Bianca Keyes, etc., et al.
vs.
John P. Iafelice, M.D., et al.
Cuyahoga County Common Pleas
Case No. 357504

Deposition of Mark Jacobstein, M.D.
June 28, 2002

ORIGINAL

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IN THE COURT OF COMMON PLEAS

CUYAHOGA COUNTY, OHIO

- - -

BIANCA KEYES, etc., et al.,
Plaintiffs,
vs. Case No. 357504
Lillian Greene
John P. Iafelice, M.D., et al.,
Defendants.

- - -

Deposition of MARK JACOBSTEIN, M.D., a Witness herein, called by the Plaintiffs for cross-examination pursuant to the Ohio Rules of Civil Procedure, taken before me, the undersigned, Heidi L. Tsimpiris, a Notary Public in and for the State of Ohio, at the offices of Mark Jacobstein, M.D., Children's Hospital Medical Center, One Perkins Square, Akron, Ohio, on Friday, the 28th day of June, 2002, at 4:06 o'clock p.m.

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- - -

(Plaintiffs' Exhibits 1 - 2 marked for identification.)

- - -

MARK JACOBSTEIN, M.D.

of lawful age, a Witness herein, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

CROSS-EXAMINATION

BY MR. BECKER:

Q. Good afternoon, Doctor. Tell me your full name, please.

A. It's Mark David Jacobstein.

Q. And handing you what has been marked as Plaintiffs' Exhibit 1, would you identify that for the record?

A. It's my curriculum vitae.

Q. Is that current?

A. It is more or less current. I was more obsessive about keeping track of this when I was at University Hospitals in an academic setting than I have been recently, but, yes, it's current.

Q. When did you leave UH?

A. 1989, April of '89.

Q. Did you come directly here to Akron?

A. Correct.

Q. So you've been here at Akron ever since you left UH?

A. That's correct.

Q. What was the reason you left UH?

A. This was a better job.

Q. Did you have anything to do with convincing Dr. Patel to come down here from UH? You don't have to answer that on the record, just --

A. More the surgeon.

Q. Okay. On the vitae that I looked at, it reflects that your wife is a lawyer?

A. Correct.

Q. And what law firm does she work for?

A. She's not working right now. I mean, she's not been working for, I don't know, for about 13, 14 years or so.

Q. Okay. All right.

MS. PETRELLO: Doctor, could you just either get a little closer to the speaker phone or keep your voice up?

(Discussion had off the record.)

BY MR. BECKER:

Q. Were you actually the echo lab director at UH?

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A. I was actually the acting chief of cardiology for the last three years, and I was director of the echo lab essentially the whole time I was there.
Q. All right. And after you left, did Zonka become director of echo lab?
A. He actually came -- there was a period of time when neither of us were there. So he came after I had left.
Q. Okay. So there was little gap when it was neither you nor Zonka between '89 and roughly '90 or '92?
A. That's correct.
Q. Okay. Let me just -- do you have a copy of the vitae? I just have some questions off of it. You did some postdoctoral work in '81, '82 --
MR. SCHOBERT: He wants you to look at that in case you need to refer to it.
BY MR. BECKER:
Q. -- and American Heart Association at Mount Sinai. Tell me just briefly what that was about.
A. That was my -- equivalent of my third year of cardiology fellowship. And I did dog

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research, animal research on the autonomic nervous system and the affects on the heart.
And at the same time that I was doing that, I was an instructor in pediatric cardiology at Case Western Rainbow Babies and Children's Hospital doing heart catheterizations.
Q. You were -- you don't have any academic positions currently?
A. I do. I'm --
Q. Is that reflected --
A. -- I'm associate professor of pediatrics at Northeast Ohio University College of Medicine.
Q. Okay. One of your grants has to do with ischemia in hypertrophied myocardium. Do you see that?
A. Yes.
Q. Long time ago, 15, 16 years ago. Tell me briefly what that was about.
A. I was doing perfused rat heart experiments doing phosphorus enema or spectroscopy, looking at using that as a tool to look at biochemical changes associated with ischemia.

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And I had investigated a compound called Cyclocreatine which was a noncommercially available chemical that was fed to the rats ahead of time to see if it would protect rat hearts from --
Q. Oxygen depravation?
A. Correct.
Q. Okay. So you kind of just gave me a summary of both these --
A. Yes.
Q. Okay. Under publications, you coauthored something with Fanaroff, "Neonatal Circulatory Changes Following Elective Section"?
A. Yes.
Q. Tell me again --
A. That was as a fellow that I had done that, and that was looking at what are called systolic time intervals on M mode echocardiograms and looking in normal babies born after C-section compared to babies born vaginally.
Q. What was the bottom line? What did you conclude?
A. Some evidence that just C-section itself

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resulted in some delayed fall in pulmonary vascular resistance after birth based on what we call time intervals, measurements made off of the M mode echocardiogram.
Q. And what was the upshot of that?
A. Well --
Q. C-section baby has a fall in pulmonary vascular resistance?
A. No. C-section babies are known to have more likelihood -- to have more likelihood to have respiratory distress after birth.
Q. All right. They have less fluid?
A. Retain fluid.
Q. Sure.
A. And there was evidence that there was a mild delay in the fall of -- the normal postnatal fall in pulmonary vascular resistance.
Q. All right. Any of the articles that you've authored, coauthored that are reflected on Plaintiffs' Exhibit 1 that would be potentially relevant to the subject matter of this case?
A. What's Plaintiffs' Exhibit No. 1?
MR. SCHOBERT: Your CV.

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BY MR. BECKER:
Q. Your vitae.
A. Okay. Anything in here that would be relevant to this current case?
Q. Yes.
A. No.
Q. Okay.
A. Specifically related to like infants and diabetic mothers and that?
Q. Anything that you think is relevant to the subject matter or bases for your opinion or consistent with your opinion, anything along those lines?
A. No.
Q. Okay. Have you had your deposition taken before?
A. Yes.
Q. I just want to review the ground rules with you. This is a question and answer session under oath. It's important that you understand the question I ask.
If the question doesn't make sense or isn't artfully phrased, you stop me and tell me so and I'd be pleased to attempt to rephrase or restate the question, fair enough?

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A. Yes.
Q. However, unless you indicate otherwise to me, I'm going to assume that you have fully understood the question that has been posed, and you're giving me your best and most complete answer today, fair enough?
A. I understand.
Q. All right. Showing you what's been marked as Plaintiffs' Exhibit 2, would you identify this, please?
A. These are notes I've taken periodically as I've been reviewing the case, more notes to myself just -- some of it is factual things, just noting things that were in the medical records.
Some are questions that I've thought about or at least at the time I was reading the various reports that I was given that I was thinking about.
Q. I'd just like to go through the questions that you asked yourself.
A. Okay.
Q. Just if you can find them.
And, Jeff, could we get an agreement rather than take the time today that I can get

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a verbatim transcript of that sometime in the future?
MR. SCHOBERT: Well, as long as the doctor doesn't have a problem dictating it, I mean, I can attempt to have it --
BY MR. BECKER:
Q. I'd be happy to pay you for your time, Doctor, but I don't want to take the time today.
A. Okay.
Q. So if you would just kind of go through the questions only.
A. This includes also like, I mean, I'm keeping notes on the number of hours I've spent reviewing things. You want that, too?
Q. No. I don't need that.
A. Okay. I'll skip that.
Q. Okay. Just take Plaintiffs' Exhibit 2 and look for questions you've asked.
A. Okay. Well, the first question mark I put here was related to the facts of the case. I had some confusion about after birth if this baby was described as hyper or hypotonic.
Q. Okay.
A. And I put a question mark to that

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effect.
Q. Okay. Next question.
A. Sometimes those things get dictated one way and transcribed another way. I wasn't sure if that was the problem.
The next question was the same thing. I keep coming upon that.
Q. Okay. Next question?
A. Then I have a question here, "EEG question abnormal." I'm not even sure what I meant by that, whether I was questioning was there an EEG done, or was it abnormal, or how it was abnormal.
Q. Next question?
A. I have a question here that says, "Question, prenatal versus postnatal asphyxia," and that regarded the deposition of Dr. Sediqui?
MR. SCHOBERT: I think that's correct.
BY MR. BECKER:
Q. Okay.
A. And I think that was one of the questions that was raised, I think, in that deposition. And I just wrote it down something

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for me to think about.
Q. Okay.
A. Questioned role of hypertrophic cardiomyopathy in brain injury that this baby suffered. I questioned the prenatal -- I questioned whether there could be prenatal decrease in cardiac output secondary to the hypertrophic cardiomyopathy.
Q. Let's stay with those two.
A. Okay.
Q. They seem somewhat relevant here. The first one you questioned was the role of cardiac -- cardiomyopathy -- hypertrophic cardiomyopathy and the role it plays in brain damage?
A. Correct.
Q. Okay. And as a result of that, did you engage in any research?
A. I did not look up anything specific, no.
Q. Okay. So what was -- what was the reason you questioned it?
A. I was just noting this as this was something for me to think about as I was reviewing the case.
Q. Okay.

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A. And I mean I've -- after thinking about it all, putting it all together -- these were notes I was doing on the fly as I was reading these reports.
Q. Okay.
A. But I mean it is my opinion that the hypertrophic cardiomyopathy played a significant role in the events that occurred postnatally.
Q. Okay.
A. Possibly in something that may have -- things that may have gone on prenatally.
Q. Okay. When you use the word possibly --
A. Yeah.
Q. -- that helps me because I don't have to -- I mean it doesn't help me one way or the other, but I don't have to go into that area. I just need to explore your opinions in terms of probability. So your opinions --
A. I think it's very probable, highly probable that it played a major role after birth.
Q. Okay. And you don't have that opinion before birth?
A. I'm less certain about that. I think

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that's harder to know for sure.
Q. Okay.
A. And --
MR. SCHOBERT: Wait. Go ahead if you have --
BY MR. BECKER:
Q. In terms of -- you indicated that it's possibly related to something before, but you don't have enough evidence, or experience, or education, or literature support to say that it's a prenatal thing; is that fair?
A. I think that's correct.
Q. Okay. I cut you off. We talked about the first -- there were two questions that peaked my interest.
Did you get the second one, Larry?
MR. PESKIN: No, I didn't get the second one.
THE WITNESS: Whether there was prenatal decrease in cardiac output could have occurred secondary to the hypertrophic cardiomyopathy.
BY MR. BECKER:
Q. Okay.
A. And the other question I had was the

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role of the hypertrophic cardiomyopathy brain injury which I think we've just addressed.
Q. Next question?
A. The next question was about the name because I came upon a report where somebody referred to the baby as Nichole and I just wrote that down.
I think the neurology consultant wrote down Nichole, and I just wanted to make sure that I wasn't confusing this. As I understand the first name is Bianca.
Q. Yes, sir. Next question?
A. Okay. I have a question -- again questioned the role of the hypertrophic cardiomyopathy in the brain injury. The same thing. There's a question prenatal versus postnatal effects of the same question.
Questioned timing of the injury at birth, before birth, and I wrote down here I'm not sure I'm qualified to answer that.
Q. Okay.
A. Timing of the hypertrophic cardiomyopathy itself, when did that begin. I do think I'm qualified to comment on that.
Q. Okay. When did it begin?

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A. Well --
Q. Third trimester?
A. Yes.
Q. Okay.
A. I mean, hypertrophic -- it didn't occur in the last two hours, or the last two days. It's been well shown that this is generally something that occurs over the last trimester.
Q. Okay. Next question?
A. That was it. That's it.
Q. Okay. Doctor, it's true that you looked at the echoes of the BPP, the biophysical profiles, of I think one was on the 28th of September as well as October 7?
A. I did not see anything from the biophysical profiles other than the report.
Q. So you never had an opportunity to look at the echoes?
A. The echoes done as part of the biophysical profile?
Q. Yes.
A. I did not --
Q. Did you ask to look at --
A. -- and I would not hold myself out as an expert on doing general fetal ultrasound

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studies or biophysical profiles.
Q. But if there was an indication of the -- if there was an appearance or a view or a window as you say in your business of the fetal echo, would you be --
A. If there was a decent study of the fetal heart, I would be qualified to comment on that.
Q. So since you've not looked at them, why are they in your possession?
A. Those aren't. Those are postnatal echocardiograms.
Q. Excuse me. So can you tell me the dates of the postnatal?
A. Yes. This was -- the first one was, I believe, on the day of birth, 10/7/94, and the second one was 10/25/94. They were both done at Rainbow Babies and Children's Hospital.
Q. Can you tell what time of day on 10/7/94 by looking at that?
A. Oh, no. I don't know that now. There may be times list -- recorded on the tape. When you get echocardiograms, it does list times. I did not note that.
Q. Did you study the 10/7 and the 10/25/94? Did you look at them?

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A. Yes.
Q. Did you take any notes as a result of your review?
A. No, I did not. If I did, it would be something in here.
Q. Can you just give me a thumbnail sketch of what you saw on the 10/7 versus the 10/25?
A. Yes. The 10/7/94 study, the first study shows quite severe hypertrophic cardiomyopathy with marked narrowing of the left ventricular outflow tract and moderate mitral valve insufficiency.
Q. Okay. Anything else?
A. No.
Q. 10/25?
A. The 10/25 study showed significant improvement in the degree of left ventricular hypertrophy. It was still abnormal, but not nearly as severe as the first time.
Q. How do you treat left outflow tract obstruction in a newborn?
A. You're talking about visa the infants of diabetic mothers? There are different kinds of left ventricular outflow tract obstruction, first of all.

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Q. Okay.
A. So there are congenital birth defects. I assume you're not asking me about that?
Q. Right.
A. The specific left ventricular hypertrophy in the outflow tract obstruction that occurs due to maternal diabetes really has no specific treatment in support of.
Q. Okay. Not beta blockers or anything like that?
A. In fact, beta blockers is one of the things that's -- that was not used as far as I can see in this girl, but that is commonly used.
Same thing with giving fluids, but there is nothing -- there is no specific -- there's no drug that makes it go away and there's no surgery alternative for it. But, yes, beta blockers are something that are used.
Q. What is generally the reaction of treating hypertrophic cardiomyopathy secondary to maternal gestational diabetes if one gives pressers?
A. Generally speaking we try to avoid using presser agents because theoretically it can

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make the outflow tract obstruction worse.
Q. Okay. Why is that?
A. Well, part of the -- the problem with the hypertrophic cardiomyopathy in general, and certainly it's true of infants of diabetic mothers, is that it's not a problem with the heart squeezing down. It's stiffness and thickening of pumping chambers so that the heart doesn't fill with blood easily.
So it's a stiff pumping chamber that can't relax, can't fill with blood. Presser agents help the heart squeeze down better. They do not particularly help the ability of the heart to relax.
And by increasing heart rate, which is one of the side effects from that medicine, and by, if anything, increasing the strength of the heartbeat, you may aggravate the blockage, the blockage in the pathway out to the body.
Q. Okay. Have you looked at this child's records, I suppose the prenatal as well as the neonatal records of Bianca Keyes?
A. Yeah. I've got everything that I looked at here. So I did look at prenatal -- I looked at prenatal records for the mom and I looked at

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the baby's records after.
Q. May I look at your file real quick?
A. Sure.
Q. While I'm looking at this Doctor, did you, either in preparation for your report or in preparation for today's deposition, did you engage in any medical research?
A. No.
Q. Tell me a little bit about how long you have been doing medical/legal reviews.
A. Well, periodically I've been doing this almost since I came on fellowship. So I guess it's been about 20 years. I've probably done a total of -- probably done a total of about 20 cases over 20 years.
Q. And have you reviewed cases for both the medical provider as well as the patient?
A. I have. I think there's been three cases that I've reviewed for Plaintiff's attorneys, and all the others have been for defense attorneys.
Q. And of the three Plaintiff's cases, do you remember the subject matter of the cases?
A. I do remember two of them.
Q. Okay. Go ahead and tell me about that.

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You don't have to tell me the name of the case, but --
A. I know. The first was a case where a child had surgery on what was felt to be an atrio-septo defect.
Q. Okay.
A. And it turned out there was no atrio-septo defect. The surgeon honestly came out and told that to the family.
Q. Okay.
A. And it ended up getting settled. I didn't have to testify in that, just generated a report. I reviewed a case for Plaintiff's attorney on a baby that had Tetralogy of Fallot and I think the complaint was that it was more of a wrongful life than wrongful death, but there was some problems that should have been recognized because -- I don't remember it too well.
I was mumbling. I think it was what's called a wrongful life case. It was a baby that had multiple problems. And the lawsuit involved that it wasn't picked up beforehand. They would have terminated the pregnancy had it been picked up. And the baby

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also had heart disease. And I was asked to review that.
Q. So would it be fair for me to say that maybe you do a couple of these a year?
A. Yeah. There will be like a year or two when I don't get any. I don't advertise. I don't know how people get my name exactly, but I get asked to do these and I'm usually willing to. But, yeah, like right now, I have a second case that I'm reviewing kind of concurrent with this.
Q. What is the subject matter of that case?
A. It's a baby with coarctation and ventricular septal defect. And I haven't reviewed it in a long time.
Q. Okay. Have you worked for Jeff Schobert before or his law firm before?
A. I believe not. Not -- definitely not for Mr. Schobert, and I don't think I've ever done any cases for them.
Q. How about Buckingham Doolittle, the law firm?
A. I don't think so.
Q. Can you read me that handwriting that's on that note?

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A. Yes. This says, "IDM hypertrophic cardiomyopathy of IDM. Severe in utero. Insult severe encephalopathy in utero and multiple organ involvement and dysfunction."
Q. Okay. And why is that note on this letter?
A. That was probably somebody was telling me about the case as they were asking me, or somewhere along the line. I don't know. I don't remember when I wrote this. I did not date it.
Q. But someone must have told you that?
A. Either that, or they called me again about the case and I pulled this out and this happened to be the first letter.
MR. BECKER: Let's mark that as Plaintiffs' Exhibit 3.
(Plaintiffs' Exhibit 3 marked for identification.)
BY MR. BECKER:
Q. Handing you what has been marked as Exhibit 3, would you identify that document? What is it?
A. It's a letter from Mr. Schobert to myself dated October 24, 2001.

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Q. Do you know any of the caregivers involved that are party defendants in this case?
A. None of them -- well, I should say I probably know some of the pediatric folks that were taking care of the baby after.
Q. Okay. But I'm more specifically interested in Dr. Thompson, Chernin, or Muise?
A. I know none of them.
Q. Okay. All right. Let's cover your opinions, Doctor, that I believe are reflected in the April 1, 2002 report. Do you have a copy of that report at hand?
MR. SCHOBERT: I think it's probably underneath that file there, Mike.
MR. BECKER: Sorry.
MR. SCHOBERT: That's all right.
BY MR. BECKER:
Q. There it is. Doctor, there was an expert or two early on in this case that had the opinion that this child had, and I'm going to screw this up, Jeff, IHSS?
A. Uh-huh.
Q. Is that right?
A. Yes.

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Q. Tell me what IHSS is.
A. IHSS stands for idiopathic hypertrophic subaortic stenosis. And it is another term, although not the preferred term, for the hypertrophic cardiomyopathy. The reason -- hypertrophic cardiomyopathy -- cardiomyopathy means sick heart muscle. Hypertrophic means abnormally thick.
And that condition can lead to narrowing of the left ventricular outflow tract and subaortic stenosis, but you can have the same condition without subaortic stenosis. So generally the preferred term that people use now is just hypertrophic cardiomyopathy, but they're synonyms.
Q. So they're synonymous?
A. Yes.
Q. IHSS and hypertrophic cardiomyopathy?
A. Yes.
Q. Now, would you defer to another specialist what happens to a fetus in the event that the mother's gestational diabetes isn't greatly controlled or is poorly controlled?
A. You mean the effects during the obstetrical care?

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Q. Yeah.
A. Yes.
Q. Now, let's talk about your main opinion here that is in the early neonatal period or postnatally you feel that part of this child's response of the heart was due to the cardiac or the hypertrophic cardiomyopathy; is that fair?
A. Correct.
Q. Okay. Now, can you separate out how much of the child's heart response was due to asphyxia?
A. I mean the term asphyxia to me means sort of interruption of oxygen and perhaps delivery to the -- oxygen delivery to the tissues.
Asphyxia can cause heart dysfunction with nothing wrong with the heart, and heart conditions can cause the, whatever we describe when we talk about asphyxia. And it can be a vicious cycle where one makes the other worse.
Q. Okay. Are you --
A. I'm not sure I answered your question.
Q. No. I think you did. Are you familiar with a concept of -- some neonatologists refer to as the ability of a fetus to make the

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"neonatal transition"? Are you familiar with that?
A. Yes. There's a circulatory trend that -- there's probably more than just circulatory, but at least I'm knowledgeable about the circulatory transitions that occur from prenatal, postnatal life.
Q. Okay. Do you have an opinion as to whether or not this hypertrophic cardiomyopathy played any part or deterrent in the quote "neonatal transition" in the birth?
A. Yes, I think the hypertrophic cardiomyopathy played a significant role in the adaptation to postnatal life.
Q. Are you familiar with any recent literature in the last couple years that stands for the proposition that the most common reason fetuses do not make the neonatal transition is profound birth asphyxia?
MR. SCHOBERT: Objection.
THE WITNESS: I'm not -- I'm not aware of this.
MS. PETRELLO: Could I ask everyone to keep their voices up?
THE WITNESS: Sorry.

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BY MR. BECKER:
Q. Now, I want to understand each and every bases for your opinion that it was the hypertrophic cardiomyopathy that impacted the heart function in the first -- is it the first hour or the first week of life?
A. Certainly the first hour is significant, but probably for many days.
Q. Okay. Explain that to me.
A. Well, the child had, first of all, no heart rate or respiratory rate at birth and that persisted for 20 minutes. Eventually the heart rate did recover. The baby continued to have significant multi-organ dysfunction, including kidney abnormalities.
And finally the baby remained very edematous for up to weeks after -- after the event and required support with fluids. And at the time, they were using I believe it was Doputamine to support the heart circulation for a number of weeks afterwards.
Q. Well, when you describe the baby as being edematous, it wasn't true -- a true hydrops picture, correct?
A. I'm just going by what was in the record

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and they just said edema. I never saw the baby.
Q. Okay. And would you -- how would you define hydrops?
A. Hydrops is evidence of fetal heart -- of in utero fetal heart failure.
Q. Okay. But is there a marker that you see fluid in a certain area first like the abdomen or the lungs?
A. You can see it in the skin. You can see it in the chest space in the abdomen. So sightings in the lungs, in the skin is evidence of fetal heart failure.
Q. Now, the reasons you have cited to me as to why you feel the hypertrophic cardiomyopathy played a role, multi-system organ failure, that can be explained from birth asphyxia, correct?
A. True. I guess I'm also basing it on the way the heart looked on the ultrasound study. That is a major find.
Q. The way it looked, but of course the way it looked could be in response to asphyxia?
A. No. That I disagree with. The ultrasound appearance of an asphyxiated heart is generally one that is enlarged, not

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squeezing down well, and often with leaking tricuspid valve.
This was a picture of a small volume left ventricle, smaller than normal volume in left ventricle with very thick walls, severe -- significant subaortic stenosis and mitral valve insufficiency. I do not believe asphyxia alone could give that picture, that ultrasound picture.
Q. Well, could asphyxia in part give that picture?
A. I don't think so. I think that is clearly explained on the maternal -- uncontrolled maternal diabetes.
Q. So besides the way the heart looked on the ultrasound --
MR. SCHOBERT: Wait, wait --
THE WITNESS: I'm sorry. I should probably say poorly controlled rather than uncontrolled.
MR. SCHOBERT: I'm sorry, Mike. Go ahead.
BY MR. BECKER:
Q. So the way the heart looked, the multi-system organ failure, what were the other

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reasons?
A. And the course immediately at birth and subsequently in the next days.
Q. Okay. Now, did you notice -- did you study and take a look at the base excess of the -- this baby?
A. The baby had significant acidosis at birth.
Q. Okay. Now, you don't get significant acidosis at birth in a matter of a half an hour, do you, or would you defer to a neonatologist?
A. I would. I would defer it to a neonatologist.
Q. Okay. And as far as the number, the base excess, whether it's 20 or 25 or 30 as to assisting one in timing this asphyxia or the acidosis, you would again defer to a neonatologist?
A. Yes.
MR. BECKER: Jeff, can we get a stipulation on the record that before this deposition I did obtain and fax to your office today a report from Dr. Reed Thompson?
MR. SCHOBERT: Yeah. I mean, that's

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an obvious. You sent to my office at some point -- I received it late this afternoon. I don't know exactly what time it was faxed over, but by --
MR. BECKER: Sometime today?
MR. SCHOBERT: Sometime today, this afternoon, yes.
BY MR. BECKER:
Q. Doctor, do you know Dr. Reed Thompson --
MS. PETRELLO: Excuse me. Did you fax that to Mark?
MR. BECKER: Yes.
MR. SCHOBERT: But before we go on, just so I can put on the record, again, I did not supply that report to Dr. Jacobstein for review based on our ongoing discussion that I am not waiving any arguments I have about the identification of the expert.
And I will, as long as I've got an ongoing objection that these questions don't waive my arguments, if you want to make -- question him about a consultant, that's fine, but I'm not waiving any argument that I have as to your ability to use that expert.
MR. BECKER: Well, I'm not going to

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stipulate as to that comment. I mean, you certainly had an opportunity to discuss this with him, although albeit brief.
BY MR. BECKER:
Q. Doctor, do you know Dr. Reed Thompson at Johns Hopkins University in Baltimore?
MR. SCHOBERT: Object.
Go ahead.
THE WITNESS: No, I do not.
BY MR. BECKER:
Q. Okay. Now, you know, I didn't ask you whether or not you saw any evidence of congestion within the neonatal echoes, particularly on the 7th?
A. I do not -- congestive heart failure?
Q. Yes.
A. That is not something you can see on an echocardiogram.
Q. Okay. Would you agree that there's a high incidence of hypertrophic cardiomyopathy in fetuses whose mothers have diabetes?
A. Yes.
Q. Would you agree it's not clear often in literature whether there is a linear relationship between the degree of control of

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glucose during pregnancy and the severity of the hypertrophic cardiomyopathy?
A. My understanding, and I may not be the greatest expert on it, but my understanding is that there is a relationship between the degree of control. It's not a perfect relationship so that you can get hot wires on both sides, but that there is a relationship between the degree of control and hypertrophic cardiomyopathy.
And in my own experience, the worst cases of hypertrophic cardiomyopathy of IDM has been the ones where there has been poor control.
Q. Can you cite me to any literature --
A. No.
Q. -- to support that proposition?
A. No.
Q. That's just your personal experience?
A. And also from -- and based on reading of literature in the past. I cannot specifically name you any. I did not do any type of literature research for this review.
Q. Can we agree that hypertrophic cardiomyopathy in an infant born to a gestational diabetic mother is almost always

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transient and resolves spontaneously without intervention within a matter of months?
A. It definitely resolves spontaneously usually -- I don't know if months, but significantly resolves within months and completely resolves typically within a year. But that doesn't mean that it always does that. It can be a life-threatening condition.
Q. Can we agree that in cases of extreme hypertrophy, most infants are asymptomatic?
MR. SCHOBERT: I'm sorry. Can you repeat the sentence?
BY MR. BECKER:
Q. In cases of severe hypertrophy, most newborns are asymptomatic?
A. I would be willing to say that most hypertrophic cardiomyopathy that occurs in infants of diabetic mothers causes no symptoms.
Q. Okay.
A. I guess I would object to the -- I'm not sure what you mean by severe hypertrophic cardiomyopathy. I think severe hypertrophic cardiomyopathy is associated with symptoms. Did I make that distinction?
MR. BECKER: Yes.

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We're going to take a short two-minute break.
THE WITNESS: Okay.
(A short recess was had.)
BY MR. BECKER:
Q. Doctor, I understand your opinion to be that the hypertrophic cardiomyopathy secondary to the mother's gestation diabetes was in part responsible for some asphyxia that was occurring in the neonatal period; is that fair?
MR. SCHOBERT: Objection.
THE WITNESS: I'm sorry. Could you restate that, please?
BY MR. BECKER:
Q. I just want to understand what you feel flowed from the newborn, stiff heart, poor functioning heart, what flowed from that?
A. I believe that that very stiff left ventricle was destined to provide low cardiac output, congestive heart failure, and affect the transition from the fetal to the postnatal circulation.
And that -- I don't know that -- I'm sure there were other factors involved. These are complex issues, but I believe the heart

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condition played a significant role in why that child was so sick right at birth.
Q. Okay. But whether or not -- what role -- how that led to -- do you have an opinion as to whether or not this low or slow neonatal transition due to the congestive heart failure or low cardiac output, do you have an opinion as you sit here today whether or not that led to any brain damage in Bianca, or would that be outside of your specialty?
MR. SCHOBERT: Objection.
Go ahead.
THE WITNESS: I mean, I might have some opinions on it. I would -- I guess I would defer to a neurologist in terms of -- I mean, I feel comfortable talking about the heart condition and what affected it.
It is known that severe low cardiac output states can cause brain damage, but I'm not a neurologist. I feel a little uncomfortable saying exactly when the brain damage occurred.
BY MR. BECKER:
Q. Okay. Do you have an opinion as to whether or not this child had sustained brain

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damage at the time it was born -- by the time it was born?
MR. SCHOBERT: Objection.
Go ahead.
THE WITNESS: Same thing I would say before. I think it is certainly -- there have been reports that I know of of stillborns and fetal sudden deaths and due to heart conditions and certainly due to hypertrophic cardiomyopathy.
And I think there is certainly a possibility. I know legally that's not, but let me just speak this out, that there's certainly a possibility there may have been insults to the baby's brain in utero that relate to that heart condition.
Q. Okay.
A. I think that's a harder question to get at. And at this point, I would -- would not be able to -- would defer to other people as to whether it's more than likely that that was going on.
Q. Do you have an opinion -- well, strike that.
Do you have any disagreement with

the interpretation at University Hospital of the people that did the studies of 10/7 and 10/24?

A. No.

Q. Do you know the people that did the interpretation?

A. I do.

Q. Okay.

A. I think it was Dr. Levine, Mark Levine.

Q. Who is no longer with UH as well?

A. He is on the east coast somewhere.

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

MR. SCHOBERT: Colleen?

MS. PETRELLO: I don't have any. Thanks.

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(Deposition concluded at 5:00 o'clock p.m.)

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C E R T I F I C A T E

STATE OF OHIO,)
) SS:
SUMMIT COUNTY.)

I, Heidi L. Tsimpiris, Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named witness, MARK JACOBSTEIN, M.D., was by me first duly sworn to testify the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by the witness was by me reduced to Stenotypy in the presence of said witness, afterwards transcribed upon a computer; and that the foregoing is a true and correct transcription of the testimony so given by the witness as aforesaid.

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, employee of or attorney for any of the parties in the above-captioned action; I am not a relative or employee of an attorney of any of the parties in the above-captioned action; I am not financially interested in the action; and I am not, nor is the court reporting firm with which I am affiliated, under a contract as defined in Civil Rule 28(D).

IN WITNESS HEREOF, I have hereunto set my hand and affixed my seal of office at Akron, Ohio on this 9th day of July, 2002.

Heidi L. Tsimpiris, Notary Public in and for the State of Ohio.

My Commission expires December 28, 2004.