IN THE COURT OF COMMON PLEAS

CUYAHOGA COUNTY, OHIO

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BIANCA KEYES, etc., et al.,

Plaintiffs,

-against-

Case No. 357504

JOHN P. IAFELICE, M.D., et al.,

Defendants.

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DEPOSITION of REBECCA BAERGEN, M.D., taken by Defendants via telephone, at New York Presbyterian Hospital, Weill Medical College of Cornell University, 525 East 68th Street, New York, New York 10021, on Wednesday, June 19, 2002, commencing at 1:10 o'clock p.m., before Karen Ann Carney, a Certified Shorthand (Stenotype) Reporter and Notary Public within and for the State of New York.

A P P E A R A N C E S:

(Via telephone.)
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R E B E C C A B A E R G E N, called as a witness, having been first duly sworn by Karen Ann Carney, a Notary Public of the State of New York, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BECKER:

Q Good afternoon, Doctor. Would you state your full name, please.

A Dr. Rebecca Nanette Baergen.

Q What is your business address?

A It is 525 East 68th Street, New York, New York 10021.

Q All right. When were you contacted regarding the Keyes case?

A In November 1999.

Q What materials did you review?

A I primarily reviewed the slides of the placenta and the pathology report, but also a discharge summary, the complaint, some expert reports, and I believe at least one deposition. Yes, one deposition.

Q Which? Who was the deponent?

A I'm going to spell it.

T-a-r-i-q-s-i-d-d-i-q-i.

Q Okay. I think that's the maternal-fetal defense expert down in Cincinnati.

Can you tell from the front cover of the depo, was it in Cincinnati?

A To tell you the truth, I don't have the deposition anymore. I looked at it and didn't really think -- usually depositions of other experts are not relevant, and I usually discourage people from sending them to me. So, I didn't keep it, I have to say, because I didn't think it was relevant. I don't have any notes or anything on it.

Q Did you ask for a copy of the complaint or was it just voluntarily sent to you?

A I didn't ask for it. I did not ask for it; so, I would assume that was their decision to send it to me.

Q All right. I have a copy of your vitae. I don't see a date on it to see how current it is. But did you happen to bring an extra copy of your vitae?

A I'm in my office so I have my CV, my most current copy on my computer, which I can

print out or whatever.

Q Okay. Well, my copy shows under Publications, 31, the last one looks like it was co-authored with Benirschke; it says in preparation, entitled, "Morbidity, mortality and placental pathology in excessively long umbilical cords."

My question, Doctor, is do you believe that's the last article that you have authored or co-authored?

A No.

(Telephone interruption due to static.)

A I don't know if you heard me.

I said "no."

Hello? Can you hear me? Can you hear me?

Q No.

A I said "no."

I guess you didn't -- couldn't hear.

Q Sorry. I did not hear that.

So, would you be so kind -- what I can gather from that answer is that there have

been other articles that have been authored by you; is that fair?

A Yes, that's true.

Q All right. Would you be so kind as to, before the court reporter leaves, run off a most recent copy and the court reporter can mark it as an exhibit. Is that fair enough?

A That's fine.

Q Are there any articles, whether recent or those appearing in the vitae I have in hand, that you feel are potentially relevant to your opinions in this case or the subject matter of this case?

A Not specifically relating to this case, no.

Q No?

A Not specifically relating to this case.

Q Do you have notes, Doctor, as a result of your review of the material, including the slides?

A Yes, I do.

Q All right. Are they typewritten or are they handwritten?

A They are typed.

Q All right. How many pages are the notes?

A Well, what I have is the notes of my review, which is really relating to my interpretation, and is really only a few lines. The pages of notes that that is on is about one and a half pages and basically has notes taken from records. And the rest of it is just kind of what I've received, what dates; the fact that, you know, I received such and such on such and such a date. So, it includes all that, as well as the few lines of my actual notes.

MR. BECKER: Okay. Can we mark that -- we'll mark the CV as 1; and we'll mark your notes as 2-A and 2-B.

Would you do that, Ms. Court Reporter?

THE WITNESS: You want the first page marked as one exhibit and the second page as another exhibit; is that correct?

MR. BECKER: Let's mark the CV

as No. 1, when she prints it out at the end of the depo for you, the current CV. Let's mark her notes, which are two pages, Page 1 being 2-A as in "apple," second page 2 being B as in "boy."

(Curriculum Vitae of Dr. Baergen was deemed marked as Plaintiffs' Exhibit No. 1 for identification, as of this date.)

(Two pages of typewritten notes of Dr. Baergen were marked as Plaintiffs' Exhibit Nos. 2A through 2B for identification, as of this date.)

A Okay. She marked them.

We're ready.

Hello?

(Telephone interruption due to static.)

A Hello? Hello?

Q Yes.

A I think we have a really, really bad connection. You keep not being able to hear us; so, if you don't hear anything, that's what is

going on.

Q Okay. What I'm doing is I'm cranking up the volume on my phone right now. I'm not sure that is going to help you at that end, but me at this end. But, whatever.

Are the two exhibits marked?

A Yes, they are.

Q Doctor, handing you what has been marked as Plaintiffs' Exhibit 2-A and 2-B, would you identify them for the record?

A (Perusing documents.) Yes. I just handed them to her and she marked them and she gave them back to me.

Q What are they?

A As I said before, these are notes that give dates that I received certain materials or dates where I entered that I have received these materials.

Q And you said there are only two lines which really reflect your true interpretation of the slides and/or material?

A Well, actually, I was in the middle of speaking.

I guess again we're having problems.

It has different dates of when I received or when I entered these things. It also has notes taken from the discharge summary and the pathology report, and then there are three, a little over three lines -- actually, three lines of my review of the slides.

Q I would just like to concentrate on those three lines that reflect your interpretation of the slides.

A That's fine.

Q Would you read them to me slowly?

A (Perusing document.) It's not going to go --

(Telephone interruption due to static.)

MS. PETRELLO: I'm not hearing anything.

Q Hello?

A We get this big static and then you can't hear us. That's the way I guess it's going to be.

(Perusing document.) The first phrase says "Many NRBCs."

Q Okay. That means nuclear red blood

cells?

A Yes, it does.

Q Okay.

A (Perusing document.) Then "Decidua capsularis-decidual vasculopathy involving several vessels."

Q What does that mean?

A The decidua capsularis is maternal tissue and it's a --

(Telephone interruption.)

A That's my phone. I'm sorry. It rings through. I can't do anything about it.

The decidua capsularis is a portion of the maternal tissue that comes away with the placenta that is in a certain location.

Decidual vasculopathy means there's abnormalities in those vessels, and I said "involving several vessels"; so, I saw these abnormalities in several of those vessels.

Q Okay. And when you say "several," first of all, what is the abnormality called and would you call this a mild, moderate or severe type of abnormality within the section of the tissue?

A The abnormality is called decidual vasculopathy, as I said, and it's not really normally rated as to mild, moderate or severe; so, I can't really do that.

Q What does that mean in lay terms, the vasculopathy?

A Basically the decidual vessels, these are maternal or the mother's vessels, and these vessels are converted into what is referred to as uteroplacental vessels. These are vessels that come from the uterus and go to the placenta.

So, this is the mother's blood that is going into the placenta and it supplies the placenta with blood. This is where the fetus gets all its nutrition, its fluid, oxygen, et cetera; and the waste is taken away through the maternal circulation, as well as through the uteroplacental veins.

So, these are the vessels that are supplying the placenta. If there is any problem with those vessels --

(Telephone interruption due to static.)

A If those vessels are not normal in

some way, then the circulation to the placenta is going to be compromised and that can or may result in decreased perfusion of the placenta, and then obviously decreased perfusion to the baby, and potentially decreased, you know, oxygen, and so on and so forth.

Q Okay. How are they compromised?

A How is what compromised?

Q How are these vessels that you are seeing the abnormality in, how are they compromised?

A Well, the vessels have thicker walls. There's damage to some of the vessels.

See, normally -- to explain this, I have to actually go back and talk about what is referred to as normal physiologic conversion.

What happens to the decidual vessels initially is cells from the embryo, which are called trophoblastic cells that are derived from the embryo, these cells actually invade the maternal vessels, the decidual vessels, and they destroy the wall of the vessel and deposit certain materials in the vessel and they change it from a small, little artery that has a muscular wall that

can constrict with a very small lumen or opening, and convert it to a very widely distended vessel that's like a rigid pipe that cannot constrict.

And the reason that this is needed is, as you can imagine, you know, you don't want a small vessel supplying the placenta; you want a lot of blood going to the placenta.

And the other thing is if something happens to the mother and her vessels constrict and her blood pressure goes up for some reason or whatever, you don't want that to affect the placenta; so, that's why the muscular coat is somewhat destroyed.

Now, this causes some specific histologic changes in the vessels. The vessel gets bigger, these trophoblastic cells are infiltrated into the wall, you get deposition of fibrinoid material and other things. Those are the main things.

Now, if that doesn't normally happen, then those vessels are not going to supply blood as well as they could if they were fully converted in a physiologic manner.

Now, decidual vasculopathy is a

general term that refers to --

(Telephone interruption due to static.)

A Hello? Hello? I can hear the sound and I know that you are not receiving me, so I stopped.

So, decidual vasculopathy is a general term that refers to basically any change that is not the normal physiologic conversion and what the vessel should normally look like.

Now, I can't tell you specifically in this case what each vessel showed because I didn't really make notes of that. But, generally speaking, I can tell you that I recall that the vessel walls were thicker than they should be; they weren't small, thin vessels; the vessels' lumens, the openings were smaller.

(Perusing document.) And further on in the note there was question, "acute atherosis," and this is a change whereby macrophages, a certain type of cell, a foamy macrophage with foamy cytoplasm is deposited in the endothelium of the vessel wall, and this is something that is kind of specific to abnormalities in these vessels

in the placenta.

Q Okay. I want to make sure that --

(Telephone interruption due to static.)

Q Doctor?

A Yes?

Q I want to make sure I understand.

Have we covered all the types of abnormalities that you see in the placenta?

A No.

Q The NRBCs, the decidual vasculopathy, and was there a third abnormality?

A Well, no. I mean, you asked me to go over each thing individually, and I was talking about the next finding of decidual vasculopathy.

Basically we're not talking about every abnormality I saw in the placenta. Specifically you wanted me to read my notes and to go over each thing.

Q You're right. And I apologize and I'm jumping around and I don't mean to do that.

Go ahead and finish reading your two or three lines. Then I'm going to ask you some questions.

A Okay. (Perusing document.) The next phrase or whatever, is "CHD," which is an abbreviation that I just used for chronic deciduitis, which means there is chronic inflammation in the decidua, and that is often associated with the previous change that I just mentioned, the decidual vasculopathy.

The next thing is question mark, "acute atherosis in one vessel."

And I just described that to you, because that's kind of part of the decidual vasculopathy.

Then the next is "Villi mature."

What this is referring to is that the chorionic villi, which are the basic unit of the placenta that you see under the microscope, that they are mature and this is a mature placenta and a mature baby, so that is consistent.

Then the next phrase says, "Foci of agglutination and microinfarcts consistent with ischemia, generally recent." And this whole phrase is basically saying these are some histologic changes that are indicative of ischemia, which means lack of blood flow, and

these changes are generally recent.

Q Can you time the changes?

A Well, the changes in the vessels have probably been going on for, you know, probably months, because usually this physiologic conversion and those kind of abnormalities happen very early in gestation and then -- actually, I think the latest that you get those kind of changes is really around 16 weeks or so. So, those actual changes really date way back.

The agglutinations and microinfarcts are relatively recent; you know, probably one to two days old.

Q What is the basis for that conclusion or that opinion?

A Well, when ischemic change occurs in the chorionic villi, one of the first things that happens is the villi just kind of glob on to each other. And that's what I'm referring to when I say agglutination. So, it's like they kind of get sticky. They don't show any degenerative change. And this is something that is seen really within the first 24 hours.

And if you follow that out,

ultimately you would see that that tissue would probably become infarcted and dead due to lack of blood flow. So, this is one of the earlier changes of ischemia.

The microinfarcts are really little areas -- "micro" meaning very small -- little areas that are actually starting to undergo actual infarct. So, those are a little bit older than the agglutination.

And just based on looking, generally looking at tissue and how long it takes tissue to undergo certain changes, that's how you can estimate how long it takes for an infarct to develop.

(Telephone interruption due to static.)

Q Okay. One to two days old and --

(Telephone interruption due to static.)

Q Have you finished your notes, Doctor?

A Yes; that's everything under my notes.

Q Okay. In lay terms, what are the abnormalities that you see in this placenta?

First would be the NRBCs?

A Well, yes, that's one.

Q Okay. Can you quantify the number of NRBCs?

A You can't really do that on a histologic section, but when I saw the nucleated red blood cells, I asked for the lab results on the baby after the baby was born, and that gives you an absolute number. So, I can't do that from looking at the section.

But I said many. In other words, you know, if there were just a few, I would say a few. If I thought there were moderate, I would say moderate. And this time I thought there were many.

You can't really -- I have heard of some people trying, but I don't believe you can reliably quantitate it on a tissue section.

Q Now, do you subscribe to Altshuler's writings on aging NRBCs?

A I don't know. You are going to have to be more specific about that. What specifically

are you referring to?

Q Let me ask you this: Are you able to age how long the NRBCs have been within circulation?

A Well, you know, the problem with nucleated red blood cells is that there's been a lot of papers written in the literature about the timing, how long it takes for them to appear, and the timing has been kind of all over the place; some studies I've looked at indicating that it, you know, just takes a matter of 30 minutes or something.

These studies have some design flaws, so they may or may not be true.

Other studies say that it takes longer.

People have given a lot of different opinions. So, I don't think you can reliably say absolutely that it takes a certain period of time.

Now, I'm of the opinion, and I think people would in general agree with this, that the higher the number, the more there are, the longer it has to be; because, you know, this is a response to hypoxia, usually, in the fetus, so

there's a response and the nucleated red blood cells are put out into circulation and it takes time for them to mount to a high level. So if you have just got a few, I mean, that's going to take less time than many.

You know, I feel that it is more than just a few minutes or an hour or two.

As I said, some people have the opinion it's 24 or 48 hours, and some people have the opinion it's only 30 minutes.

(Telephone interruption due to static.)

Q Where, Doctor, where do you feel -- are you able to give me an opinion within a reasonable degree of medical probability as to the age of the NRBCs given the numbers?

A Well, I think I just did to the best of my ability.

Q Did you say 24 to 48?

A No. That's what I said some people said. I explained it in the best way I know how.

Q Okay. I know -- and you're doing very good. But I'm trying to understand where you fall in this range here, some 30 minutes to 24 to

48 hours. How do you feel about it? Is it six hours, twelve hours, likely?

MR. MOSS: I'm just going to object. I think the doctor already answered the question, as she indicated.

Doctor, if you have anything else to add or clarify, feel free.

A I can just repeat what I said, which is that I think that the higher the number, the more time it takes, and that I don't think it is just a few minutes, like 30 minutes, and it could be as much as, you know, 24 hours.

Q Okay. It could be. Do you have an opinion in terms of probability as to whether it's at least 24 hours?

A I cannot give you a percentage or probability. I answered it really the best I could.

Q Fair enough.

So, we're kind of reviewing the abnormalities that you find in this placenta. We talked about NRBCs now.

Now let's move to the next one.

Just restate -- is it the decidual vasculopathy, is that the next abnormality?

A (Perusing document.) Yes. That's the next abnormality that is listed in my notes.

Q And can you age that at all and -- first of all, can you age it at all?

A Well, again, I already did that. I said the changes -- just like when I was talking about the agglutination and microinfarcts, I already aged those and I told you what I thought about the decidual vasculopathy, that this is a change that happens early in pregnancy; so, that's probably been there for many months.

Q Okay. Next abnormality? Is it the chronic deciduitis?

A (Perusing document.) Yes, that's the next one listed in my notes.

Q Okay. And can you age that?

(Telephone interruption due to static.)

A That's --

Q Can you age that, Doctor?

A I'm trying to. We're getting a lot of static.

The chronic deciduitis, I don't know, it's within a few days, probably. It's actually a finding that is just associated with other findings and I don't think particularly significant because it's a common finding in many placentas.

Q Okay. How about the acute atherosis?

A That, again, goes along with the decidual vasculopathy. It's part of that whole spectrum. It really falls under that.

Q Okay. The ischemic changes we talked about at the end. Is that the last abnormality?

A Yes. I already talked about the agglutination and the microinfarcts and gave timings on those.

(Telephone interruption due to static.)

Q The last abnormality is the ischemic changes?

A I'm sorry, again, we're getting static. I did answer, but I'll repeat it.

The agglutination and microinfarcts

are the last changes listed in my notes, and I did already comment about the timing on those.

Q Is that one to two days?

A Yes.

Q Okay. Now, are you going to be rendering any opinions as to whether or not any of these abnormalities had real clinical significance for this fetus?

A Well, first of all, I just want to say, I mean, there are some other abnormalities that aren't listed here. But if you want to just talk about these --

Q Well, I need to know about every abnormality you are going to be testifying to at trial.

A Well, you didn't ask me about every abnormality I saw; you asked me what was in my notes.

Q Okay. I'm not trying to argue with you, Doctor.

(Telephone interruption due to static.)

A I'm just --

Q What other abnormalities do you see?

A I'm just trying to answer the exact questions you ask. I'm not trying to be, you know, smart or anything.

(Telephone interruption due to static.)

A (Perusing document.) The other abnormalities that are present are increased vascularity in the villi, and hypercellularity.

Q Okay. Tell me what they mean and tell me if you can age them.

A Well, those are changes that, in this context, are consistent with maternal diabetes, and since maternal diabetes is a condition that is not something that occurs over a short period of time, it is likely that these changes are not recent, but are, you know, longer than a few days. But I can't be specific because no one that I know really concerns themselves with dating those.

Q Okay.

A That's the only other abnormalities that are not listed in my notes.

Q Doctor --

MR. MOSS: Doctor and Mike, I

don't mean to get in your way, but I wrote down one of the things that you mentioned in your notes was decidua capsularis, and I don't think we talked about that.

THE WITNESS: Well, that is just a location in the placenta.

MR. MOSS: As I said, I just was going back to my notes.

THE WITNESS: Right. Well, that was just to tell me where the vessels were that were abnormal.

MR. BECKER: Okay.

MR. MOSS: Sorry, Mike.

MR. BECKER: Okay.

BY MR. BECKER:

Q Doctor, I have your report that is dated October 25, 2000. Do you have that at hand?

A Yes, I do.

Q That's your only report that you have generated on this case?

A That's correct.

Q Have you had an opportunity to review this report recently?

A Yes, I have.

Q Have you had an opportunity to review this report recently?

A Yes, I have.

Q Do you want to make any changes or amendments to the report?

A No, not really.

Q Okay. I may ask you -- I have a few questions off of your report.

You say the nucleated red blood cells indicate that the fetus suffered significant intrauterine hypoxia, correct?

A That's correct.

(Telephone interruption due to static.)

Q You are not suggesting or going to have an opinion as to when the fetus sustained the hypoxia?

A Well, I don't know what you mean by that. What do you mean by the hypoxia?

Q Are you going to be rendering an opinion as to when the hypoxia began?

A No.

Q Are you going to be rendering any

opinion as to whether or not the hypoxia was clinically significant to this fetus?

(Telephone interruption due to static.)

A The only --

Q Did you hear my question?

A Yes. We have static again. I hope you realize that every time there is a pause, it's because there's static and that I'm not just not answering.

Q I'm not suggesting that you are not answering. I understand. I sense that you are trying to be cooperative.

I just want to move this along.

Did you understand my question and did you answer the question?

A No. I was waiting for the static to die down.

Q Okay.

A Can you ask the question again?

Q I will quickly ask the question before static resumes.

I want to know whether or not you are going to be rendering any opinions at trial

that will be to a reasonable degree of medical probability as to whether or not the hypoxia that you're referencing in here was clinically significant to the fetus.

A Well, it was sufficient hypoxia to cause a marked elevation in the nucleated red blood cell count; so, it certainly could be clinically significant. Whether it's clinically significant or not is really out of my area of expertise, to really define that. That really is defined by the baby after the baby is delivered and whether the baby experienced hypoxia of a significant nature that caused a significant problem, and I can't answer that. That's out of my area.

Q Right.

(Telephone interruption due to static.)

Q And what also would be out of your area is whether the fetus in this case had the ability to compensate for the hypoxia for at least some period of time, correct?

A Well, the nucleated red blood cells are a compensatory response to hypoxia.

What I can't answer is how successful that compensatory response was.

Q Fair enough.

In the last sentence of the second paragraph you do state that the placental perfusion and hypoxia were present for at least 24 hours.

Is that an opinion that you hold to a reasonable degree of medical probability or is it just one of the possibilities?

A Well, you know, I think that the decreased placental perfusion is definitely at least 24 hours old. I think that there was, to a reasonable degree of medical probability, some hypoxia for at least 24 hours.

The thing is, is as I told you, it takes a longer time for a higher level of nucleated red blood cells to appear. So, you know, that's why since there is such a high level, it probably had to actually start becoming elevated further back. So that's what the 24 hours refers to.

It doesn't indicate that the maximum level of nucleated red blood cell count and, thus,

hypoxia was 24 hours prior.

Q Okay. The maximum level of hypoxia nucleated red blood cells could have been eight hours prior to birth?

MR. MOSS: Objection.

MS. PETRELLO: Objection.

MR. MOSS: You can answer, Doctor.

A Well, as I said, I can't really say.

Q Okay. Of the abnormalities we talked about, Doctor, are most of them attributable to gestational diabetes?

A Some are, and some aren't.

Q Would you tell me which ones are not?

A The evidence of decreased placental perfusion, the changes in the decidual vessels; and I'll say that the changes in the decidual vessels, which is the decidual vasculopathy, is really what caused the ischemic changes in the chorionic villi, which were seen as the microinfarcts and the agglutination. So, that's all really one process. And those things aren't specifically related to diabetes.

The nucleated red blood cell count, that's a little more problematic because a slight elevation in nucleated red blood cells can sometimes be seen in diabetes, and it's questionable whether that indicates that infants of diabetic mothers have a low level of hypoxia all the time or not. And I can't answer that question.

The other thing is the -- let's see -- the hypervascularity and hypercellularity is also a change seen in placentas where the mother is diabetic.

Q Doctor, speaking generally about gestational diabetes, is it true that that process taxes the placenta as you proceed towards term?

A I don't know what you mean by "taxes."

MR. MOSS: Objection.

Q That it challenges the placenta and potentially compromises the placenta as the baby gets towards term.

MR. MOSS: Object to the form.

Go ahead, Doctor, if you can answer it.

A I really don't -- I don't -- the terms that you used don't really make a lot of sense to me; so, I don't think I can answer.

Q Okay. Let's assume we're just having a general conversation about gestational diabetes and the placenta, the impact of that.

Are there any negative impacts of gestational diabetes?

A Yes, there are.

MR. MOSS: Objection.

Go ahead.

Q And is the timing -- well, let's just answer the first question. What are the negative potential problems to the placenta from gestational diabetes, some of which you already covered, I suspect? Go ahead.

A Just to the placenta or to the baby, as well?

Q Well, I'm assuming that if it's going to impact the placenta, it has certainly a direct impact to the baby.

A Yes, but there's also a lot of things that have an impact to the baby that don't necessarily cause abnormalities or changes in the

placenta.

Q From gestational diabetes?

A That's what we're talking about, isn't it?

Q Right. Give me some examples of those, that just impact the baby and not the placenta.

A Well, sometimes you get intrauterine fetal demise and there isn't anything specific in the placenta.

Sometimes you get anomalies of the baby associated with the reported increase in diabetes that you don't necessarily see anything different in the placenta of those diabetics.

Renal vein thrombosis without necessarily seeing thrombosis in the placenta.

You know, certainly hypoglycemia of the neonate which, of course, is not something you are going to ever see on a microscopic section, but that would be something else.

I'm sure there are others that I can't think of off the top of my head.

Q All right. When a placenta ages and it becomes mature, doesn't it somehow lose its

ability, start to lose its ability to perfuse the fetus?

A Well --

MR. MOSS: Objection.

Go ahead.

A First of all, I object to the use of the term "ages," because a placenta, it does mature but it doesn't age and it doesn't become senescent, like some people believe; it doesn't get old and worn out and, in fact, could probably go on forever.

So, no, it does not, does not wear out.

(Telephone interruption due to static.)

Q Doctor, I was under the impression that one of the dangers and why you have to closely monitor -- this might be a maternal field question -- but one of the dangers of gestational diabetes is it has a negative impact on the perfusion of the placenta, perfusion ability of the placenta?

A Well, I don't know what you mean by that.

Baergen

MR. MOSS: That's not a question. Go ahead. Make a question out of that, Mike.

Q Well, do you agree or disagree with that proposition?

And you've indicated that you don't understand what I'm saying.

A Well, I don't understand what you mean, which is a slightly different thing.

I don't know if you are saying that -- let me ask you this: Are you saying that diabetes is associated with altered uteroplacental perfusion?

Q Yes. Is it?

MR. MOSS: Objection.

Go ahead, Doctor.

A Well, first of all, I mean, I already told you that there was abnormalities in uteroplacental perfusion.

Q I'm speaking generally, Doctor, and please don't argue with me.

Is it associated with impacting perfusion? The answer is yes/no.

A No, the answer is not. I can

either -- you know, I can try to answer your question the way I am able to answer the question.

MR. MOSS: Do that, Doctor.

A If you don't want to let me do that, then I won't be able to answer the question.

Q Go ahead.

A As I told you, in this case there is altered uteroplacental perfusion with decidual vasculopathy, et cetera. And I told you that that was not specifically associated with diabetes. So those specific issues are not specifically associated with diabetes. That doesn't mean that they cannot be associated in particular cases. But they are not something that you typically see in association with diabetes.

But that's not all of the abnormalities of perfusion you could probably have; so, I don't know if that is what you are referring to or not.

Q Well, you're telling us that gestational diabetes can result in altered placental perfusion but not always?

A No, that's not what I said.

I said in some cases you can have

gestational diabetes where you have altered uteroplacental perfusion, but that doesn't mean it's because of the diabetes; it just happens to be in the same case.

Q Okay. I mean, is it recognized in medicine, an association between uncontrolled gestational diabetes and altered placental perfusion?

MR. MOSS: Objection.

Go ahead, if you can answer, Doctor.

A Well, again, if you are talking specifically about, quote, maternal underperfusion, unquote, or decreased uteroplacental perfusion, the answer is no, that's not specifically associated with diabetes.

Now, some obstetricians use uteroplacental insufficiency or altered placental perfusion and other terms, and I don't know what they mean by that. I'm being very specific about the definitions of what I'm saying; and in that context, you know, I have answered that question.

(Telephone interruption due to static.)

Q Well, do you have a belief that gestational diabetes can result indirectly in altered placental perfusion?

MR. MOSS: Objection. I think this has been asked and answered.

Doctor, if you have anything else to add, go ahead.

A I don't. That's the same question basically that you asked me before, and my answer has been the same, and I've said it several times. I don't have anything to add.

Q Now, just in this deposition, Doctor, what will you be saying at trial is totally contained within your October 25, 2000 report?

MR. MOSS: Objection. I don't think that she's represented that at all.

A Well, you know, I think what I'm going to actually say, if I were to testify, if I were asked to testify at trial and I did testify, what I actually would say, the specific words that I would say would really be somewhat dependent on the questions I would be asked.

However, I have gone over with you all of the abnormalities I thought were present in the placenta and explained to you what I thought they meant. And, you know, we discussed the timing of all those findings, and I don't have any other abnormalities about -- in this placenta. There is no other abnormalities that I saw that we have not discussed.

Q You recognize, Doctor, that hypoxia doesn't necessarily equate with asphyxia?

(Telephone interruption due to static.)

A Hypoxia is basically decreased oxygen in the bloodstream; where asphyxia, people generally use that to mean lack of oxygen. So, they are very similar terms but they are not exactly equivalent. And, in fact, people often use them slightly differently. So, there's some variability in their use, as well, that they are not the exact same terms.

(Telephone interruption due to static.)

Q Are you familiar with any literature

in placental pathology that speaks about women who live in high altitudes, what their placentas look like and whether or not nucleated red blood cells are often found therein?

A Yes.

Q And do you agree with that proposition that is set forth in those articles?

MR. MOSS: Objection. I think that question is awfully broad.

A Yeah.

I mean, what I can tell you is that women who live at high altitudes who presumably have a low level hypoxia all the time, they do show changes in their placenta of hypoxia, which is several things; most commonly what has been described as chorangiosis, which is a specific definition for an increased number of blood vessels in the chorionic villi. And I believe there is some literature indicating that nucleated red blood cells are increased, as well.

Q All right. Just to recap, Doctor, as to when the decrease in placental perfusion and the fetal hypoxia became its worst; you don't have an opinion?

Baergen

MR. MOSS: Objection. It's been asked and answered repeatedly.

Go ahead.

A Well, I think I've already discussed with you the timing of the events to the extent and the specificity that I could.

Q But my question, I just want the recap, and I think you indicated this earlier, and that is whether or not, at what point, whether it was six hours or eight hours before birth when the perfusion and hypoxia were at its worst. You don't have an opinion as to when it was at its worst?

MR. MOSS: Objection.

MS. PETRELLO: Objection.

MR. MOSS: Doctor, you can answer.

A Well --

(Telephone interruption due to static.)

A What you, I think, were referring to is when I was discussing nucleated red blood cells specifically. And I said that I could not say when the maximum number of nucleated red blood

cells were present.

(Telephone interruption due to static.)

THE WITNESS: Hello?

Q Did you hear my question, Doctor?

MS. PETRELLO: I didn't.

A I don't know which question -- you asked a question and I answered it. I don't know if you asked another one after that. I didn't hear another question.

MR. MOSS: Your answer got cut off, Doctor.

A Okay.

Basically what I thought you were referring to -- what I think you are talking about is when I was discussing the number of nucleated red blood cells. And I said I couldn't say when they were at a maximum. That's what I think you are referring to.

Q Okay. Can you say when the decreased placental perfusion was at its worst?

A Well, basically, the events causing the decreased perfusion, as I said, were caused by the abnormal vessels, which were there for a long

time. The specific changes in the placenta that I could see that indicated ischemia, I thought were, you know, 24 to 48 hours old. I cannot say specifically when they were at a maximum.

Q Okay. That answers that question.

Would you agree that whatever was compromising and causing the compensatory mechanism of the NRBC, as well as causing a decrease in placental perfusion, it was likely an evolving process?

A No, I wouldn't agree with that.

Q Okay. What's the basis of that opinion?

A Well, there isn't any basis for the opinion that you just gave, that you asked me if that was my opinion. It's not that I have a basis -- I'm saying that I don't think there's a basis for the opinion you just gave.

(Telephone interruption due to static.)

Q Let me see if I can ask that question a different way.

Do you feel that it is likely that the longer this fetus remained in the environment,

in utero, the greater --

(Telephone interruption due to static.)

Q -- the greater the degree of hypoxia and placental perfusion it would likely go on to sustain?

MS. PETRELLO: Objection.

MR. MOSS: Objection.

(Telephone interruption due to static.)

A I don't believe I could say that.

(Telephone interruption due to static.)

MR. BECKER: That's all the questions I have, Doctor.

THE WITNESS: Okay.

MR. MOSS: Do you have any?

MS. PETRELLO: No, I have no questions.

Thank you, Doctor.

THE WITNESS: You're welcome.

MR. MOSS: Doctor, I think under the circumstances, with the difficulties in transmission, we would

really recommend that you review this transcript. I know you typically don't do that.

THE WITNESS: Well, you know --

MR. MOSS: I'll leave it up to you. But I have some concerns just based upon the quality of the connection that we had.

THE WITNESS: Well, the thing is, the court reporter is here with me and she's hearing exactly, I think, what I'm hearing. So, I think it's more of an issue on your end.

MR. MOSS: I'll leave it up to you, Doctor. I'm just expressing my concern.

(Telephone interruption due to static.)

THE WITNESS: Then I would like to waive signature.

MR. MOSS: Okay.

MR. BECKER: Okay. I'll take a copy, but there is no rush.

Baergen

MR. MOSS: Same here.

MR. BECKER: Thank you.

MR. MOSS: Thank you, Doctor.

THE WITNESS: You're welcome.

MS. PETRELLO: Same here.

(Whereupon, at 2:08 o'clock p.m., the deposition was concluded.)

C E R T I F I C A T E

STATE OF NEW YORK )
) ss.
COUNTY OF NEW YORK )

I, KAREN ANN CARNEY, a Certified Shorthand (Stenotype) Reporter and Notary Public of the State of New York, do hereby certify that the foregoing Deposition, of the witness, REBECCA BAERGEN, M.D., taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

I further certify that I am neither counsel for nor related to any party to said action, nor in any wise interested in the result or outcome thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this 11th day of July, 2002.

KAREN ANN CARNEY, CSR, RPR, CMRS