, or either way?
MR. COHEN: Either way.
BY MR. COHEN:
Q If there is a difference, you can explain the difference.
A Okay.
Could you repeat the question?
Q In Dr. Mupas' deposition, he said that he came into the patient room at 6:50, exchanged pleasantries with the family, left the room, and didn't review the fetal monitor strip.
Inasmuch as Dr. Mupas hadn't seen this patient for hours, would you consider that a deviation from the standard of care?
A I think it would be hard to say. It would depend upon what his intention was. If he intended to come back and reassess the patient, you know, shortly, then that would be something that would be consistent with the standard of care.
I'm not sure if he just poked his head in the room to say hello and went and changed his clothes and intended to come back. I don't know, but I think, obviously, at some point shortly after he arrived at the hospital he

should have examined the patient and talked to the nurses, talked to the patient and examined the monitor strip.

Q I'm not sure what your answer is.

A Well, my answer is that it would depend upon what his intention was. If he, simply, popped his head in to say, "Hello, I'm here," and intended to get into his scrub suit to deliver the baby and come back, examine and the patient and the tracing, then that was acceptable, but I don't know what his intention was at that point in time.

That's not an adequate examination of the patient, no.

Q An adequate examination of the patient would include reading the fetal monitor strip; wouldn't it?

A And examining the patient, yes.

Q Do you agree that continuous late decelerations are an ominous sign?

A Yes.

Q Do you agree that where continuous late decelerations are subtle, that can, also, be an ominous sign?

MR. COLUMBO: Let me object to the form of the question.

I guess it would depend on your definition of what "continuous" is.

MR. COHEN: Well, Dr. Kane seemed to know

when I asked him the last time.

MR. COLUMBO: Well, I think that question was objectionable, too, and I should have objected.

I think it depends on who is defining "continuous." Is "continuous" one every hour? Is "continuous" one every three to five hours?

BY MR. COHEN:

Q When I am using the term "continuous," I am meaning late decelerations that occur with most contractions.

A That's the same definition that I'm using. That's the ACOG definition; a late deceleration that occurs with most of the contractions.

Q All right.

A I'm sorry. I lost the question.

Q Would you agree that where late decelerations are continuous, even where they are subtle, that that is an ominous sign?

A Well, I would say that it can be, but it's not necessarily an ominous sign.

Q Would you agree that there are circumstances where subtle late decelerations can be even more ominous than pronounced late decelerations?

A No.

I can explain, if you want.

Q Go ahead.

A Because of the mechanism of late decelerations, I think that what happens with late decelerations that are subtle and where the amplitude isn't large -- and by that, I mean they don't drop a great deal -- is a reflex of slowing of the heart that occurs, because of decreased oxygen tension in the blood. I think that when you have deep late decelerations which are larger, the mechanism is different. They are occurring because of a direct effect on myocardial contractility, a direct effect on the heart muscle. A deep late deceleration means that the heart muscle is hypoxic, whereas a subtle late deceleration works by an entirely different mechanism.

There are chemoreceptors in the blood called chemoreceptors and pressure receptors called baroreceptors, and they will reflexively slow the heart depending upon the concentration of oxygen in the blood, and those produce subtle or smaller late decelerations. The deeper late decelerations usually reflect a change in myocardial contractility on the basis of myocardial oxygenation.

Q Are you familiar with medical literature which says that subtle decelerations can be more ominous than deep decelerations?

A No.

Q Is this the first time that you have heard that

notion; from me today?

A Yes.

Q Okay.

MR. COHEN: Let's take a break.

MR. COLUMBO: We are going to take two seconds here, Rich.

MR. STUHR: Okay.

(Brief break.)

MR. COLUMBO: Rich, are you there?

MR. STUHR: Yes.

BY MR. COHEN:

Q Dr. Kane, I am looking at the legal pleading called "Identification of Expert Witness By Defendant Weirton Medical Center," where it says that their lawyers expect that you are going to testify that the placental abruption was the cause of the injuries sustained by Jeffrey Konnovitch.

Is that your opinion?

A Yes.

Q How did the placental abruption cause Jeffrey Konnovitch's injuries?

A Well, placental abruption is a separation of the placenta from the wall of the uterus. Essentially, what happens is the placenta is the source of the fetus' nourishment and oxygenation, and when the abruption occurs

there is a loss of nourishment and oxygenation and there, also, is the release of a number of chemicals into the circulation which are damaging. Obviously, this creates a hypoxic event, so that there is a drop in the fetus' oxygen tension within the blood. There are chemicals, tissue thronboplastins and a whole series of vasoactive compounds -- and by that, I mean compounds that affect the circulation -- that are released into the blood that are damaging, and as a result of this damage, the baby goes into shock, which is a circulatory collapse, the blood pressure drops, the heart stops, and oxygenation of the fetus ceases.

Q When did this process begin?

A It's difficult to pinpoint it exactly, but I think that it probably occurs sometime after the second epidural, during the time the epidural anesthesia is being given, sometime after that. There is really nothing in this tracing that would concern me up until that time. It's after that -- let me just take a look at my notes to see if I can give you a time.

THE REPORTER: Excuse me.

MR. COHEN: Sure.

MR. COLUMBO: We are going to take a second break here. We need a charge.

(Brief break.)

BY MR. COHEN:

Q Okay.

A I think that the question was when was the first evidence that the abruption was beginning. Correct?

Q No.

A Okay.

Q I asked you when the process where the brain injury occurred began, and I thought you said that you were looking through the strip after the epidural and you didn't see any evidence of it.

MR. COLUMBO: You are saying the actual brain injury?

MR. COHEN: Yes.

BY MR. COHEN:

Q Do you know when the brain injury occurred?

A No.

Q Would you defer to a pediatric neurologist for such an opinion?

A Well, it would depend on the neurologist, yes.

Q As an obstetrician, that would be beyond your area of expertise; wouldn't it?

A Yes.

Q You mentioned something about the abruption occurring after the epidural was given. Didn't you say that?

MR. DITTMAR: After the second.

BY MR. COHEN:

Q After the second epidural was given. Did you say that?

A Well, I think it's hard to tell when it actually began, but the first time you begin to see evidence that something has happened is after the second epidural.

MR. DITTMAR: Did he circle something and what was it?

THE DEPONENT: I'm sorry?

BY MR. COHEN:

Q You circled something about when you believed the abruption began, I thought.

MR. COLUMBO: You are talking about in a prospective manner now, obviously, looking back?

A Well, in a prospective manner, I don't think that you could say that until what I have circled here, 5700.

Retrospectively, looking back on this, there is a note in the nurses' notes at 6:52 that the fetal heart rate is 80. If you read the nurses' depositions and -- I hope I pronounce his name right -- Mr. Konnovitch's -- is that your client's name?

Q Konnovitch, yes.

A If you read those and Mr. Konnovitch's deposition, I think they kind of describe the same thing, that after the

second epidural, at about this point in time, they lost the fetal heart tones, the nurse left the room to get the doctor.

Q That's at 6:52 p.m.?

A Well, right around in there. It's hard to tell exactly when. The first nurse's note I can see that the heart tones are down is 6:52.

Q What else is it at 6:52? It's Mr. Konnovitch's testimony, the nurse's --

A Well, he doesn't --

MR. COLUMBO: Wait, wait.

THE DEPONENT: I'm sorry.

BY MR. COHEN:

Q The nurse's note that the heart rate is down?

A Yes.

Q Anything else?

A Well, again, it's hard to pinpoint the time.

What I am saying is sometime after the second epidural, and this is retrospectively, going back and looking at it.

If you take a look at Denise Schreiner's deposition, I think that she says something to the effect that after the second epidural occurred -- I don't have it in my notes, so I could be wrong. Let me look at her deposition.

MR. COLUMBO: What are you looking for?
A I thought that in her deposition she was asked about the events that occurred after the epidural. Do you remember that?
Q No.
A Okay. Well, then I'm mistaken. You would know better than I.
Q You believe that the abruption process occurred one minute after Dr. Mupas left the room, the first time he was there? Is that your testimony?
A No.
Q You say 6:52. He came in the room at 6:50, he was there for about a minute, and you believe one minute after he leaves the room the abruption process starts; is that your testimony?
A No.
What I said is that I think sometime after the second epidural is when the abruption occurred.
Q You mentioned 6:52; right?
A Right.
What I'm saying is is that's the first time I see evidence on the chart that something is going wrong, and that is from the nurses' notes.
Q Do you think that it's a complete coincidence that one minute after Dr. Mupas leaves the room that you will

opine that the abruption starts?
A I'm not saying with a degree of certainty that that is when it occurred.
I'm saying that is the first time you see evidence of it, but --
MR. COLUMBO: I will also state that he told you at least four times that there is no way he can tell precisely when it started.
A I don't think I understand your question.
Q Could the abruption have started at 6:49 p.m.?
A Sure.
Q Could it have started at 6:00 o'clock?
A Yes.
Q Could it have started at 5:00 o'clock?
A Yes.
Q Could it have started at 4:00 o'clock?
A Yes.
Q Could it have started the previous day?
A Well, I think that it's possible, but I think that that is unlikely.
Certainly, people do have small retroplacental bleeds that occur all throughout pregnancy and the bleeding sometimes stops and the bleeding gets reabsorbed -- these are small abruptions -- but I think once the patient is into the process of labor and you have got

contractions. It's really impossible for the bleeding to stop. Once the patient is in labor, which I think occurs sometime after 3:12, the abruption has to have begun sometime after that.
Q If the placenta is becoming separated from the uterine wall, would that not affect the flow of blood to the fetus?
A Yes.
Q If the flow of blood to the fetus is affected, might that not be reflected in fetal monitor strips?
A It might be, but it would have to be a very large amount of blood flow affected. As I say, there are people who have small abruptions frequently throughout pregnancy, there are people who have chronic abruptions that last for weeks. It has to be a very large abruption to produce hypoxia.
Q Fifty percent?
A Big enough.
Q Fifty percent would be big enough to be reflected in abnormal fetal heart tracings; wouldn't it?
A Well, it's hard to say, because fetal heart monitoring is, simply, not that reliable that anyone in the world would say that if you have 49, 50, or 51 percent, you will see some abnormality on the fetal monitor tracing. No one has, to my knowledge, even

attempted to make that correlation.
Q You are not discounting the effectiveness of fetal heart monitoring? You think it is a good thing; correct?
A Absolutely.
Q You think that it can detect problems with the fetus and the placenta; isn't that right?
A Yes.
Q You think that the intervention of cesarean section can prevent brain damage?
A No.
Q You don't believe that?
A In the face of -- what?
Q Well, had a cesarean section been done here, I mean, to the extent that the abruption occurred at 6:52 p.m. --
MR. COLUMBO: Wait a minute. Wait a minute.
You are asking him to assume that it did?
MR. COHEN: No.
A I'm not saying that it did. If that's the way you understood my answer, then I expressed myself poorly.
What I said is: In retrospect, looking back through the chart, that's the first time that I see signs that there is something wrong, at 6:52, so I'm saying that may have been when it occurred. It may have occurred earlier, it may have occurred later. It is really hard to pinpoint when it started.

Q Do you see the problems at 6:52 reflected on the fetal heart monitor?
A Okay, 6:52 --
MR. COLUMBO: Off the record.
(Discussion off the record.)
A On the fetal heart monitor at 6:52 there is no tracing, whatsoever. There is a note -- "fetal heart tones down, Dr. Mupas here" -- but there is no fetal heartbeat recorded, whatsoever, at that particular time on the fetal monitor tracing.
. The nurses were listening -- and that's an auditory count.
Q Do you intend to testify at trial that C-section intervention could not have avoided brain damage in this case?
MR. COLUMBO: I am going to object to the form of the question.
At what time, for what reason? Is it possible? I think the question is very vague, so I object to the form of the question.
BY MR. COHEN:
Q Do you intend to testify on that subject at trial?
MR. COLUMBO: On what subject?
MR. COHEN: The subject that a C-section intervention could not have avoided brain damage.

MR. COLUMBO: At what time?
MR. COHEN: At any time.
MR. COLUMBO: At any time, okay.
A If asked, yes, I will.
Q You will?
A If asked.
Q What is your opinion about that?
A Well, again, I think that, certainly, it could have, that it depends upon what time you are talking about. If you did a C-section a week before, sure, you have completely circumvented abruption, the baby should have done fine. If you did the C-section at noon, probably the baby would have been fine. So, yes, an intervention by C-section could probably have prevented this from happening.
Q What if you did the C-section at 5:00 o'clock?
A I think if you did the C-section at 5:00 o'clock --
MR. COLUMBO: Are we understanding that you are not asking him whether it was indicated?
MR. COHEN: I want to know what he is going to testify to at trial.
MR. COLUMBO: Well, that's fine, but you are asking him very vague questions.
MR. COHEN: He gave me a very vague answer as to what he is going to testify to at trial.

MR. COLUMBO: Well, what I anticipate asking him is whether, number one, the C-section was indicated any earlier than it was --
MR. COHEN: Well, we are going to talk about whether a C-section was indicated.
MR. COLUMBO: Okay.
I want to make sure the question is clear. You are not asking him about indications for a C-section, just whether or not a section would have been done at a particular point in time, whether it would have avoided brain damage?
MR. COHEN: Right.
MR. COLUMBO: Okay.
BY MR. COHEN:
Q Inasmuch as you don't know when brain damage began -- you really can't answer that question; can you?
A Well, no, I don't think that's true.
I think that the brain damage began sometime after the abruption. I think that the abruption caused the brain damage. The abruption did not occur --
Q I thought you told me that you couldn't tell us when the abruption occurred.
A I can't --
MR. COLUMBO: Wait.
Let me object. He has told you four or five times

that the abruption is what started the brain damage. Exactly when brain damage began, the minute, he can't tell you.
MR. COHEN: Okay.
A I can tell you, though, the year, I can tell you the month, I can tell you the week, I think I can tell you the day, which is 9-22.
Q Okay.
A It is not that I can't say when it occurred. I just can't pick the minute.
Q Do you believe that the brain damage occurred at the commencement of the abruption?
A No.
Q There is a process that goes on where, as the baby gets less and less nourishment, the brain damage first occurs and then intensifies; is that correct?
A That's correct, but it is not, simply, less oxygenation, as you are talking about. The shock component has a great deal to do with it, too.
Q Do you intend to testify about that at trial?
A If asked, yes.
MR. COHEN: Counsel --
MR. COLUMBO: About what?
MR. COHEN: About about how this witness believes that brain damage is caused by things other than

lack of oxygenation to the brain.

MR. COLUMBO: Yes, we may. We may want to inquire, in a general sense and from an obstetrical sense. I am, certainly, not going to ask him questions that would be better suited for a pediatric neurologist, but, obviously, depending on how the case is going and what the evidence has been up to that point, from his point of view, he may --

MR. COHEN: Wait a minute.

You, certainly, know all of the evidence that could come in through the plaintiffs' expert witnesses.

MR. COLUMBO: I understand.

What I'm saying is he is not going to testify about the minute brain damage occurred. Okay? That's not his testimony, that's not his expertise. He may, and I don't want to foreclose it, and that's why I want you to know that we may ask him just from his point of view about what goes into brain damage, is it just hypoxia or are there other factors, a general type question like that.

MR. COHEN: All right.

BY MR. COHEN:

Q Doctor, would you agree that that subject is within the province of a pediatric neurologist as opposed to an obstetrician?

A No.

I don't know if this is in the CV or not, but I have a great deal of experience and additional education in the treatment of critical care medicine in shock states, I am certified --

Q Other than testifying --

MR. COLUMBO: Wait a minute. Let him answer the question.

A I'm just trying to say this so you will understand where I'm coming from and this won't take too many more hours. I am just trying to explain what my point of view is.

Q Okay.

A A great deal of my education, expertise, and experience comes from education in critical care medicine. I have a great deal of experience in dealing with people who are very, very sick, in shock states from lack of oxygenation of the brain and other organs, from lack of oxygenation and all forms of shock states. I am certified and recertified by the American Heart Association in basic and advanced cardiac life support systems, which includes brain resuscitation. I have a great deal of experience in this area, and that's my point of view.

Q Where do you engage in the medical practice of brain resuscitation?

A At the present time I do not.

Q When is the last time you did?

A I would say not within the last two years.

Q When is the last time you engaged in the medical practice of brain resuscitation?

A Between two and three years ago.

Q Where?

A Magee Women's Hospital Intensive Care Unit.

Q How did you engage in the practice? What was your role in the medical practice of brain resuscitation versus that of pediatricians?

A By restoring circulation to the brain.

Q You would work on infants, newborns?

A This was an adult.

Q All right.

When was the last time you worked on pediatric brain resuscitation?

A I have the education and have passed the test but do not do that.

Q Have you ever done it?

A Yes, but not in recent years.

Q When is the last time that you engaged in the medical practice of pediatric brain resuscitation?

A In the 1970's, not since 1980.

Q Where?

A At Mercy Hospital.

Q In what capacity?

A In the neonatal intensive care unit and in the delivery room.

Q Isn't that the job of a pediatrician?

A It is the job of a neonatalologist, but if there is no neonatalogist available, then the most qualified person does that. As I said, I have the credentials to do that.

Q All right.

MR. COHEN: Can we take a break?

MR. COLUMBO: Yes.

(Brief break.)

BY MR. COHEN:

Q Doctor, I want to go over your background as an expert witness.

How many cases have you reviewed over the course of the past three years, medical malpractice cases?

A I would guess twelve to fifteen.

Q Over the past three years?

A Uh-huh.

MR. COLUMBO: You have to say "yes."

A Yes.

I'm sorry.

That's three or four a year; right?

Q Yes.

How many of those have been for the plaintiff?

MR. STUHR: Harry, can you speak up a little?
BY MR. COHEN:
Q How many of those have been on behalf of a patient?
A I would say about a third.
Q Have you testified on behalf of patients in any cases that have been filed in Allegheny County?
A Not that I can remember.
Q Geographically speaking, what is the closest to Allegheny County you have ever testified on behalf of a patient?
A Cambria County.
Q Who was the lawyer that you testified for?
A It was not a testimony. The case settled. It was an opinion. It was Regis McClelland from Harrington and Schweers, and the case settled, I did not go to testify.
Q What was the case about?
A It was a prolapsed cord that had occurred in a hospital in either Johnstown or Altoona with a physician who was unavailable.
Q What was the negligence in that case?
A The negligence in it was twofold on the part of the hospital, they caused the prolapsed cord by having the woman stand up. The woman presented with a breech presentation that was unengaged and ruptured membranes, cervix open, one of the nurses got her up to go to the

bathroom, which she shouldn't have done, the cord fell out, the cord prolapsed, the doctor was totally unavailable, and in spite of all sorts of efforts to reach him, they were unable to get ahold of him and had to find a substitute to come in.
Q What intervention, according to your opinion in that case, could have avoided injury?
A Not getting the woman out of bed, keeping her on bed rest.
Q Did the child suffer an asphyxial insult in that case?
A Yes.
Q Did the asphyxial insult cause brain damage or death?
A Yes.
Q Was it your opinion that an earlier C-section could have prevented that?
A Yes.
Q What year was that --
MR. COLUMBO: His involvement or the --
BY MR. COHEN:
Q -- that you wrote that opinion?
A Within the last three years, I would say.
That's what you are asking about; right?
Q Right.

In that case how would a cesarean section have avoided brain damage?
A When a prolapsed cord occurs, the umbilical cord falls through the cervix and as the baby comes down, it compresses the umbilical cord so that no blood flows through to the infant. The appropriate treatment would have been to prevent it from happening, but once it had occurred, the appropriate treatment is to hold the baby up off of the umbilical cord, so that it doesn't compress the umbilical cord by hand and then do a cesarean section and remove the baby before umbilical cord compression occurs.
Q Have you testified in other cases that an earlier cesarean section intervention would have avoided brain damage?
MR. COLUMBO: In the last three years?
MR. COHEN: Ever.
A The other case is a death, fetal death, and then there is another that's a maternal death.
You are talking about plaintiffs' cases?
Q That is right.
A In the fetal death, the baby was not -- everything was dead, it wasn't just brain dead, it was a complete fetal death.
Q You have talked about three cases.
Have you only testified in three cases for the

patient?
A No.
You had just asked about -- I thought you were talking about brain damage and death.
Q Yes.
A No, those aren't testimonies yet. Those are cases that I have written opinions on and will be testifying in soon.
Q Who are the lawyers in those cases?
A The maternal death is Talarico, and he is in Western Pennsylvania in a county north of here, maybe Mercer. Joe Talarico is his name.
The fetal death is Andrew Sissini, who is in Erie County. I also testified for Mr. Sissini's client, who was a plaintiff last -- well, I guess, two years ago in a case that was a postpartum neuropathy that had occurred to the mother after delivery.
Q What was Mr. Talarico's case about?
A Mr. Talarico's case is a maternal death. Essentially, a patient was admitted to a hospital --
Q I am not interested in that.
A Okay.
Q Have you told me now about all of the cases involving fetal death or brain damage where you have offered opinions on behalf of the patient?

MR. COLUMBO: In the last three years?

MR. COHEN: Ever.

A Ever?

Q Yes.

A Well, there have been others. Let me think about it.

(Brief pause.)

A Those, I would say, are the only ones that I can remember, but I think there have been a couple others, but not recently.

Q Why is it you have never testified or offered an opinion on behalf of a patient in Allegheny County?

A I have rarely been asked.

Q Is that the only reason?

A Yes.

I, certainly, would be willing to testify in Allegheny County. I mean, I am testifying in all of the counties around Allegheny.

Q What are your charges to serve as an expert witness?

A $250 an hour to review the case, $250 for the deposition, with a minimum of $500, and a minimum of $1,000, plus traveling time, to come to trial.

Q Can you characterize, generally, when an obstetrical nurse should move a patient, reposition a patient, or give a patient oxygen in response to a fetal monitor pattern?

MR. COLUMBO: Just generally?

MR. COHEN: Yes.

MR. COLUMBO: Well, let me just object to the form of the question because I think it's vague. If the Doctor can answer it, he can go ahead.

If you need more specificity, just ask Mr. Cohen.

A I think that's too hard to answer in general.

Q Well, would you agree that if an obstetrical nurse sees a non-reassuring fetal heart pattern, that she should at least reposition the patient?

A Yes.

Q If that doesn't work, should she, or he, give the patient oxygen?

A Yes, and IV fluids.

Q When, if there is a priority, should the obstetrical nurse call the obstetrician in response to a non-reassuring fetal heart pattern?

A Well, I think as soon as she recognizes it as a non-reassuring fetal heart pattern.

Q Concurrent with her repositioning the patient and giving IV fluids?

A Well, it would depend upon the circumstances.

If the doctor is in the next room, you know, or close by, immediately available, I think it would be perfectly appropriate to try to do intrauterine

resuscitation, which is what we are calling the things that you are doing -- repositioning the patient, IV fluids, oxygen -- without notifying the doctor. If the doctor is half an hour away, then I think he ought to be notified, you know, immediately upon the appearance of the pattern.

We have this happen all the time at Magee, where the nurse will call us and say, you know, "Mrs. Jones has a non-reassuring pattern, I would like you to come and look at it. I've repositioned her, I've given her IV fluids, I've got her on oxygen, and it hasn't changed."

Q I am not understanding the difference in the nursing obligation for situations where the obstetrician is in the hospital versus situations where the obstetrician is, say, a half-hour away.

A Well, a non-reassuring pattern does not correlate well with fetal distress. Non-reassuring pattern and fetal distress are two very different things. Once someone has a non-reassuring pattern, the baby may be perfectly fine, they may have a perfectly normal newborn, or you may have a newborn who has problems. The presence of a non-reassuring pattern is not evidence of fetal distress and doesn't correlate well with fetal distress, and, certainly, doesn't correlate well with neonatal brain injury.

The reason to notify at all is that a non-reassuring pattern can become an ominous pattern, if there is some underlying pathological process, so if the doctor is close by and can react to the ominous pattern, if the non-reassuring pattern doesn't resolve, there is no reason to let him know prior to doing the normal things that they do, because they usually work. The vast majority of times when people have non-reassuring patterns and you give them fluids and change their position, their non-reassuring pattern goes away, oxygen is rarely needed. Usually just fluids or changing the position.

Now, as I say, if the doctor is at home, thirty minutes away or so, you want to let him know that there is a reassuring (sic) pattern so he can come in and be ready in case it doesn't go away.

MR. DITTMAR: You said, "reassuring."

MR. COLUMBO: You said, "reassuring." You meant non-reassuring?

THE DEPONENT: Yes.

A You want to let him know that there was a non-reassuring pattern so he can come in and be available in case things go bad, things go sour, but if he is in the next room, he is prepared to react. If he is across the hall, in his office, close by, he is prepared to react.

Q You said that a non-reassuring pattern is not

evidence of fetal distress?
A Absolutely not. Yes.
Q What is evidence of fetal distress as reflected on a fetal heart monitor?
A There is no real clear-cut way to make a diagnosis of fetal distress on a fetal monitor.
Go ahead.
Q To the extent there is fetal distress, the only way to know that is through a fetal heart monitor; isn't that true?
A Absolutely not.
In the case that I had talked to you about before, the prolapsed cord, if you see the cord hanging out of the woman's body, do you need a fetal monitor to tell you it's in fetal distress? Obviously not.
There are plenty of ways to tell if there is distress without using a fetal monitor, plenty of conditions.
Q Tell me what they are.
A I mean, there's an infinite number. A gunshot wound to the pregnant uterus, a stab wound to the pregnant uterus.
Q A gunshot wound, a stab wound --
A I said there is an infinite number. If you want to know all of them, I can't list them all.

Q Excepting trauma and bleeding, can you tell me how else you can diagnose or suspect fetal distress?
MR. COLUMBO: Wait a minute.
I want to make sure the question is clear, because you had two questions. I don't think he is saying you can diagnose fetal distress by the heart monitor.
You asked him how else can you diagnose fetal distress aside from the heart monitor?
MR. COHEN: Yes.
MR. COLUMBO: He has already told you that you can't diagnose fetal distress with a heart monitor.
BY MR. COHEN:
Q Is that your testimony; you cannot diagnose fetal distress with a heart monitor?
A Fetal heart monitors are not reliable ways to determine fetal distress alone.
Q Well, those are two different statements.
Can you diagnose fetal distress with a fetal heart monitor?
A Only in combination with the whole clinical picture.
Q The fetal heart monitor plus -- what -- would enable you to diagnose fetal distress?
A The entire clinical picture.
You were asking for examples earlier and I gave it, then you excluded trauma and bleeding.

Q Right.
A Let's talk about some other things.
Conditions such as toxemia, when someone has eclampsia, preeclampsia, florid toxemia, an obviously dangerous, but relatively common obstetrical complication, which taking that clinical picture in conjunction with the fetal monitor --
Q Are there -- I'm sorry to interrupt you. Go ahead.
A That's good. You've got the idea.
Q I am trying to hurry this up here.
A Okay. Go ahead. So am I.
Q Okay.
Are there circumstances where there are fetal distress absent trauma, absent bleeding, absent maternal problems that can be diagnosed through the fetal monitor?
A Sure.
Q So you can --
A I'm sorry. Through the fetal monitor?
Q Yes.
A Could you repeat that question?
Q Absent trauma, absent bleeding, absent maternal problems, are there circumstances where you can diagnose fetal distress through a fetal heart monitor?
MR. COLUMBO: You are saying conclusively diagnose it, say, yes, that is an infant that has fetal

distress?
MR. COHEN: If he doesn't know what diagnose means, he can tell me.
MR. COLUMBO: I object to the form of the question.
If you can answer it, go ahead. If you can't, tell him.
A The question, as I understand it, is: Are there certain purely fetal conditions of distress which can be diagnosed by a fetal monitor --
Q Yes.
A -- without anything else?
Q Yes.
A There may be, but I can't think of any -- well, I can think of one.
Q Go ahead.
A I can think of more than one.
A third degree heart block which results in congestive heart failure.
Q In the mother?
A No.
In the fetus.
Q How is that diagnosed?
A You can diagnose that with a fetal monitor on the basis of the fact that you get a very low heart rate, you

attach it to the electrocardiogram and you see a third degree heart block.

Q If a physician sees continuous ominous fetal heart tones that are not resolved by conservative measures, is a cesarean section indicated?

A Yes.

Q Why?

A Because there may be fetal distress. Not every time when a cesarean section is done in the face of persistent late decelerations will there be a distressed fetus. That's why fetal distress doesn't correlate with non-reassuring patterns that frequently --

Q But because --

MR. COLUMBO: Wait a minute. Wait a minute.

A Frequently when you have got a non-reassuring pattern, the fetus is not in distress.

Q That's no reason to not perform a cesarean section?

A That's correct.

Q There are circumstances where performing a cesarean section prevents brain damage?

A Yes. They are rare, but they occur. The example I gave you, the prolapsed cord, is a good one.

Again, I think if this woman had had a C-section two weeks earlier, this baby would have done well.

Q What was the indication for a cesarean section in

this case?

A The indication for the cesarean section was that initially they lost the fetal heart tones and they had prolonged severe bradycardia, an ominous pattern.

Q You have reviewed the fetal monitor strip for Karen Konnovitch?

A Yes, I have.

Q Were any portions of it non-reassuring?

A Yes.

Q I would like you to begin at 12:00 o'clock and find the first portion that was non-reassuring.

MR. COLUMBO: Are we -- wait a minute.

MR. COHEN: 12:00 noon.

MR. COLUMBO: Why don't you ask him a different question which might shorten this up? You may want to ask him if the only non-reassuring part of the strip was what we identified previously.

BY MR. COHEN:

Q Is that your opinion?

A Yes. I don't think that it's fair to take a look at one minute of strip and say that's non-reassuring. I think you have to look at a larger picture.

The tracing becomes non-reassuring in that point that I circled at the beginning of this.

Q How long a strip must you look at to say it's

non-reassuring? If it has to be more than one minute, how long does it have to be?

A I would say a non-reassuring pattern that persists for three minutes and does not respond to conservative measures would be an indication.

Q Is it your opinion that there was no three-minute strip here which would be non-reassuring?

MR. COLUMBO: Until?

MR. COHEN: Until around 6:30 p.m.

MR. COLUMBO: Well, let's be a little bit more specific.

THE DEPONENT: Let me go back. Maybe I didn't understand the previous question.

Could you read the previous question? Is that possible?

MR. COHEN: Go ahead.

(Record read.)

A That's just the question; to call it non-reassuring?

Q Yes.

A Then the answer is what I gave you.

Q You have to see three minutes of the pattern to say it's non-reassuring?

A Well, it depends on the pattern, but I think on the whole that would be true. I think there is a sinusoidal pattern which you probably need to see longer than that

before you would call it reassuring.

Q How many minutes of a pattern do you need to see to say it's reassuring?

A Well, again, I define the reassuring pattern as a normal tracing, the absence of non-reassuring. I would say that three minutes of a tracing that is reassuring is reassuring for that period of time, but it can become non-reassuring later.

Q I don't understand.

Can you tell me how many minutes of a pattern you can look at to say this is a reassuring pattern?

A Only in the context of the whole tracing --

Q You need the whole tracing to say it's reassuring?

A -- and to say it's non-reassuring. These things all occur only in the context of the whole tracing.

I think with three minutes of a non-reassuring tracing, and then subsequently not responding, that would be indication that the tracing is non-reassuring, yes.

Q Now, is there any three-minute period of time where you see a non-reassuring pattern between, say, 12:00 noon and 6:00 o'clock p.m.?

A No.

Q Do you see any late decelerations between that time?

MR. COLUMBO: Between noon and 6:00?

MR. COHEN: Yes.

A I don't remember any. There may be an isolated late deceleration somewhere, but I don't remember it.
Q I am going to ask you just to -- we are going to go through this. I am going to ask you to tell me all of the late decelerations. You have already been through the strip, I presume?
A Yes.
Q You know that that is an issue in this case; don't you?
A Yes, from reading your cross-examination of Dr. Chinakarn.
Q Tell me all of the late decelerations that you have identified in this strip.
MR. STUHR: What was that last question?
MR. COLUMBO: He asked him if he was aware that the issue of late decelerations is an issue in this case, and the Doctor said yes, based upon his cross-examination of Dr. Chinakarn. Now he is asking him to identify all late decelerations between noon and 6:00 p.m.
Is that correct, Harry?
MR. COHEN: Right.
MR. STUHR: Okay.
BY MR. COHEN:
Q Maybe we can do it this way --

MR. COLUMBO: That's a long period of time, obviously.
Also, maybe just to shorten this up, even the plaintiffs' experts don't call anything late until after 3:10 p.m.
A Okay.
Q Will you turn to panel 68674?
A I've got it.
Q Do you see a late deceleration there?
A No.
Q How would you describe that pattern?
A A mild variable deceleration of no clinical significance.
Q Is there a late component?
A No.
Q 68675, do you see a late deceleration?
A No.
Q How would you characterize that pattern?
A Normal variability -- 68675?
Q Yes.
A Yes, normal variability.
Q 68676, do you see a late deceleration?
A No.
Normal variability.
Q When you say "normal variability," would that also

include a variable deceleration?
A No.
Q Panel 68678, do you see a variable or late deceleration?
A Variable deceleration.
MR. STUHR: What panel?
THE DEPONENT: 68678, variable deceleration.
BY MR. COHEN:
Q With a late component?
A No.
Q 68679, do you see a late deceleration?
A No.
Q Do you see a variable deceleration?
A No.
Q 68680, do you see a late deceleration?
A No.
Q Do you see a variable deceleration?
A No.
Q 68681, do you see a late deceleration?
A No.
Q Do you see a variable deceleration?
A No.
Q 68683, do you see a variable deceleration?
A Yes.
Q With a late component?

A No.
Q 68684, do you see a late deceleration?
A No.
Q Do you see a variable deceleration?
A It's impossible to tell what that is -- 68684?
Q Yes.
A There is no way to tell. I think there is a deceleration there, it's probably a variable deceleration, just looking at the wave form, but there is not enough -- you can't see the deceleration.
Q Is there enough to suspect a late deceleration?
A No.
Q Do you suspect a variable deceleration?
A Yes.
Q With a late component?
A No.
Q 68685, do you see a variable or late deceleration there?
A Yes. Variable deceleration.
Q With a late component?
A No.
Q 68686, do you see a late deceleration or a variable deceleration?
A No -- 68686?
Q Yes, sir.

A No.
MR. DITTMAR: Did he see a variable?
THE DEPONENT: No.
BY MR. COHEN:
Q Not variable and not late?
A No.
Q 68687, do you see a variable or late deceleration?
A No.
Q 68689, do you see a variable or late deceleration?
A No.
I see a changing baseline.
Q 68691, do you see a variable or a late deceleration?
A No.
Q 68692, do you see a variable or late deceleration?
A No.
Q 68695, do you see a variable or a late deceleration?
A 68695?
Q Yes.
A No.
Q 68712, do you see a variable or late deceleration?
MR. COLUMBO: What?
MR. COHEN: 68712.
A I see a variable before that.
Q Where?
A 68 --

MR. COLUMBO: Wait a minute. 712?
MR. COHEN: Yes.
A 68704.
MR. COLUMBO: That's what I am asking. You are saying "712." I think you are misstating the number, because I don't think there is a 712.
MR. DITTMAR: There is. 68712 (indicating).
BY MR. COHEN:
Q When you say 68704, what do you see?
A A variable deceleration.
Q Is there a late component?
A No.
MR. COLUMBO: 68712? The strip runs out at 706.
BY MR. COHEN:
Q 68712?
MR. COLUMBO: Where?
MR. COHEN: Do you have a 68712?
MR. DITTMAR: Yes.
THE DEPONENT: I've got a 68712.
MR. COLUMBO: All right. I am having a brain cramp here. I'm sorry. I am with you now.
A It's impossible to tell what happened here. I think maybe there was a variable deceleration because you have got a change in the baseline and then you have got some

fetal heart tones recording down here around 90, but the amount of time that it records is just a few seconds, so there may have been a variable there, but whatever it was came back very quickly to baseline.
MR. STUHR: You are talking about 68712 now?
THE DEPONENT: 68712.
BY MR. COHEN:
Q It may be a variable, it may be nothing?
A That's right.
Q Is there a late component?
A No.
Q 68713, do you see a variable or late deceleration?
A Yes.
Q What is it?
A A prolonged variable deceleration.
Q Is there a late component?
A No.
Q 68714 and 68715, do you see variable or late decelerations?
A A prolonged variable deceleration.
Q Is there a late component?
A Yes, I would say there is.
Q Is that a non-reassuring fetal heart pattern?
MR. COLUMBO: Wait a minute. Where?
MR. COHEN: 68714 and 68715.

A Yes.
Q Okay.
A For three minutes. What's reassuring about that is the same things that I mentioned in regard to that other deceleration we discussed earlier. It's a variable deceleration, you have got good variability all through the bottom of it, it's not a flat line down there, you have got good variability through the bottom. By the late component, I mean the slow return back to baseline. You have got a slower return back to baseline. What's reassuring about this is once it gets back to baseline, the variability returns, and it is not followed by a tachycardia, so while it is non-reassuring for three minutes, after that it becomes reassuring again.
Q Where does it become reassuring? I want you to circle where it becomes reassuring.
A It becomes reassuring as --
Q In fact, put an "X" where it becomes reassuring.
A I can't. It's the way I viewed the entire deceleration and the period of the tracing after the deceleration. Looking at the deceleration and the period after that would cause me not to be concerned about it.
Q When I first asked you the question you said it's non-reassuring --
A Correct.

Q -- and the same thing that you looked at and said is non-reassuring is reassuring?
A In the context of the tracing, yes. I'm sorry. I guess I'm not making myself clear.
What I'm trying to say is that looking at isolated areas of the tracing is not a valid way to look at it.
Q After this section of the strip that you say is reassuring and non-reassuring, when is the next time that you can read any tracing?
MR. COLUMBO: I am going to object.
Have we not gone over -- because we looked backwards initially.
MR. COHEN: We didn't go this far, though.
MR. COLUMBO: Yes, we did.
THE DEPONENT: I thought we did, too.
A Say it again.
Q When is the next time that you can even read this strip? You can't read it in 55681; right?
A 55682 -- 55683, the first panel.
Q That is reassuring?
A Yes.
Q Do you see a deceleration of any kind at 55682?
A Yes.
This is what we discussed before. This is an early deceleration from head compression.

Q It's an early deceleration?
A Right.
Q It is not a late deceleration?
A Right.
Q Is that right, it is not a late deceleration?
A Well, yes. It doesn't meet the criteria. Number one, it begins early in the contraction, not middle or late in the contraction. Number two, it has got good variability at the nadir of the contraction and when it returns to baseline you have got good variability without a tachycardia again.
Q It is not a variable deceleration with a late component?
A No.
It's head compression.
Q Did you characterize the patterns at 55690 and 55691 already?
A Again, I think this is head compression. The patient is sitting up, sitting on the baby's head --
MR. COLUMBO: Well, we just lost Rich.
MR. COHEN: You didn't pay your phone bill.
MR. COLUMBO: That might be.
THE DEPONENT: Do you want to call him back?
MR. COLUMBO: He will call back in a second.
(Brief break.)

BY MR. COHEN:
Q Doctor, will you turn to panel 68685?
A Okay.
Q 68685?
A I have it.
Q You saw in Dr. Chinakarn's deposition that he called that a late deceleration; didn't you?
A Yes.
Q Does that tell us that Dr. Chinakarn is incapable of reading the monitor strip?
A No, I don't think so.
I think that there, certainly, can be different opinions, but I wouldn't agree with him on this particular deceleration, no. I don't think the fact that we don't agree about a single deceleration means that either one of us is incapable of reading the whole strip.
Q Would you turn to 68714?
A I've got it.
Q Dr. Chinakarn called that a late deceleration.
Could reasonable minds differ about whether or not this is a late deceleration?
A Yes.
Q Could reasonable minds differ about whether 68685 is a late deceleration?
A That's the last one we looked at?

Q Yes.
A Yes.
Q Looking at the chart at 68715 and 14, Mary Jordan testified that this is the type of tracing which should have prompted the nurses at Weirton Medical Center to call an obstetrician.
Do you believe that testimony is wrong?
A Yes.
Q What does that tell you about Nurse Jordan's ability to read a fetal monitor strip?
A Simply that we have a difference of opinion.
Q Could reasonable minds differ about this?
MR. COLUMBO: About what?
MR. COHEN: About Nurse Jordan's opinion that strips 68714 and 68715 should have prompted the nurses at Weirton Medical Center to call an obstetrician.
BY MR. COHEN:
Q Could reasonable minds differ about the difference between your opinion and her opinion, or is she just flat out wrong?
MR. COLUMBO: Wait a minute.
Let me object to the form of the question inasmuch as -- are you saying that the standard of care required -- I don't know. I don't remember the quote out of the deposition, and I am not so sure that she said that the

standard of care required the nurses to contact the doctors.

Anyway, let me object to the form of the question. I am not sure I understand the question.

A Repeat the question, Harry. I'm sorry. I don't mean to keep having you repeat it.

Q Mary Jordan testified that strips 68714 and 68715 should have prompted the obstetrical nurses at Weirton Medical Center to discontinue pitocin -- this is a new question.

MR. COLUMBO: That is a new question.

BY MR. COHEN:

Q Strips 68714 and 68715 should have prompted the nurses at Weirton Medical Center to discontinue pitocin.

Do you disagree with that opinion?

A Yes. Just based upon those two panels, yes.

Q Now, could reasonable minds differ about how you interpret this panel, or is Nurse Jordan just flat out wrong?

MR. COLUMBO: Wait a minute.

Are you talking about interpreting the panel?

THE DEPONENT: Yes, that was the question.

MR. COHEN: Interpreting the appropriate response to the panel.

MR. COLUMBO: In relation to pitocin?

MR. COHEN: Yes.

A The question is: Could reasonable minds differ about the nursing response to this pattern?

Q That is right.

A Yes.

Q Why would it be reasonable to shut off pitocin in the wake of this pattern?

A Well, I don't think there is enough here that I would turn the pitocin off.

Q I know you wouldn't.

I am just asking: Why might reasonable minds shut off pitocin after a pattern like this?

A Because she has got two contractions here, one that runs right into the other, and the thought would be that because she has two contractions too close together, that that may have caused the variable deceleration, and by turning the pitocin off, you can return the tracing to normal.

(Brief pause.)

BY MR. COHEN:

Q Turn to panel 55690.

A That is backwards from where we are or forward?

MR. COLUMBO: Forward.

BY MR. COHEN:

Q Forward.

A Okay.

Q Nurse Mary Jordan said that this panel reflects fetal bradycardia with a deceleration.

You disagree with that interpretation?

A Yes.

Q Could reasonable minds differ about your interpretation and her interpretation?

A I don't think so.

Q So she is flat out wrong?

A Yes.

Q What does that tell us about her capability as an obstetrical nurse insofar as reading fetal monitors are concerned?

MR. COLUMBO: With regard to the strip?

MR. COHEN: Yes.

A I think it tells me that she is probably very capable, that she errs on the side of being safe at all times, that whenever she sees something that she is not sure of, she calls it something bad and would call a doctor. If she doesn't know about it, she takes no chances.

Q Can you imagine why she calls that fetal bradycardia with a deceleration?

A No.

Q You don't have a clue?

A No.

Q Yet you think that reflects good nursing skills, to call that something that you can't -- you don't even have an idea why she is labeling it that?

A Yes, because she's erring on the side of safety.

Q Well, if she is erring on the side of safety with absolutely no basis for it, doesn't that reflect incompetence?

A I don't think, no. I don't think she has no basis for it. I think anybody who looks at that sees that that is not the way the rest of the tracing looks. It's something that is different than what it was before, so what she's saying, I think, is that when she sees the heart rate going down for whatever reason, she calls it something and she thinks the doctor ought to be called.

Q Is that what you expect from your obstetrical nurses?

A Well, at the beginning. I think at the beginning we always want them to err on the side of safety and if they're not sure, think that it's something bad and give us a call right away, but after they have done this for a while, these things aren't that difficult to read. They can read them very well.

Q Who can read them very well?

A The nurses.

Q One of the nurses said that a late deceleration is one that begins after the contraction. Did you see that?
A Well, no, but I will believe you. I will assume that.
Q All right.
What does that tell us about that nurse's capacity to read fetal monitor strips?
MR. COLUMBO: Let me object to the form of the question in that there is very little, if any, foundation for him to base an opinion on the entire competency of a nurse based upon that hypothetical.
BY MR. COHEN:
Q If all you knew about the nurse was that in her opinion, a late deceleration was one that started after a contraction, what would be your opinion of that nurse's competency?
MR. COLUMBO: If any.
A I would want to know more. I couldn't be able to form an opinion based upon one statement like that.
Q Given that statement in her deposition, wouldn't it be dangerous to have an obstetrical nurse who held that opinion while watching your patients?
A If that was an opinion that she held and --
MR. STUHR: Well, note my objection, Harry.
At no time was Ms. Schreiner asked what she meant by

after the contraction. There is no testimony with respect to what she meant by that.
MR. COHEN: I am sure you are going to tell her what she meant.
MR. STUHR: We don't know what she meant by after the contraction.
BY MR. COHEN:
Q Well, assuming that she meant what my mother taught me about the English language --
MR. DITTMAR: Just go ahead.
MR. STUHR: Well, the English language is susceptible to many interpretations, and we don't know what Nurse Schreiner meant by that statement.
MR. DITTMAR: Okay. Your objection is noted. If the doctor can answer, let him answer.
A I need the question again, Harry.
Q Wouldn't it be dangerous to have an obstetrical nurse watching your patients who was of the opinion that a late deceleration was one that started after a contraction?
A I think it would depend upon her whole contextual understanding of labor, delivery, fetal monitoring and pregnancy. I couldn't say that it would be dangerous based upon one idea, no.
Q You wouldn't mind having a nurse watch your

patients -- I want to be clear about this.
It would be acceptable to you if you had a nurse watching your patients whose idea of a late deceleration was one that started after a contraction?
MR. COLUMBO: Let me object to the form of the question in that that's not what he just testified to.
MR. COHEN: Well, you have made your objection.
BY MR. COHEN:
Q Answer the question, please.
A I couldn't answer the question because what I'm saying is that I would need to know more about the nurse other than one fact before I could judge her competency.
Q If you only knew that fact alone and it was her responsibility -- strike that.
Isn't one of the responsibilities of obstetrical nurses to call you when there are continuous late decelerations?
A Yes.
Q If a nurse doesn't know what a late deceleration is, she is not going to call you when there is continuous late decelerations; isn't that right?
A Yes.
Q Wouldn't it be dangerous to have a such a nurse watching your patients?

A If a nurse does not know what late decelerations are, continuous, late decelerations, it might be dangerous or it might not, depending upon which side she erred. If she erred on the side of safety, like this other person we are talking about who calls whenever the heart rate goes down, it wouldn't be dangerous at all. If it is someone who is not going to call, then it would be dangerous.
There is really not enough information here to say whether that concept is valid, I don't think.
Q Are continuous variable decelerations with a late component non-reassuring patterns?
MR. STUHR: Objection.
Go ahead, Doctor.
Without further definition of what you mean by a variable deceleration, I object.
A I thought you said continuous late decelerations.
I'm sorry. Say it again.
Q Continuous variable decelerations with a late component, is that a non-reassuring pattern?
A Yes. It depends to some degree on the variable decelerations.
As you know, ACOG doesn't consider all variable decelerations significant. If it was a significant variable deceleration with a late component, then the answer would be yes.

Q Under what circumstances would continuous variable decelerations with a late component not be a non-reassuring pattern?
A If the variable decelerations are insignificant and quickly remedied and had an obvious explanation.
Q They would have to be remedied?
A And have an explanation.
I will give you a couple examples. Someone who has oligohydramnios, which is a decrease in the amniotic fluid, those people run into a lot of problems with cord compression because there is not a great deal of fluid to keep the baby off of the cord. They frequently show variable decelerations with late components. However, if you just turn them to the other side, the variable deceleration with the late component goes away.
Another approach would be amnio infusion. There are a variety of things that can be done to relieve the pattern.
Q Would it be a deviation from the standard of nursing care to do nothing to alleviate a pattern of continuous variable decelerations with a late component?
A Yes.
Q Would it be a deviation from the nursing standard of care to do nothing in response to continuous variable decelerations?

A No, because, as I said -- well, let me say this again. Variable decelerations are very common. The vast majority of people have them in labor. Not all variable decelerations are considered significant.
Q Where there is a non-reassuring pattern, pitocin is contraindicated; true or false?
A A persistent non-reassuring pattern, yes, but what you have isolated down here as non-reassuring patterns and had me answer that in one or two minutes this looks non-reassuring, pitocin is not contraindicated, no.
Q My question is this: Pitocin is contraindicated where there is a non-reassuring pattern?
A It depends on the circumstances.
Q Can there be a non-reassuring pattern, where pitocin is indicated?
A Yes. Again, the way you have questioned me about one and two-minute segments is not a valid way to look at the tracing.
Q As I understand it, you don't believe that a one or two-minute pattern is reassuring or non-reassuring, you can't tell from a one or two-minute pattern?
A That's correct.
Q All right.
My question has to do with non-reassuring patterns. Pitocin is contraindicated where there is a non-reassuring

pattern; true or false?
A A persistent non-reassuring pattern, true.
Q Pitocin intensifies contractions and can diminish further the flow of oxygen to the fetus; correct?
A It can, yes. It doesn't always.
Q That's why it's contraindicated for non-reassuring patterns; isn't it?
A Which are persistent, yes.
Q Epidurals are contraindicated for non-reassuring patterns; aren't they?
A I would say that would be a relative contraindication. Sometimes when you have a non-reassuring pattern based upon -- again, it goes to the -- from now on I am going to answer your questions to mean a non-reassuring pattern which is persistent, so I won't say this over and over again. All right?
Q All right.
A I am going to rephrase your question and if I'm wrong, you can ask it again.
Would an epidural be contraindicated with a non-reassuring pattern that was persistent and unremedial? Is that acceptable?
Q You can go ahead and answer that question.
A Yes.
Q The answer is "yes"?

A Yes.
Q All right.
If you had a non-reassuring pattern for a very short period of time and there was no subsequent reassuring pattern, wouldn't it be a deviation from the standard of care to administer an epidural?
A No.
Q Just so I understand, it's okay to have a two-minute non-reassuring pattern, see no reassuring pattern, and administer an epidural? That's okay?
A Again, it depends upon the circumstances.
There are other ways to judge fetal heart rate and to look at the fetus inside other than the fetal monitor tracing. All of the literature that the American College puts out, the American Academy of Pediatrics puts out says that it is equally acceptable to listen as it is to use this electronic fetal monitor. If you have got a non-reassuring pattern on the monitor and you listen and you see that the pattern goes away, it would be perfectly acceptable to do that.
Q Even though the pattern might continue to show something that is non-reassuring?
A No, because you have listened and you have ruled that out by auscultation.
Q All right.

Assume a situation where that hasn't been done.
A Someone has a non-reassuring pattern and that's it?
Q A brief non-reassuring pattern, an epidural is administered without there being a reassuring pattern.
MR. COLUMBO: How brief is "brief"?
MR. COHEN: A minute, one minute.
BY MR. COHEN:
Q There has been a one-minute non-reassuring pattern and no subsequent reassuring pattern --
A Again, as my previous answer was, I don't think you can say a pattern is non-reassuring in one minute.
Q You can have a suspicion with a panel with a period of time that is one minute; can't you?
A A suspicion?
Q Yes.
A I suppose, yes.
Q If the fetal monitor strip gave you reason to have a suspicion for one minute and there was no subsequent reassuring pattern and after that suspicion you gave an epidural, that would be a deviation from the standard of care; wouldn't it?
A You are presuming that no one has listened?
Q Yes.
A No one has checked the fetal heart tone in any way?
Q Yes.

MR. COLUMBO: All you have is a suspicion?
MR. COHEN: Yes.
A It's only one minute?
Q Yes.
A I don't think so, because I don't think one minute is long enough to, you know, make a decision on it.
Q I want to be clear on this.
You think it would be good medicine to have reason for suspicion, no subsequent reassuring pattern and still give an epidural?
MR. COLUMBO: I object to the form.
MR. STUHR: Note my objection.
When you say "no subsequent reassuring pattern," that's a nonsecular. Should he conclude that what you are saying is that the subsequent pattern is non-reassuring?
MR. COHEN: No.
MR. STUHR: Well, if it isn't reassuring, then what is it?
THE DEPONENT: Not there.
MR. COHEN: I think he is saying not there.
MR. COLUMBO: It can't be determined one way or the other.
MR. DITTMAR: Okay.
A Also, he is saying no one is listening; right?
Q That is right.

A The question is: Is it good medicine --
Q The question is this: Is it good medicine --
MR. STUHR: Well, note my objection as to what is good medicine, because that's not what is required.
MR. COLUMBO: I agree with the objection.
MR. COHEN: All right.
BY MR. COHEN:
Q You are telling us that it is good medicine to have a suspicion from looking at one minute of a fetal heart pattern and give an epidural without seeing a reassuring pattern?
A Well, it would depend upon what the non-reassuring pattern is.
In general, if you have someone who has a perfectly normal tracing for hours and hours and they have a one-minute deceleration, then that would not be a contraindication, that would be good medicine to do. However, if you have someone who appears like they're going into a sinusoidal pattern for a minute, no, then it wouldn't be. It would depend entirely upon what the pattern was and it would also depend upon the clinical circumstances.
Q I don't understand.
If you had a suspicion of a problem --

A Well, that's not what you said.
You said a suspicion of a non-reassuring pattern.
Q Well, let's use that.
If you have a suspicion of a non-reassuring pattern, why wouldn't it be good medicine to wait for a reassuring pattern before you give an epidural?
A Well, it would be. It would also be good -- I mean, you are saying the only good medicine is one thing?
Q No.
A There are many different approaches. There are many different ways to handle it. Someone can practice good medicine doing one thing and someone can practice good medicine doing something else.
MR. STUHR: Note my objection and move to strike any and all testimony regarding the administration of the epidural because there will be no expert testimony that the epidural was contraindicated.
MR. DITTMAR: It's okay. Just keep going.
BY MR. COHEN:
Q Just so I understand your position, it is not a deviation from the standard of care if the pattern shows reason for suspicion to give an epidural without waiting for a reassuring pattern?
A No, that's not my answer.
My answer is that you have to put the suspicion.

whatever that might be, in the context of the entire patient care, you know, the patient, any condition she might have, any complications she might have, any high risk factors she might have, and then the question is: What is the suspicion? If you are talking about a variable deceleration, the level of concern about that is much different from the level of concern about something like a sinusoidal pattern. I don't think that you can make that statement, whether it's good or bad, based on one minute of tracing.

Q Doctor, I want to clear up whether or not and to what extent you are going to give opinions about the timing of this injury.

Do you have an opinion as to when this baby's injury occurred?

A As I said, I can tell you the year, I can tell you the month, I can tell you the day, I can fix it within, I think, a period of time, but I can't give you the minute, I can't come down to ten minutes.

By "injury," you are talking about the abruption; is that correct?

Q I am talking about the brain injury.

A Well, I thought you meant the abruption.

MR. COLUMBO: He wants to know if you have an opinion as to when the brain injury occurred in this

child.

A As I said, I can pinpoint it to the day --

Q I have heard that.

I want to know whether you have an opinion --

A Well, yes, I do have an opinion.

My opinion is that it occurred on September 22nd, 1995 --

Q Can you be any more specific than that?

A -- and it occurred sometime after 5:00 p.m.

Q Can you be any more specific than that?

A I think most likely it occurred sometime after 6:00 p.m.

Q Can you be any more specific?

A Let me just answer what I mean by "occurred." A brain injury is not, particularly this type of brain injury, a sudden event, it doesn't happen in one second. It's something which evolves over time. It is something that would take several minutes to occur and then, given time, would worsen.

What I'm talking about, when the brain injury occurred -- and, maybe, I guess, I am asking for clarification. What I'm talking about is when I think the beginning of it occurs.

Q Right.

In your opinion, the beginning of brain injury

occurs sometime after 6:00 o'clock?

A That's correct.

Q Can you be any more specific than that?

A As I said, the first evidence that I see is at 6:52, so sometime between -- let me just take a second and look at this time line I put together.

(Brief pause.)

A No, I don't think that I can be more specific than that as to when the onset of it is.

Q Now, can you tell us when the abruption began?

A Sometime --

Q Do you have an opinion as to when the abruption began?

A Yes.

I think the abruption began sometime immediately -- is he off?

MR. COLUMBO: Are you there, Rich?

MR. STUHR: Yes, I'm here.

MR. COLUMBO: Is that you --

MR. STUHR: Yes.

MR. COLUMBO: -- making that noise?

MR. STUHR: Yes.

MR. COLUMBO: Okay.

MR. COHEN: What is it?

MR. STUHR: It's a speaker phone.

A The question is: Can I give an opinion as to when the abruption occurred?

Q Yes.

A Most likely sometime after 6:00 p.m. on September 22nd, 1995.

Q Have you ever advocated the reduction in patient rights with respect to medical negligence cases?

A No.

I have advocated the opposite.

Q In what forum?

A I have encouraged my son to go to law school and to become an attorney who will be someone who will be a plaintiffs' advocate.

Q Any other forum that you have advocated that, an increase in patient rights to sue doctors?

A No.

Q You have never advocated a reduction in patient rights to sue doctors?

A No.

MR. COLUMBO: Do you actually know somebody who has?

MR. COHEN: Pardon me?

MR. COLUMBO: Do you actually know people who have? I mean, I can't imagine that somebody would ever say yes.

MR. COHEN: Do you mean have I ever asked anybody who admitted this?

MR. COLUMBO: Well, I mean, just who does?

BY MR. COHEN:

Q Do you serve on any committees or societies having to do with medical malpractice insurance?

A No.

Q Do you have any role in any health maintenance organization?

A Yes.

Q What is that?

A I'm an adviser to Keystone Health Plan West of Blue Cross. I am an adviser to Best Health Care of Pennsylvania. I have been the medical director for obstetrics and gynecology for the HMO alliance which was purchased by Blue Cross.

Your question was -- could you repeat the question again because there may be more?

Q Tell me all of the societies or committees on which you serve relative to health maintenance organizations.

A Oh, I have had a great deal of activity related to health maintenance organizations.

I started the Magee Physicians Association and was the first president of the Magee Physicians Association because we were concerned about patient rights as health

maintenance organizations came into Western Pennsylvania. That was about -- it may be on that CV, but I'm going to guess that was eight or nine years ago. I have testified before the State Senate asking for expanded rates for patients from HMO organizations. I am chairman of the legislative committee of ACOG for Pennsylvania, trying to get legislation passed for expanded rates for patients who belong to HMO's. I am the chairman of the Board of the Magee PHO and I see my primary role as protecting patient rights in the face of managed care.

Q Have you lectured on attempts to reduce the incidence of C-sections?

A No.

Q Have you written any articles relative to efforts to reduce the incidence of C-sections?

A No.

Q Have you in any way participated in efforts to reduce the incidence of cesarean sections?

A You mean for me personally or for everyone?

Q In any respect.

A I can't think of any way, no.

Q Are you aware of health maintenance organizations' efforts to reduce the incidence of cesarean sections?

A Very much so. And they are very aware of my opinion on the subject.

Q What is your opinion on the subject?

A My opinion on the subject is that it has to be a medical decision, not an insurance decision, and that they have no right to try to intimidate people by doing this.

Q How have you made that opinion clear?

A In writing, in letters, in the paper that I wrote.

Q Do you have any of those writings here in the office?

A No.

Also, in going down to the meetings of these various organizations.

Q Where are these writings where you have advocated an expansion of women's rights to have cesarean sections?

A Well, it's not limited to that, but it would be all women's rights.

Q Well, that's what the questions are about.

What paper did you write relative to expanding rights of patients to have cesarean sections in response to this effort that you have identified of HMO's attempting to reduce incidents of cesarean sections?

A The paper is not a published paper. It was a paper that I wrote for the Magee Physicians Organization which has been circulated to Blue Cross, to U.S. Health Care, and to a wide variety of managed care organizations.

Q Well, we are taking this deposition in your office.

Can you get me a copy of it?

A No.

I don't have a copy of it. I wish I did.

Q Where could I get a copy of that?

A I don't know. I don't know that a copy of it exists.

MR. DITTMAR: Well, just stop right here because it's probably put on a computer somewhere and it's a printout, if it was done, so --

THE DEPONENT: No, it is not on any of my computers because I have subsequently looked for it because I have tried to get them to go back and look at what we agreed upon after I wrote that paper.

I have checked three of my hard drives and it's not on there. If anybody has it, it would be Tom Kerr, who is one of the vice presidents at Blue Cross.

BY MR. COHEN:

Q Okay.

A Can I expand on that answer because there is more?

Q Sure.

A There are more things that I have done in that regard. I might as well say them all.

Initially when managed care came into Western Pennsylvania, I thought that there was a significant attempt to reduce women's access to health care, and I

went on a virtual crusade to try to expand women's access to health care and to decrease insurance managed care organizations' interference in that. As I said, this involved Senate testimony, it involved negotiations with the large managed care organizations, it was really the expanded access for women, that Blue Cross now has in all of their managed care products is really based upon that paper that I'm telling you about that I gave to Tom Kerr and went down and met with him and subsequently that was expanded throughout all Blue Cross managed care products.

Currently there is an open access plan for women being offered by the Tri-State Health Care Network which has been picked up by Blue Cross and will also be offered by U.S. Health Care, and I am the author of that policy.

There is probably more. I have spent a lot of time on that.

Q You have offered opinions in which I have been the plaintiff's attorney. This is now the third time; is that right?

A I only remember one other.

Q Which case was that?

A The one that Terry Cavanaugh had, and I did a deposition in your office.

I don't remember any others.

Q You have kept a letter from you to me -- or, from me

to you dated June 18th, 1992, which you have produced today; correct?

A Yes.

Q Why did you keep this?

A I didn't keep it. My office manager kept it. I don't have any idea why. Usually these things are destroyed very quickly, but she has a letter file and it was in the letter file and she found it.

Q You don't have any idea why it was kept?

A No.

Q Okay.

A I didn't even know we had it. I had forgotten the whole --

Q Before the year 1992, have you testified for patients in medical negligence cases?

A Yes.

Q When was the first time you testified for a patient in a medical negligence case?

MR. COLUMBO: Prior to 1992?

MR. COHEN: Yes.

MR. COLUMBO: If you remember.

Do you want, actually, a date?

MR. COHEN: If he knows it.

A No.

Sometime in the mid 1980's.

Q In your letter to me, you wrote that there is no evidence that performing cesarean sections early or during labor in any way prevents the development of cerebral palsy.

A That's correct.

Q Is that your opinion?

A That's the opinion of ACOG and the technical bulletins.

What I meant by that is that there is no evidence that intervening in the face of abnormal fetal monitor tracings in any way prevents the development of cerebral palsy. In fact, there is considerable evidence to the contrary; that it does not prevent the development of cerebral palsy.

Q Well, why in the face of those tracings do you, as an obstetrician, perform cesarean sections?

A I have tried to make it clear -- and I'm sorry, because I guess I haven't -- that I don't, that I take a look at the entire picture, the entire clinical picture, everything that is going on, and make the decision based upon that.

It would be extremely rare for me to make a decision to do a cesarean section based strictly on a fetal monitor tracing.

Q I thought we were over this.

If you have a persistent bad pattern that doesn't resolve, don't you perform cesarean sections to prevent brain damage?

A No.

If you go back to the original literature on fetal monitors that Dr. Hahn published from Yale in the early seventies and trace it all the way up to the present day, the original purpose of the fetal monitor is not to prevent brain damage but to prevent fetal death. That's the primary indication to do these cesarean sections; to prevent fetal death.

There is no evidence that responding on the basis of a fetal monitor tracing alone in any way prevents cerebral palsy. In fact, there is considerable evidence to the contrary, that it does not prevent it.

Q Has the incidence of cerebral palsy remained consistent even with increased cesarean section intervention?

A It has remained the same in term infants, and gone up in premature infants.

Q Pardon me?

A It has remained unchanged in term infants, like this one, and it has increased in premature infants.

Q What study are you using to base that on that separates premature infants from term infants?

A The data on term infants is widely quoted, you can get it from anyone. By anyone, I mean, you can get it from the American Academy of Pediatrics, you can get it from ACOG, it appears in the ACOG technical bulletins.
Q The ACOG technical bulletins tells us -- what -- about the incidence of cerebral palsy in term infants as distinguished from premature infants?
A The ACOG technical bulletin -- it may not be in the bulletin. It may be in the standards or it may be in the Guidelines for Prenatal and Perinatal Care, but it's in one of those three publications. It publishes the data on term infants. The data on premature infants is from articles.
Q I am asking you about term infants now.
A Okay.
It is either in the ACOG technical bulletins, the two on fetal monitoring, electronic fetal monitoring, that had been published in 1989 and 1995, or it is in the Standards for OB/GYN Services, Seventh Edition is the latest, or it is in the Guidelines for Prenatal or Perinatal Care, which is a joint publication by the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics. You will find the same data, I think, in Perinatal Events and Brain Damage, which is an NIH publication in cooperation with the March

of Dimes and the National Academy of Strokes, a 1985 government publication.
Q Have we now covered all of the opinions that you intend to offer at trial?
A Well, the opinions that I intend to offer depend upon the questions that I'm asked. I don't have any idea what questions you will ask me, so --
Q Can I see your book, your notebook?
A (Handing.)
MR. COLUMBO: He will, obviously, be asked whether the nurses should have contacted the obstetricians any earlier than the obstetricians saw the patient, whether a C-section was indicated any earlier than it was performed, whether the nurses deviated from the standard of care in their interpretation or in their treatment at all of Mrs. Konnovitch. Obviously, those are the issues that he will be testifying about.
I don't know that you have specifically asked those questions. You, obviously, know that that is the area of his testimony. I would presume if asked, he will give testimony that the physicians involved complied with the appropriate standards of care.
BY MR. COHEN:
Q I can't read your handwriting.
Would you read what you have yellowed in your notes?

A Okay.
MR. COLUMBO: Just the yellow?
MR. COHEN: Yes.
A The first is from the deposition of Dr. Mupas, Page 45, "Dr. C" -- which means Dr. Chinakarn -- "saw patient at 12:30, Dr. M" -- which is Dr. Mupas -- "1850."
Next is Pages 50 to 54, and it was your question, "Is pitocin appropriate when there is fetal distress?"
58, this comes from page 58, "Non-reassuring does not mean fetus not receiving enough oxygen." That was Dr. Mupas's reply to your question.
Page 66 -- this is, I think, your question -- "Can you tell if there is insufficient oxygen to the fetus from the tracings?"
Page 101, "Call to Dr. Mupas at 6:00 p.m. Dr. Mupas notified."
Page 107, "If you were told of bradycardia and late decelerations at 5:53, would you have ordered an epidural?"
Answer, he would.
109, he would have watched her get the epidural.
110, not equipped for fetal scalp gases, September, 1995.
121, got to hospital around 6:50. 55696, "Dr. Mupas here." That's on the tracing.

Next is from Dr. Mupas' and Chinakarn's office records, "Smokes half a pack a day, thirty-one year old gravida I."
Q Why did you highlight "smokes half a pack a day"?
A Because that's a risk factor for abruption.
Q Did you see any other risk factors for abruption?
A Just that one.
Q Are patients who are at higher risk for abruption to be monitored any closer than patients who are not?
A The answer would be no, but she was monitored very, very closely, anyway. The answer is no, because abruptions are unpredictable and unpreventable events. You can have a perfectly normal fetal monitor tracing and five minutes later there is an abruption and fifteen minutes later the baby is dead or thirty minutes later the baby is dead.
Q You can run a stop sign --
MR. COLUMBO: Wait a minute.
MR. COHEN: Okay.
A Doing monitor tracings doesn't in any way prevent or detect that an abruption is going to occur or predict that an abruption is going to occur.
Q I thought we talked earlier about the fact that there are some abruptions that can and do show up on fetal heart monitors or at least that there is evidence of

problems such as abruptions.
A Well, yes. You are talking about once the abruption has occurred.
What I'm talking about is monitoring the patient throughout the pregnancy.
I'm sorry. I misunderstood your question. I thought you were talking about --
Q If a patient is at risk for an abruption, wouldn't you want to monitor that patient more closely so you can quickly perform a cesarean section if you can diagnose the abruption?
A More closely than this, no. You couldn't monitor it any more closely than this.
Q I know that you think that this was perfect monitoring.
I am speaking --
A I didn't say that.
Q I am speaking in general terms.
In general terms, if a patient is at risk for an abruption, how does that change at all the duties of the obstetrical team caring for the patient?
MR. STUHR: Note my objection, without further definition of what you mean by "at risk."
Are you talking about a smoker? Are we talking about somebody with a history of vaginal bleeding? I

think it makes a difference here in terms of what you mean by "at risk."
A I thought you meant someone who smokes half a pack a day.
Q All right.
Someone who has more risk factors than that. If somebody has more risk factors than just smoking --
A They have had three previous abruptions?
Q Whatever, whatever.
If somebody --
MR. COLUMBO: I don't think you can just say "whatever."
BY MR. COHEN:
Q If somebody is at high risk--
A For previous abruptions?
Q -- for an abruption, does that change the obligations of the obstetrical team to that patient?
MR. COLUMBO: Let me object.
MR. STUHR: Note my objection.
There will be no such facts in evidence in this case.
MR. COHEN: All right. We have got your objection. The Doctor understands the question.
MR. COLUMBO: Well, let me object, as well. I object to the form of the question in that I just don't

think that you can throw out just "at risk" and "whatever" and --
BY MR. COHEN:
Q Doctor, do you understand the question?
MR. COLUMBO: I object to the form of the question.
MR. COHEN: All right. You have made your objection.
A I think it would depend upon the circumstances, what makes her high risk. Someone who has had four fetal deaths from four fetal abruptions in the past you would monitor very differently than someone who smokes half a pack a day.
Q How would you monitor a patient who is at high risk for a fetal abruption --
MR. COLUMBO: I object to the form of the question.
BY MR. COHEN:
Q -- as compared with a patient who isn't?
MR. COLUMBO: Asked and answered. I object to the form of the question.
Go ahead and answer it, if you can.
MR. STUHR: Note my objection, as well.
MR. COHEN: We have got it.
A Well, again, it would depend upon how you would

define someone as high risk.
Q I understand that.
A I would define somebody --
Q Well, you have already done it -- or, I thought you did.
MR. COLUMBO: Well, then why are we asking the question?
MR. COHEN: Because I want to know how the monitoring changes.
A Okay. If I had someone who had four previous abruptions and was pregnant again, and, thus, at high risk to have another abruption, I would do an amniocentesis on her very early in the pregnancy, probably about thirty-six weeks, and depending upon when the other abruptions had occurred, if the baby was mature at thirty-six weeks, I would get her delivered a month early.
Q Would it change at all the method in which the patient would be monitored?
A No, because the monitoring is not reliable, as I said, on an abruption. You can have a perfectly normal monitor tracing and five minutes later the abruption occurs.
MR. COHEN: I am going to take a break.
MR. COLUMBO: Okay.
(Brief break.)

BY MR. COHEN:

Q What is your definition of bradycardia?

A Bradycardia is mild, moderate, and severe. Mild bradycardia is bradycardia between 100 and 120, moderate rate bradycardia is bradycardia between 80 and 100, and severe bradycardia is bradycardia under 80. Those are ACOG's definitions.

MR. COHEN: That's all of the questions I have.

MR. COLUMBO: I have one question. I just want to make sure it's clear.

- - -

EXAMINATION

BY MR. COLUMBO:

Q Doctor, can you diagnose or predict a placental abruption based upon the appearance of a fetal monitoring strip?

A No.

Q Okay.

MR. COLUMBO: That's all I have.

He will read.

MR. COHEN: That's it.

- - -

(Whereupon, at 6:50 o'clock p.m., the deposition concluded.)

C E R T I F I C A T E

Commonwealth of PENNSYLVANIA,)
) SS:
County of ALLEGHENY.)

I, Jamie J. Fagen, do hereby certify that before me, a Notary Public in and for the Commonwealth of Pennsylvania, personally appeared JOHN J. KANE, M.D., who then was, by me, first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the taking of his oral deposition in the cause aforesaid; that the testimony then given by him as above set forth was, by me, reduced to stenotypy in the presence of said witness, and afterwards transcribed by computer-assisted transcription.

I do further certify that this deposition was taken at the time and place in the foregoing caption specified, and was completed without adjournment.

I do further certify that I am not a relative, counsel or attorney of either party, or otherwise interested in the event of this action.

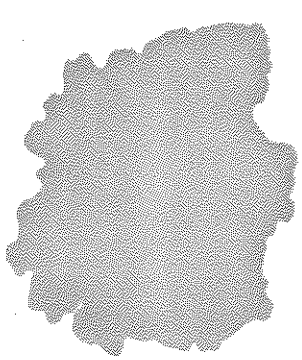
IN WITNESS WHEREOF, I have hereumto set my hand and affixed my seal of office at Pittsburgh, Pennsylvania, on this _____ day of May, 1997.

_____
Jamie J. Fagen, Notary Public
McCandless Township, Allegheny County
My Commission Expires September 20, 1999

Deposition of: JOHN J. KANE, M.D. (5/15/97)

CHANGES AND/OR CORRECTIONS

PAGE	LINE	CHANGE/ CORRECTION	REASON FOR CHANGE/CORRECTION



I, John J. Kane, M.D., do hereby certify that after having read the foregoing deposition, and having made all the desired corrections on the preceding page, if any, find this to be a true and accurate transcript of my deposition.

_____
John J. Kane, M.D.

_____
Date

_____
Notary Public

My Commission Expires:

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