IN THE COURT OF THE COMMON PLEAS
CUYAHOGA COUNTY, OHIO

GLORIA MASLANKA, Individually
and as Parent and Natural
Guardian of Shane Maslanka,

Plaintiff,

vs.

No. CV-05-552424
JUDGE McDONNELL

METROHEALTH MEDICAL CENTER,

Defendant.

AUDIO-VISUAL DEPOSITION of MICHAEL PARKER SHERMAN, M.D., taken in the above-entitled case before Tricia L. Gudgel, a Notary Public of Menard County, acting within and for the County of Sangamon, State of Illinois, at 2:15 o'clock P.M., on August 3, 2006, at 107 East Allen Street, Springfield, Sangamon County, Illinois, pursuant to notice.

JOB NO. 186010

APPEARANCES:

BECKER & MISHKIND
BY: David A. Kulwicki, Esq.
Michelle Mahon, Attorney at Law,
via telephone
1660 West Second Street, Suite 660
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On behalf of Plaintiff.

REMINGER & REMINGER
BY: Christine Reid, Attorney At Law
1400 Midland Building
101 Prospect Avenue West
Cleveland, Ohio 44115
On behalf of Defendant via telephone.

ALSO PRESENT:

Mr. Trevor Baldwin, Videographer
Baldwin Legal-Visual
107 East Allen Street
Springfield, Illinois 62704

I N D E X

E X H I B I T S

NUMBER	MARKED FOR IDENTIFICATION
Exhibit 1	(Before the deposiiton.)
Exhibits 2-4	(Conclusion of deposition.)

S T I P U L A T I O N

It is stipulated and agreed, by and between the parties hereto, through their attorneys, that the audio-visual deposition of MICHAEL PARKER SHERMAN, M.D. may be taken for before Tricia L. Gudgel, a Notary Public and Certified Shorthand Reporter upon oral interrogatories, on the 3rd of August A.D., 2006, at the instance of the Defendant at the hour of 2:15 o'clock P.M., 107 East Allen Street, Springfield, Sangamon County, Illinois;

That the oral interrogatories and the answers of the witness may be taken down in shorthand by the Reporter and afterwards transcribed;

That all requirements of the Civil Practice Act and the Rules of the Supreme Court as to dedimus, are expressly waived;

That any objections as to competency, materiality or relevancy are hereby reserved, but any objection as to the form of question is waived unless specifically noted;

That the deposition, or any parts thereof may be used for any purpose for which discovery depositions are competent, by any of the parties hereto, without foundation proof;

That any party hereto may be furnished copies of the deposition at his or her own expense.

(Whereupon the Deponent was sworn by the Notary Public.)

M I C H A E L P A R K E R S H E R M A N, M. D.

Having been first duly sworn by the Notary Public, deposeth and saith as follows:

EXAMINATION

BY MS. REID:

Q Good afternoon, Dr. Sherman.

A Good afternoon.

Q As I'm sure Mr. Kulwicki has told you, my name's Christine Reid, and I'm here on behalf of MetroHealth Medical Center this afternoon. And we're here for your deposition to explore your expert opinions in this case. Is that your understanding, as well?

A Yes.

Q I apologize for not being there in person, your weather kept me on a plane for a couple hours this morning but going nowhere.

I know from reviewing some past information that you've had your deposition taken in the past, correct?

A Yes.

Q All right. As we go through this

process, particularly because we're on the telephone, if for any reason you do not understand a question I've asked, please interrupt me, stop me, and I will attempt to rephrase or repeat the question so that we're on the same page throughout, all right?

A Yes.

Q All right. Because as you know, I will rely on the answers you give here today at the time of the trial in this matter.

A Understood.

Q All right.

Could you state your full name for the record.

A Michael Parker Sherman.

Q And is your business address still with the Southern Illinois University School of Medicine?

A That's correct.

Q All right. Your practice, Dr. Sherman, has it changed at all since September of 2005?

A No. Other than, perhaps, I probably do more clinical or bedside neonatology now than I did last September.

Q Okay. The reason why I asked that is my partner, Leslie Jenny, took your deposition back in September of 2005, and you gave a description of your practice at that time. Rather than repeat the questions, I'm just, you know, wondering if I could rely on your description at that point with the editions you've just given me?

A That would be correct. It's probably 75 percent or more clinical practice at this time.

Q All right. Why has there been an increase in your bedside practice?

A We took over a -- or are in the process of taking over a level 2 nursery in Decatur, Illinois.

Q What's the name of that institution?

A Decatur Memorial Hospital.

Q And the other hospital you go to is St. John's Hospital?

A St. John's Hospital is where the level 3 nursery is, and Memorial Medical Center is where the level 2 hospital is. After December of 2005, I had increasing responsibilities at Memorial Medical Center.

Q Such as?

A Such as being the attending neonatologist in their level 2 nursery.

Q All right. Do have an academic appointment at this time?

A Yes, I do.

Q All right. And is that with Southern Illinois University?

A I have an appointment there as professor of pediatrics, and I'm a professor emeritus and professor recalled at the University of California at Davis.

Q What does it mean to be a professor recalled?

A It means that because I received a research award from the National Institutes of Health, they recalled me as a research professor to do funds. I think it's probably mostly so they can recover the indirect cost from the federal government to fund the university programs.

Q All right. Do you currently go to the University of California Davis and do any teaching, lecturing or research?

A I have gone to the University of California Davis in the past year to perform

bench-side research in the basic science laboratories.

Q On what specific areas?

A Animal model of necrotizing enterocolitis and its prevention with human recombinant lactoferrin of breast milk protein.

Q In reviewing your CV, that's something you've been working on in the past, as well?

A That's correct.

Q All right. Do you do any didactic teaching currently?

A Yes.

Q At Southern Illinois?

A Yes.

Q And how often are you going to the University to teach?

A Well, I teach third year or fourth year medical students and residents. So that's almost on a weekly basis. If I'm doing clinical care, I'll have fourth year medical students. If I'm at Memorial, I've had third year medical students. And then we have pediatric residents who are educated at St. John's Hospital.

Q Do you do any lecturing at the

University?

A Yes.

Q How -- is there a class you teach on a regular basis or are they irregular types of courses?

A There's a neonatology course that we -- all the neonatologists participate in.

Q And how many neonatologists are in your group?

A Six.

Q I'm assuming, in your practice of neonatology, particularly at St. John's Hospital, you deal with premature infants?

A That's correct.

Q Do you treat premature infants at all three institutions you go to or primarily at St. John's?

A All three institutions.

Q All right. Can you tell me what the percent of your neonatology practice deals with premature or low birth weight infants?

A It would be in excess of 50 percent.

Q Mr. Kulwicki advises me that you have brought a copy of your curriculum vitae with you

today?

A That's correct.

Q What's the date of the curriculum vitae you have with you today?

A It's current, August of 2006.

Q Okay. Can you have your -- if you haven't already done this, just make sure the court reporter marks that so it can be attached to the deposition.

A She has it marked as Exhibit 1.

Q Great. Thank you very much.

Have you brought any literature with you today?

A No, I did not.

Q No articles whatsoever?

A No.

Q Did you review any medical literature in preparation for either your report, your expert report in this case, or in preparation for today's deposition?

A No, not -- not specifically for this deposition.

Q How about at the time you were putting together your expert report in this case?

A Well, at the time I was putting together the expert report in this case, we had an ongoing research study at the University of California Davis, that was funded with me as the principal investigator, on using near infrared spectroscopy for early identification of the patent ductus arteriosus in extremely low birth weight babies.

That research is now in press in Biology of the Neonate. So obviously, in preparing a clinical research paper, you would be reviewing a great deal of information on patent ductus arteriosus.

Q Is that research that's now in press?

A It's in press, that's correct.

Q Is it listed on your CV?

A Yes, it is.

Q Can you tell me what number it is or -- just so I can easily refer to it when I take a look at your CV?

A It is on page 30 and it's under a title called "Peer-reviewed Manuscripts" and it's number 81.

Q All right. Other than that research regarding PDA which you just described, is there

any other literature that you can identify for me today that you believe supports any or all of your opinions that are set forth in your expert report?

A Well, you know, there's many aspects of my CV that are relevant to this case.

Q All right. Your CV obviously has multiple pages. I have an August of 2005 edition of it, I guess. Are there any articles that you can point me to, as we sit here today, that you believe are relevant to this case?

A Well, there's many basics research papers that I did in conjunction with Ronald Gibbs, professor and chair of OB/GYN at the University of Colorado that have to do with antenatal infection.

And I just revised a chapter for eMedicine that's entitled "Maternal Chorioamnionitis," and it probably will be posted in the next few months as being updated. It was originally published in September 6, 2001, and the revised version has gone in in May of this year.

Q Anything else from your CV that you can point me to right now that you believe is relevant to this case?

A Well, there's -- there's many articles

that have to do with early onset infection. Probably the most famous of the articles are ones that were published when I had a lot more hair than I have today.

The one I probably would refer you to is publication number 7 on page 23 published in 1980 in Pediatrics, on tracheal aspiration and its clinical correlates in the diagnosis of congenital pneumonia.

And reference number 13 also on page 23 called Gram's stains of tracheal secretions predict neonatal bacteremia. And that has to do with early onset bacterial infection which would appear a number of clinicians caring for the infant and one of your experts wrongly believe was present.

Q Who are you referring to?

A Dr. Martin.

Q Okay. And why do you --

A And Dr. Kumar. We'll get into that, I'm sure, later in the depo.

Q Okay. But you -- that comment was specifically related to Dr. Kumar and Dr. Martin?

A That's correct.

Q All right. Other than articles or

publications that are listed on your CV, is there any other literature that you can point me to or you intend on pointing me to that you believe supports your opinions as set forth in your expert report?

A Well, that's kind of like asking what's the volume of the ocean. But there certainly is a wealth of information about treatment of PDA's, the use of indomethacin to actually prevent intracranial hemorrhage.

There's a variety of subjects on hypernatremia and interventricular hemorrhage. There's information about asphyxial intrapartum events with reperfusion, reoxygenation injury after birth.

There's linkage between blood -- hyperoxemia, which was present in the first hours of this patient's care, all which can lead to either pulmonary brain injury. So this case is extremely complex with regards to its deviations from the standard of care.

Q I understand that there are complexities in this case.

My question is, and if the answer is no

-- I mean, as we sit here today, is there any article, textbook, chapter in a textbook that you can refer me to that you can say, hey, specifically support your opinions in this case?

A Yes.

Q All right. And what would that be?

A Well, Remington and Klein, which is a textbook on infectious diseases of the newborn. A host of publications on patent ductus ateriosus by Ronald Clyman, professor of pediatrics at UCFS. Work by Dr. Coulter: C-O-U-L-T-E-R.

Clyman's spelled: C-L-Y-M-A-N. C-L-Y-M-A-N. Coulter: C-O-U-L-T-E-R.

Dr. Coulter was at the University of Utah, he still may be there. He did work on hypernatremia and intracranial hemorrhage.

And then there's a host of literature about the risk of -- increased risk of retinopathy of prematurity, and potentially pulmonary injury from pulmonary oxygen toxicity associated with hyperoxemia.

That probably can be looked at very simply by looking at the range of acceptable intraarterial oxygen tensions in the "Manual of

Neonatal Care" by Cloherty from Harvard. That name is spelled: C-L-O-H-E-R-T-Y. There are two other editors that are part of that issue.

And probably in that regard, I should mention an article that we -- that I just submitted actually today to Pediatrics on the relationship of antenatal methamphetamine abuse, cocaine abuse, and the occurrence of respiratory distress syndrome and other pulmonary conditions in the newborn.

Q Why is that article you just mentioned relevant to this case?

A Well, because it has to do with the manifestations of different types of pulmonary disorders and -- and their causes. And certainly there's a disparity between Dr. Kumar, who says that this is a severe respiratory distress syndrome, and Dr. Martin, who describes it as mild respiratory distress syndrome.

Q Any other literature or does that cover it?

A Well, there's -- we could go on and on about what are the proper values for coagulation values in infants. I recently had done CD-ROM for the pediatric residents that lists a variety of

articles from the literature that they can use as resources on a variety of topics including: Bleeding, patent ductus ateriosus, retinopathy in prematurity, respiratory deceases, chronic lung disease, interventricular hemorrhage, PBL, and other aspects of this case.

So, you know, there's -- you know, we could be here the rest of the afternoon giving citations of the medical literature since there was probably a thousand articles associated with that CD-ROM.

Q Was that CD-ROM published by a national publisher or was it something you just put together?

A It was something I put together for the pediatric house officers at Southern Illinois University.

Q Would there be a way for me to request a copy of that CD at my expense?

A I don't know why you would be privileged to have it. Maybe Mr. Kulwicki can discuss that with you. But I see no reason why you should receive a -- something that took several weeks to put together and had to be reviewed. I don't think

it's appropriate that I do your research on -- medical research on cases.

Q Well, I mean, do you believe that it's appropriate that I'm aware of what medical authorities and research you're relying on to support your opinion?

MR. KULWICKI: Chris, let me -- let me interrupt. Let me interpose an objection. The right way to get this, rather than trying to negotiate with Dr. Sherman in the course of a deposition, would be to either drop a subpoena on him or drop a request for production of documents, or even less formally, a letter on me.

Allow me to consider the discoverability of that, and we can handle that as a records request, as opposed to trying to negotiate with Dr. Sherman right now.

I think if you're asking him will he agree to give it to you, he's telling you no --

MS. REID: All right, that's fine. I mean, I -- a lot of times when I ask experts if they'll agree to give me a piece of literature or a study, they say yes. So I think I was trying to do it the easy way. If you want me to do it the formal way,

I will do so. And I'll move on.

MR. KULWICKI: Okay.

THE DEPONENT: Well, I think there's a -- there's -- there's a -- there was an interruption. And I think that you can refer to an article that we published, I think in 2003 in "American Journal of Obstetrics and Gynecology," that it had to do with a center that founded on perinatal medicine and law.

And you may be under the assumption that Fanteroff and Martin's textbook is authoritative or that peer-review articles are authoritative. They're authoritative in the eyes of the beholder, and they hold no special significance.

So whether you're going to produce something from the CD-ROM and consider it to be authoritative, it's a peer-reviewed publication, okay. It's no different than the publications that I've cited to you that I -- that I had peer-reviewed and were published. So -- so what you consider authoritative and what the medical community considers authoritative is quite different.

MS. REID: Q What do you consider

authoritative?

A There is no authoritative thing because there's disagreement among medical experts as to a variety of subjects.

Q All right. So no piece of medical literature, as far as you're concerned, is -- should be considered authoritative?

A Well, there are some classic articles that I think are well accepted over time but that requires time. And most of the articles on this CD-ROM were published probably in the last three to a maximum four years. And it takes time to become authoritative. This was produced to give the residents a flavor of the current state of the art, not necessarily where we'll be, three, five, or even ten years from now.

Q So what you're saying is that while you -- I presume you consider the literature you write to be authoritative or...

A I think that's judged by somebody else, not by me.

MS. REID: All right. Well, let me move on.

I'll be frank with you, David, and frank with Dr. Sherman, I mean the reason why I asked

this is if there's any piece of literature that Dr. Sherman is going to use at the time of trial to support his opinions, I think I'm entitled to know that, see it. And that's really what I'm getting at.

So you can tell me there's nothing or you can tell me you'll produce anything he intends on using at the time of trial to support his opinions and we can move on.

MR. KULWICKI: Well, again, I think that sort of request is not for purposes of a deposition but is to be obtained through a records request and you know how to do that. I mean, I intend to ask you for any lit that you intend to use at trial and certainly you have the right to ask me.

Trial is several months away, do I have a list in mind right now, not at all. Are there a couple articles I'm thinking about, yes. I consider it work product at this point in time. But obviously at some point in time before trial, if you give me a formal request, I think I have a duty to show you it, so.

MS. REID: Well, as long as we have an understanding that that's how we're going to handle

it, I can -- that's how we'll handle it. Fair enough?

MR. KULWICKI: Fair enough.

MS. REID: All right.

Q Dr. Sherman, can you do me a favor, since, unfortunately, I'm not there with you today, and I don't mean to make this tedious, but I'd like you to read into the record what materials you have with you today that you reviewed as it relates to this case.

A Well, the first two things, I was contacted, I believe, either -- and I don't recollect whether it was via a E-mail or via a telephone call by, I think it's a Mrs. Chaya: C-H-A-Y-A; a nurse. And after our discussion, I told her I would look at the case and render an opinion about it. And she sent me two volumes. Okay.

One is entitled medical records of Gloria and Shane Maslanka and it says: expert copy. And it's the smaller of the two binders.

The second one is newborn records of Shane Maslanka from MetroHealth Medical Center and volume one. And under that in parenthesis it also

has: expert copy. Okay.

So those were the -- those are the two major documents I've relied upon for my opinion today.

Q Can I interrupt you. Are all of those records in those two volumes from MetroHealth Medical Center?

A For the most part, yes. Okay.

Q Meaning?

A Well, there's -- there's maybe some -- I think most of the other stuff is in fact reports or depositions.

Q I was talking about with the two volumes of records you just described.

A Yes. Most of the -- almost all, if not all, are in those volumes. Okay.

MR. KULWICKI: Chris, I am looking through it, since we sent these records, and I'm certain it's the same two volumes that we sent to you as part of our production. And looking at them, they are all MetroHealth medical records.

MS. REID: Okay. Thank you.

MR. KULWICKI: Okay.

MS. REID: All right.

Q What else have you reviewed then, Dr. Sherman?

A I was sent an expert report by Dr. Gimovsky that's about two-and-a-half pages long, and a one-page letter sent to Mr. Kulwicki from a Robert W. Bendon.

And then I was just given today two expert reports of defense experts. One has a cover letter with your name on it, and then the letters are a three-page letter by Richard Martin, and a slightly over one-page letter by Marilyn Segal.

Q Do you know Richard Martin?

A I've had dinner with him on one occasion in Nice, France.

Q What was the occasion for that dinner?

A We were both presenting at a pediatric pulmonary conference at a pediatric pulmonary scientific meeting.

Q Do you maintain a copy of the Martin and Fanteroff text in your library?

A Yes, I do. Along with --

Q Do you believe that Dr. Martin is a well respected neonatologist?

MR. KULWICKI: Objection. You can answer.

THE DEPONENT: Yes. As far as I'm aware, that's correct.

MS. REID: All right.

Q Do you know Marilyn Segal?

A No, I do not.

Q I don't know if -- strike that.

Do you know a physician named T. Murphy Goodwin from the University of Southern California?

A No, that name's not familiar with me and I practiced many years at UCLA.

Q Okay. All right.

What else? We've gone through the records, the expert reports, what else have you had the opportunity to review?

A Okay. I was sent depositions on a number of people. Actually, on one person, I was sent two copies, one of which included the vitae of the individual, that person is Deepak Kumar. The other depositions I was sent was Gloria Maslanka, Judette Louis, Ahmad Razi, Joseph Sciarrota, Graham Ashmead and Cathy Rhodes.

Q Any other materials you've reviewed in this case?

A No, that's it.

Q Were you provided any type of medical records summary in this case?

A No. And I don't look at medical record summaries if I had gotten them.

Q Did you say no, you were not provided with them?

A I was not provided them and I did not -- and I wouldn't look at them if I was. I don't ever -- I make my own opinions based solely, usually on the medical records.

Q Have you maintained the correspondence that you received from the Becker and Mishkind law firm?

A Yeah. There's several things here that -- there's several cover letters here that -- I think three or four.

MS. REID: David, do you have any objection to those being marked as exhibits?

MR. KULWICKI: I don't.

MS. REID: All right.

Q Doctor, and we can do this at the end in the interest of time, but I'd like the -- can you tell me how many there are, just so I know?

A Let me look inside the volumes and see if there's -- I have three here in front of me.

Q You can hand them to the court reporter and we'll have them marked as exhibits.

(Discussion off the record.)

MS. REID: Q Dr. Sherman, were you provided any films as it relates to Shane Maslanka in this case?

A No, I was not.

Q Okay. You have not reviewed any ultrasound films?

A I have not reviewed any ultrasound films or any radiographic materials.

Q All right. In your practice, do you review head ultrasounds of infants?

A Yes.

Q All right. Do you interpret it themselves or do you rely -- interpret them yourself or do you rely on a radiologist to do so?

A On an emergency basis, I interpret them myself, but I always ultimately rely on the report of the pediatric radiologist.

Q All right. A pediatric radiologist would have more expertise than you in interpreting a head

ultrasound?

A I think that might be questioned because I was part of a big study at UCLA in which I did thousands of head ultrasounds on babies under 1500 grams. But that's I think -- I think the pediatric radiologists have respect for my opinions in interpreting head ultrasounds.

Q But you also respect their opinions and rely on their reports, correct?

A I rely upon their reports, that does not mean we might not have a discussion occasionally on differences of opinion.

Q Fair enough. Okay.

Dr. Sherman, how many years have you been doing expert work in the medical/legal field?

A I started in 1983.

Q All right. Why was it that you first got involved in doing expert consulting work?

A At that time, I was on the faculty at the University of California, and one of the charges for faculty members was to render public service, and doing medical/legal reviews was considered public service.

Q Okay. And have you continued to do your

expert consulting work because you believe it's in the public service?

A Yes.

Q All right.

A Otherwise we wouldn't have founded the Center for Perinatal Medicine and Law to try and avoid malpractice litigation against OBs and neonatologists in 2001, I think it was.

Q That's when the center was first developed?

A Yes. It's -- I think it's on my vitae, I think.

Q And is that center still ongoing?

A Well, I think it's probably reduced its activities since I left.

Q Were you the head of -- the head of the center?

A I was the codirector for research.

Q All right. Who was the other codirector?

A William Gilbert, who was a perinatologist, and interestingly, a plaintiff's attorney named Don Fascio.

Q Do you have any involvement currently with the Center for Perinatal Medicine and Law?

A No, I don't.

Q I note in some the articles where you're an author there's a Jan Sherman, RN?

A Yes.

Q Is that your wife?

A Well, she's a Ph.D., and RN, and MNP. That's my wife, that's correct.

Q Okay, just curious.

A She's much smarter than me.

Q You should have that page blown up for her.

What is your understanding, when you do expert consultant work, like we're doing here today, what your role is?

A Well, I never allow defense or plaintiff's attorneys to define a role for me. Okay. All that I do is I look at the records and I render whether I believe that the case is defensible or that they -- that a claim should be prosecuted.

But on both sides of the aisle, I would say maybe 25 percent of the time, I refuse to be involved with the case I'm sent because it either it's not defensible or the plaintiff's claim has no

merit.

Q That's in 25 percent of the cases, you said?

A Yes.

Q Do you believe your role in -- as an expert consultant is to be an advocate for one side or the other?

A No, it's just to be an expert.

Q Okay. Your a member of the American Board of Pediatrics; is that correct?

A That's correct.

Q Are you a member of any other board?

A I have many scientific associations.

Q Okay. But as far as medical boards, is the American Board of Pediatrics the one that --

A And the National Board of Medical Examiners.

Q Okay. Do either of those boards, Dr. Sherman, that you're aware of, have any type of guidelines for serving as an expert witness in a medical malpractice case?

A Well, the American Academy of Pediatrics, it's not as rigorous as ACOGs, but the American Academy of Pediatrics, of which I'm a member, has

published guidelines on providing expert testimony.

Q And you've reviewed them and are familiar with them?

A Yes, I have. In fact, I often cite them in depositions when people provide less than honest and candid and scientifically sound testimony, especially if they're pedestrians.

Q All right. So you agree with those guidelines, I assume?

A Yes, very much so.

Q All right. Is it your intention in this case, Dr. Sherman, to provide any opinions regarding the standard of care for the obstetricians in this case?

A No. But I will provide some opinions of how neonatal injury may have occurred as the consequence of obstetrical care.

Q Right. So you'll talk about the factual scenario related to the obstetrical care but not state that there was or was not a deviation from the standard of care?

A That's correct.

Q All right. Can we agree, Dr. Sherman, that when Gloria Maslanka presented to MetroHealth

Medical Center on July 31, she was in preterm labor?

A Yes, she did seem to be having some contractions.

Q Okay.

A Infrequent but having some.

Q Can we agree that on that date, Gloria Maslanka had a premature rupture of membranes?

A I'm not convinced of that.

Q Why not?

A I couldn't find a result of a ferning examination or a nitrazine test in the -- in the records that would go along with membrane rupture. It could have been that the leaking she experienced was in fact a urination.

Q Well when do you believe Gloria Maslanka ruptured her membranes?

A Perhaps with placement of the intrauterine pressure catheter. But that's an opinion that should be given by an obstetrician not by a neonatologist.

Q All right. So, I mean, do you believe that she had spontaneous rupture of membranes?

A I don't think that that's conclusively proven by the -- by the -- by the medical record. But again, that requires testimony from an obstetrician or perinatologist.

Q Well you made mention in your report about expectant management of the pregnancy, correct?

A Right. Expected management when there is rupture of membranes.

Q All right. So --

A At 27 weeks gestational age.

Q Right. Now, let's assume that expected management, as you described, was used in this case -- that's probably not the appropriate word -- for the rupture of membranes at 27 weeks. Do you have an opinion as to how long delivery in this case could have been delayed?

A I have an opinion based on experience and serving on the obstetrics and maternal-fetal biology study section at the National Institutes of Health, but that is an opinion that actually should be obtained by an obstetrician or a perinatologist rather than myself.

Q All right. So, I mean, ultimately you

would defer to an obstetrician/gynecologist as to how long delivery could have been delayed in this case?

A That is correct.

Q All right. I mean, can we agree though in generalities, that regardless of any interventions that could have been taken or should have been taken, however you want to it put it, that Shane Maslanka was going to be a premature and low birth weight infant?

A No, we can't agree on that.

Q Why not?

A Because we recently had babies that are surviving in our institution that ruptured their membranes at 18 weeks and went to 28 weeks. While if she did have ruptured membranes, and that's an assumption, we don't know that she wouldn't have gone to 34, 35 weeks, a gestational age which would have had far less risk of complication.

Q How is it that you maintain a pregnant woman with rupture of membranes for 10-plus weeks?

A If they don't get infected and the baby has well-being, they can go that long. There's a recent article, if you're interested in this, that

I just printed off for my colleagues from Europe, I think it was the "European Journal of Obstetrics and Gynecology" or something of that nature, so.

So there's -- there's certainly literature to support that as long as there's fetal well-being, you may be able to go quite a time with a premature rupture of membranes. We have two babies in the nursery right now that are living proof.

MR. KULWICKI: My daughter's living proof, three months.

THE DEPONENT: Three months rupture?

MR. KULWICKI: Yeah.

THE DEPONENT: It happens. It's not common but it happens.

MS. REID: All right. That's the point I was going to get to is that --

A Well that's an opinion that you have to get from an obstetrician not from me.

Q Okay. And so you're not going to weigh in to a reasonable degree of medical probability as to how long the delivery could have been delayed in this case?

A No, I'm not going to weigh in on that

point.

Q All right. Can we agree, Dr. Sherman, that complications of prematurity and low birth weight account for the majority of perinatal morbidity and mortality?

A That's kind of a broad question that I'm not -- I'm not quite getting the meaning of.

Q All right. Fair enough.

The delivery of a premature or low birth weight infant can cause morbidity and mortality; we can agree to that?

A We can agree to that.

Q And low birth weight or premature infants have a greater probability of developing morbidity?

A That's generally true in broad terms, yes.

Q Okay.

A But term infants, there's a large number of term infants that have cerebral palsy without any known risk factors as well.

Q Right. But --

A "But" is the -- you know.

Q But -- but infants that were premature or born with, actually, in this case, a very low birth

weight, they're at risk or have a great deal of probability of developing cerebral palsy, as well, correct?

A Babies born at 27, 28 weeks gestation will have some increase risk. However, I have now many, many babies born at 27, 28 weeks that actually send me their graduation announcements from college and send me their wedding announcements. So I have many, many very normal functioning 27-weekers at the present time --

Q All right.

A (Continuing)--provided they got good obstetrical care and good neonatal care.

Q Now, but at 20 -- in general terms, though, a 27-weaker born at 1100 grams is -- has a greater probability of developing cerebral palsy and other potential complications than a term 3,000 gram baby; can we agree upon that?

A We could agree upon that. But I think if you looked at the recent literature, the outcome for babies at 27 to 28 weeks is now considered to be far, far better than it was 10 or even 20 years ago.

Q Right, and I understand that, and that's

why I'm talking in terms of probability related to a full-term normal birth weight infant.

A Well we're not -- we're not doing a neonatal consult here in discussing the pros and cons of delivery with the parents. For any individual baby, you know, there may be a potential for increased risk. But it's our duty to practice good obstetrics and good neonatal medicine and prevent those complications that might lead to increased morbidity.

Q I'm assuming in this case, and perhaps now is a good time, that you are going to have criticisms of the neonatologists and the care provide to Shane Maslanka in the immediate -- no -- in the NICU; is that correct?

A That's correct.

Q All right. Why don't you go through because -- and if you could, in list fashion, tell me what those criticisms are going to be.

A Well, I think the only really cogent way we can do that is to go through -- and I apologize, this record is not Bate stamped, so we'll have to refer to certain aspects of it. But what I'm going to do right now is -- is go -- I'm starting to go

through the progress notes. Okay?

Q All right.

A And the first -- the first thing that I note is that on 8-1, and I really don't know who wrote the admission note, it's not identified as a resident, but it must be a resident because the person subsequently identifies them as such.

And this person actually somehow knew that there was a positive Group B strep culture of less than 10,000 colonies on June 28, and also knew that there was a pelviectasis on the fetal ultrasound that was done on 7-12.

So this person that wrote the admission note obviously had access to records that provide that information, which would have identified this baby as a 27-week gestation based on an EDC of 10-31, 2001.

The person does not mention in that initial examination a murmur. And we go on to then look at Dr. Kumar's note from the 1st which talks about the slightly dilated right kidney, without really defining what the abnormality was. And in his note, he says that the GBS status is unknown, something that is not correct.

And you'll note on this examination of Dr. Kumar, there is no physical examination or description of the infant. He gives only one saline bolus for a low blood pressure of 39 over 19, a low diastolic pressure, and says the baby will receive additional fluid boluses and vasopressors as necessary. So he's concerned about low -- low blood pressure.

Now, he never verifies the examination of the admitting physician who does do an examination. He never discusses that he -- he never -- he never verifies that they've discussed the management, and that they have come to agreement of what the management will be. That's what we call a compliance violation, which ethically needs to be potentially reported to the government accounting office since this was a Medicaid patient.

I think the next deviation from the standard of care besides doing -- not doing a proper physical examination is that on the next day, the 2nd, the same person who evaluated the baby with the physical exam notes that there is -- that the baby has a positive PDA murmur. And right

after that, he indicates that the dopamine was increased from 10 to 12 mics.

Certainly if you have a ductus with large ductal runoff, the baby will be hypotensive. And they record the lowest blood pressures as 34 over 18. They record the average map on that as 26. This would suggest that the baby might have a hemodynamically significant ductus arteriosus.

Now, that would suggest that a echocardiogram should have been ordered on the 2nd to assess the severity of the ductus. And, in fact, on the 3rd, it did reveal left atrial and left ventricular dimensions were increased. Indicating it was a hemodynamically significant ductus that was going left to right at both the foraminal valley and at the ductus ateriosus. And would be certainly treating a ductus that is present and was hemodynamically significant in a 27-weaker, should have been begun on the 2nd.

Now, it was predetermined that they were going to get an ultrasound on the third day after birth without actually looking at the patient and evaluating how the patient was doing.

Now, there's two issues that I'd like to

cover right now, and they have to do with the care of the infant from a respiratory standpoint. You can easily look at the blood gas values on the first and second days. And if you would like, I can go back to those values, those arterial blood gas samples, and you will find that there are a number of samples that have PAO2's above a hundred tore.

And that deviates from the standard of care as outlined in the Manual of Neonatal Care that I mentioned to you, where people will talk about 50 to 70, or 55 to 80 is the partial pressure of oxygen. And when you don't wean like that, you potentially will dilate the ductus more. You potentially will cause pulmonary injury, but most importantly, will increase the risk of retinopathy to the patient.

In addition, there were some PCO2's which were in the twenties, and those PCO2's could be associated with a reduction in cerebral blood flow. Certainly, a large patent ductus will be associated with a reduction in cerebral blood flow as a result of what we call a ductal steal.

That's the reason why the ductus

arteriosus is treated. That's why indomethacin is given prophylactically to avoid intracranial hemorrhage in babies of this gestational age.

And so the blood goes back to the lung rather than going to the cerebral circulation, creates an ischemic event, which then later in the course of the hospital stay can be associated with periventricular leukomalacia due periventricular ischemia.

But there was probably other factors that resulted in periventricular leukomalacia since it appeared at about four weeks of time, suggesting that timing was around the time of birth. And those factors include the fact that the baby had fetal bradycardia. Consideration was given to potentially delivering the baby by cesarean section. Afterwards, the baby persisted in having decelerations up until the time of delivery.

And if we look at the fetal monitoring strip, the very last two panels on it, we'll see that at the end of the fetal monitoring strip -- and I'll identify the panels for you. Starting at about 6:31, there appears like a bradycardia starts to occur. And through 6:35, 6:38, the fetal heart

rate is about 90 a minute. And then continues to be 90 or less than 90 per minute until the delivery after 6:45. So that's a prolonged period of bradycardia.

When the baby is resuscitated, the baby will get a reperfusion injury of the brain, and along with high oxygen values in the intraarterial blood, the baby will also get a reoxygenation injury to the brain.

Both of those can result in problems that could ultimately end with a Grade 3 interventricular hemorrhage and/or periventricular leukomalacia. And those two complications can be interlinked to some extent, as well.

If we then look at Dr. Kumar's note from August 2, we will find that again there is no physical examination of this infant. There actually is no mention of a murmur consistent with a patent ductus ateriosus.

He does note the sodium of 150 and a chloride of 117. But in fact, the sodium was much higher than that, and the chloride was much higher than that. And there is a -- the fluids that were ordered for this baby had no sodium in them, they

only had calcium in them.

The only sodium source that the baby received was the bolus of saline for the hypotension on 1, August. So how did the baby -- and this was a fairly large baby -- how did this baby get such high sodiums? High sodiums by Dr. Coulter have been associated with interventricular hemorrhage.

How this undoubtedly occurred is that a procedure was done, which I have never experienced in 30 years of doing neonatology, and that is doing an amnioinfusion with saline on a 27-week gestation fetus.

Now, as the baby had fetal bradycardias, the baby would most likely gasp and certainly would have inhaled or aspirated saline into the lungs. The baby would also have fetal swallowing, which would load the baby with sodium.

So the only firm explanation for the hypernatremia, which was -- which very likely could have been associated with brain injury came from the amnioinfusion with the saline.

Again, this was not recognized as the cause by Dr. Kumar in his discussion. And again,

we have a very cryptic discussion here of the baby's status, with no discussion or confirmation of the physical examination, no plan to explore the presence of and significance of a ductal murmur on the 2nd of August.

And certainly, in my opinion, the ductus was hemodynamically significant, the echocardiogram confirms that. And it was probably a major need -- was a major cause of for the need of assisted ventilation in this infant.

On the day that a ultrasound was obtained, which is the 3rd again this resident says that the baby's on 12 mics of dopamine. In other words, the diastolic pressures were as low as 16. That is fairly indicative of a diastolic runoff associated with a significant PDA.

The heart rate was up as high as 180. Again, associated with increased volume overload on the left ventricle and associated with the left ventricular dilatation.

The baby is noted again to have a Grade 2 over 6 murmur, consistent with a patent ductus ateriosus. Again, the resident notes hypernatremia in the form of a sodium of 154.

(Whereupon a short recess was taken.)

THE DEPONENT: Okay, let me go back just restating that this baby at this time had low diastolic pressures, a diastolic pressure as low as 16, an elevated heart rate of 180, was requiring 12 mics of dopamine to provide cardiovascular support.

The baby had a base deficit, on the note by the resident, of minus 7; a metabolic acidosis associated with patent ductus ateriosus. There was a patent ductus murmur present. And the baby also had continuing hypernatremia with a sodium of 154 and a chloride of 121, which also contributes to metabolic acidosis.

Now, on this date of the 3rd, you will -- it is stated in the impression that there was a Grade 2 IVH, that is not exactly -- that's not correct, based on the text of the report. There certainly was a subependymal hemorrhage or germinal matrix hemorrhage present, but -- and that hemorrhage was said to be, perhaps, not occurring at that time.

The baby had a slightly cystic characteristic to that germinal matrix hemorrhage.

There was no description of clot within the ventricle. And there was no description of the ventricle being dilated in any way.

So it was an assumption that there could be a Grade 2 hemorrhage. It is difficult to understand why there would be a Grade 2 hemorrhage for the following reasons: If there was a clotted hematoma in the germinal matrix, why would there not have been clotted blood in the ventricle.

Moreover, the next day, coagulation studies were performed. I believe that the PT was 13, the upper limits of normal was 12.9. The PTT was 60, their normal level was 32. But I'm certain that that specimen was drawn from umbilical arterial line, and the heparin in the umbilical arterial line will interfere with the PTT value.

Additionally, the fibrinogen was normal on the 4th. And the -- there was no evidence of a coagulopathy based on fibrin degradation products or D-dimers. Also, the platelet count was normal. Therefore, there was very little indication from the medical record that there was ongoing bleeding, which would exclude the use of indomethacin.

And, in fact, on the 3rd, there was no

coagulation studies ordered that would be required if there was bleeding, so that those coagulation factors could be replaced and further bleeding minimized.

So that in toto is a deviation from the standard of care from the standpoint of not trying to prevent bleeding if they believed it was present. However, it's -- the report is very cryptic as to whether there is in fact Grade 2 hemorrhage present, and, in fact, it's not supported by other facts in the medical record.

There is the suggestion that they would not use indomethacin but try to manage with fluid restriction because of interventricular hemorrhage. But, in fact, the literature by Ment and others -- M-E-N-T -- would suggest that indomethacin in fact is used to prevent interventricular hemorrhage, not cause it.

And there's nothing to support in the literature, in the absence of any active bleeding, and the physicians in this case had no indication of any active bleeding, there was no evidence of glitter formation or Doppler evidence of active bleeding in the ventricle that's described in the

report of the 3rd.

Now, probably more worrisome than anything is that there is no note by Dr. Kumar on the 3rd, at least in the records that I have. So I would ask who was managing this patient and who was making decisions of a critical nature since the patent ductus ateriosus, if it's not taken care of on the 2nd and the 3rd, certainly increased the risk of intracranial hemorrhage, particularly interventricular hemorrhage, and a patent ductus ateriosus also increases the risk of worsening chronic lung disease, both of which occurred in this case.

The first note that does appear by Dr. Kumar is on the 4th, and it actually states that -- it mentions nothing in the note on the 4th, other than at the beginning of the note, it talks about last night there was a base deficit of minus 10.7; that the heart rate and blood pressure remain normal.

However, that may not be the case if one looks at the vital signs. And one cannot assume that when a baby is on a dopamine of 12 mics per kilo per minute, as he puts in his note.

There he states that there is a Grade 2 over 6 diastolic murmur but he doesn't provide any more information about his own examination to determine whether this is a hemodynamically significant ductus, such as visible axillary pulses, an active precordium, a bounding dorsales pedis pulse, or other physical characteristics that would suggest that a hemodynamically significant ductus was present.

In his note he still mentions that the sodium is 149. And in fact, in this time frame, actually -- in this time frame actually started a sterile water drip into the stomach to try and treat the hypernatremia; therefore, they considered it an extremely dangerous situation to have hypernatremia because sterile water drips are themselves potentially associated with intestinal perforation.

In his note of the 4th, he says, and I quote: A head ultrasound last evening showed a Grade 2 -- a Grade 2 IVH, and hence -- and hence, despite a cardiac echo showing no ductal patent lesion with a patent ductus, treatment with indomethacin was deferred for the time being.

And in fact, that might not be what a prudent neonatologist under similar circumstances would have concluded, and would have performed additional studies to confirm whether the baby could or could not be treated with indomethacin.

Moreover, since he mentions that this head ultrasound was done last evening, it actually was done at 4:30 in the afternoon, I actually would have to conclude that he did not examine nor know anything about the head ultrasound when it was done on the 3rd. And no note by him reflects his management of the patient on the 3rd.

We can go on. Ultimately, we can go on with other aspects of the care. If this ductus was hemodynamically significant and there was the concern of bleeding, we don't know why they waited from the 3rd to the 4th to do coagulation studies. That's a significant delay in determining the coagulation status of the patient.

The patient went on to continue to have a patent ductus ateriosus. Patent ductus ateriosus, if left untreated, is associated with worsening of interventricular hemorrhage. This hemorrhage became a Grade 3 hemorrhage, it's also associated

cerebral ischemia, which can lead to periventricular leukomalacia, and it can also result in pulmonary hemorrhage.

And I quote from later in the record where Dr. Kumar states -- and I'll get the exact reference -- after a pulmonary hemorrhage had occurred, he says, on the 7th of August: We will consult the ENT service for possible bronchoscopy to identify possible cause of bloody secretions.

Bloody secretions are a classic finding associated with patent ductus ateriosus, pulmonary edema, which was probably a major factor even on the day one, day two of life, and went untreated.

Also higher up in that note, he says: We're -- the baby is also receiving fresh frozen plasma because of a PT of 14, which isn't that prolonged; an INR of 1.3, and a PTT of 81.

Again, the PTT of 81 would actually require thrombin time because PTTs would not be reliable on a sample drawn from an arterial catheter with heparin in it.

The baby goes on -- if the baby had a significant ductus that was leading to pulmonary hemorrhage resulting in a coagulopathy, in fact,

the baby, probably based on what we were seeing, extended the hemorrhage, and it probably became a Grade 3 somewhere between the 6th, 8th and 9th.

And it very causally could be related to hypernatremia to the patent ductus arteriosus. And the events associated with fetal heart rate decelerations followed by reperfusion, reoxygenation injury after birth.

The baby, if the baby was that ill, and it wasn't that ill because the baby was not receiving high-level ventilator support, and was not on high oxygen, could have easily had a surgical ligation of the ductus to take it out of the realm of a problem for this infant.

If they were concerned that there was an interventricular hemorrhage, that would preclude the use of indomethacin, but that conclusion is less than obvious from the medical records.

Again, on the 8th, it says he has been scheduled to have an ENT evaluation and possible bronchoscopy regarding the cause of the bloody secretions, but now he was -- he has extubated and is doing well. So again, a conflict in terms, a conflict of actually looking and understanding

what's going on with this patient.

I will note that during all Dr. Kumar's typewritten notes, there is not one of them, one -- not one note that describes a physical examination with vital signs; what's happening in the ear, nose and throat; what the chest sounds are like.

Finally, we see that he's taken the note of the resident and he puts down on the 9th his abdominal examination is soft, nondistended, nontender -- well -- but urine output is falling.

And we go on to continue to have problems for an extended period of time, another ten days after the 9th. And finally on the 19th, a ductal ligation is performed. And I think any prudent neonatologist would ask why it took so long.

Now let us address the issue of the assumption that this baby had some type of early onset infection. And I will --

MS. REID: Q Doctor, let me stop you there. I mean, when you talk about the early onset infection, I'm assuming you're going to respond to Dr. Martin's report?

A In part. But I'm also going to look at the clinical data in the record, okay, in both the

maternal record and in the baby's record, okay, and see if that's a reasonable assumption based on the fact that many people consider me an expert in the area of early onset neonatal infection and in maternal chorioamnionitis.

Do you want me to proceed?

Q Yeah, go ahead.

A So this lady's -- when she presented, the fetus had a heart rate of 150. There was no indication that it was an unhealthy fetus. They described heart rate accelerations. Babies who are infected typically have an elevated heart rate, typically above 160. And the heart rate has reduced variability, you usually don't see heart rate accelerations.

In addition to that, the obstetrical records very clearly state that the abdominal examination reveals a nontender uterus. The amniotic fluid is described as clear. There is no indication that there's foul smelling amniotic fluid. And there was clearly no abruption, which can be associated with infection.

Then you go to the baby. The baby, despite what I would consider a less-than-optimal

intrapartum course, had reasonable APGAR scores for a baby of 27 weeks gestation. And babies who have serious life-threatening infections at the time of birth have very low APGAR scores and often require immediate intubation.

This mother, although she was GBS positive, did not receive any penicillin, an order was written and then canceled. And so she received no intrapartum antibiotics; therefore, if the baby was bacteremic, you would more readily obtain a positive blood culture.

Also there is no discussion here. Oftentimes congenital bacterial pneumonia goes along with bacteremia at birth, and there was no tracheal aspirate obtained to look for bacteria. The lungs should be sterile at birth, and in fact, the lungs showed clearing according to the descriptions of the radiographs in the chart, indicating that the lungs looked more congestant -- congested, again, consistent with congestive heart failure from a patent ductus ateriosus.

The whiteout lungs were undoubtedly a complication of the saline infusion that occurred. The interamniotic infusion of saline, which I've

never seen before in a baby of 27 weeks gestation, but could have, as it did in this case, disastrous consequences for the brain and the lung.

The baby had a white count of around 4 -- or around 4 to 5,000 at the time of birth, but had 28 pollys, an adequate absolute neutrophil count and either zero to one band. This would mean that the baby had a very low immature to total neutrophil ratio, it did not rise to any appreciable extent. One would expect the white count to fall further and the IAQ ratio to increase if this baby had a life-threatening infection.

So there is no indication that the white count here reflects, other than the fact that the father of this baby was African-American, and we know and is published well in the literature by Bob Christiansen and others -- that's spelled: S-E-N, Christiansen, Robert -- that African-American babies can have, at birth, normal low white blood cell counts.

It is stated by Dr. Martin that this baby had neutropenia. Neutropenia in an African-American baby can be normal, particularly in the context of the lack of a falling white

count, a rise in the immature total neutrophil ratio, a negative blood culture, and a host of other factors in the mother that did not suggest chorioamnionitis.

There is no indication, okay, from the description of the placenta that this baby had what we call funisitis, an inflammation of the umbilical cord which has to be associated with serious neonatal infection and a subsequent and ultimate adverse neurologic outcome.

It -- it -- the metabolic acidosis and the need for pressor support are very adequately explained by the presence of a hemodynamically significant ductus.

And the statement made by Dr. Martin regarding the neutropenia and the fact that PVL would be caused by intrauterine infection are absolutely not supported by the facts in this case.

And I will work tirelessly with Mr. Kulwicki in this regard before and at the time of trial, since I really truly am an expert in this field.

So the assumption that this baby had an infection, the premise is completely false. The

baby did subsequently have a bacteremia with coagulates negative staph, that was after the baby received three days of dexamethasone.

In the middle part of 2001, it was well known that the administration of postnatal dexamethasone was largely abandoned as a way to get babies off assisted ventilation because there was a significant increase risk of producing cerebral palsy long term in those particular infants.

The administration of dexamethasone also could have interfered with host offenses that led to the baby getting coagulate negative staphylococcal infection, something that we know now is a cause of long-term morbidity. Recent papers have indicated that nosocomial infections are associated with an increase risk of cerebral palsy.

Finally, there are many things that could have been undertaken as far as the neonatal care of this infant which could have resulted in a far different outcome. But the real thing here that could have markedly affected the outcome, and which is most disturbing to me because this case would have been referred to an internal QA, or quality

assurance examination, was the delivery of this baby without knowledge of the 7-12 ultrasound report.

That dates the baby to exactly the same gestational age obtained by Dr. Kumar in his physical examination of the infant. There was no ultrasound done to evaluate whether there was rupture of membranes or what the fetal size was or what the maturity of the infant was. There was no knowledge, at least as far as I can tell from the obstetrical record, of that 7-12 ultrasound or the Group B strep results.

And it's what we call a system failure. In other words, there was a lack of transfer of outpatient information critical for the proper care of this fetus and the fetus's mother to the doctors providing the care.

And that is why I say either expected management or management that would involve tocolysis and the administration of betamethasone, which would decrease significantly the incidence of the ductus arteriosus, interventricular hemorrhage, necrotizing enterocolitis, and perhaps other morbidities was not offered to this fetus and was

detrimental to the baby's ultimate outcome.

So this was in toto, if reviewed in most QA settings in which I've dealt with for the past 30 years, this would have been felt to be a preventable morbidity in this infant, that is more likely than not, and meets the test of deviations of the standard of care, resulted in serious injury to this fetus and to the newborn afterwards.

Q Are you through, Dr. Sherman?

A Probably not. But I will give -- I'm getting tired of talking.

Q Well -- I mean, you've given me a synopsis, so to speak, of your opinions in this case; is that fair to say?

A That's correct.

Q All right. I mean, we may explore some more of the basis of those opinions as we move on. But if I take what you've just listed for me, would I be correct in saying that summarizes all of your opinions in this case?

A I wouldn't say that it summarizes all of my opinions. We would probably have to go through page by page through the laboratory studies, the X-rays, the progress notes.

There is one piece of information, because it is difficult to provide large volumes of records, Mr. Kulwicki has not provided me with the nursing notes. And I need to look at those nursing notes to actually confirm whether Dr. Kumar did bedside examinations of the infant, which he did not record in his progress notes. And only by looking at the nursing records will I hope to find that they said Dr. Kumar examined the infant.

Q All right. Anything else from the nursing notes you feel like you need to take a look at?

A Well, certainly in the period of time through the first -- through the ductal ligation and shortly thereafter, during the time when they gave dexamethasone and when they extubated the baby, and then they were -- had to reintubate the baby because of the coagulates negative staph bacteremia, it will be useful to look at how timely they were in the recognition of the problems that affected this infant.

Q Well, what information do you need to explore that?

A I'll just look at the nurses' notes.

Q Okay. Have you requested those nurses' notes from Mr. Kulwicki?

A We have discussed it but we thought at this time that I have more than enough information from the physician records to recognize that deviations of the standard of care had occurred, and that they were causal in injury to the baby. The nurses' notes will be only confirmatory to some of the statements I've made.

Q Are there any other portions of the medical record that were not sent to you?

A Well one portion of medical record that has not been sent to me is the follow-up care. And certainly -- certainly, it's nice to look at the follow-up characteristics of the infant and translate it back to the neuroimaging of the baby.

However, I have two infants that I'm currently caring for, one is a surviving twin of a dead twin who has very severe periventricular leukomalacia. And another baby who had congenital cytomegalo virus infection with interventricular hemorrhage and severe periventricular eschemia with severe PVL at the present time. And those babies, our anticipation, since we have rehabilitation

already involved, will be severe.

My anticipation in this case, is that this baby will need considerable rehabilitative services. But I will really need to correlate current status by a neurologist or psychologist or both with the clinical record from the intrapartum period in the immediate postneonatal period.

Q So as far as --

A It won't change my opinions, if that's what you --

Q No, no. I just want to make sure I understand.

You haven't seen any records then after Shane Maslanka was discharged from Metro on October 15 of '01?

A That's correct.

Q All right. As it relates to the Metro record from 8-1-01 through 10-15-01, --

A Right.

Q (Continuing)--you mentioned you were not provided nursing notes?

A Right.

Q Were there any other portions of that record that weren't sent to you?

A Not to my knowledge. I have the laboratory studies and I have the radiographic studies and they appear to be quite complete, as well as the physicians notes, within the -- there are consultant notes, etc., that are provided, you know, among those records.

Q They have the physicians' orders?

A A physicians' orders also appear to be complete, that's how I know the dates and timings of the administration of dexamethasone, fresh frozen plasma, etc.

Q So as far as you know, the only thing that was not sent to you from that confinement of Shane Maslanka at Metro were the nurses' notes?

A That's correct. And that was by agreement early on between Mr. Kulwicki and myself because -- because the records were already significant in their size.

MS. REID: David, do we have a time constraint here?

MR. KULWICKI: I need to leave at 4:30 Central Time, so 5:30 your time.

MS. REID: All right. I'm going to do the best I can to get through this but --

MR. KULWICKI: Approximately 45 minutes.

MS. REID: Yeah. I may or may not get through, I'll just let that out there.

MR. KULWICKI: Okay.

MS. REID: Q Doctor, I'm going to start with your opinions and kind of go backwards from what you were -- the narrative you gave me previously.

I want to start with this issue of betamethasone. You're going to provided a standard of care opinion as to whether or not betamethasone should have been administered?

A No. My opinion only relates to the fact that it would be preventative in the causation of some of the complications that the baby encountered.

Q Okay. Now I want to talk about that in -- kind of in a step-by-step process. It's your opinion, and I'm reading from your report, that the administration of betamethasone would have either -- would have resulted in absence or reduced incidence and/or severity of intracranial hemorrhage and periventricular leukomalacia, correct?

A That's correct.

Q All right. Let's talk about the intracranial hemorrhage first. What is your opinion -- and the reason why I want -- I just want to be more -- get more specific as to the, you know, how strong your opinions are as to each of these entities.

Is it your opinion to a reasonable degree of medical probability that had betamethasone been administered, Shane Maslanka would not have suffered intracranial hemorrhage?

A He would have either not suffered it at all or it would have been reduced. And that's to a reasonable degree of medical probability.

Q All right. Well, can you be any more specific as to whether it -- it would have been absent, would have been reduced, to what degree it would have been reduced, or is that something you can't be more specific about?

A That's something you can't be specific about. There's a wealth of literature out there that would indicate that it would be reduced. I don't think you know in any particular baby where there's multiple injuries that occurred in the intrapartum and postnatal period that were due to

deviations from the standard of care. I don't think that it's easy to separate and do -- find nuances of what the outcomes would have been.

Q When do you believe the interventricular hemorrhage in this case began?

A Well, I'm not -- I can't be convinced, and we'll see, there will be a neuroradiology expert that will review the ultrasounds, according to my discussions with Mr. Kulwicki. But certainly, I believe somewhere between the -- somewhere the 6th to 9th, there may have been an extension of bleeding to a Grade 3 hemorrhage.

There could have been bleeding, perhaps, even on the 4th. But since we don't have any imaging to follow-up the ultrasound of the 3rd, despite the high risk situation that existed, we're not going to know.

Q Well, you've read the report of Dr. Marilyn Segal; is that correct?

A Yes, I have.

Q Do you have any reason or basis to agree or disagree with her opinions regarding the timing of the bleed?

MR. KULWICKI: Objection. You can answer.

THE DEPONENT: Well, very simply, her conclusions don't fit with other aspects of the medical record, and we've talked about that before with regards to the presence of coagulopathy. And I think -- I think there will be an expert that will render an opinion --

MS. REID: Q Well, I mean, there is no expert at this point in time and --

A Well, but the thing is if it comes to that, I'll look at the films myself and make a conclusion, okay, and I'm quite capable of doing that. Okay.

But at this time for you to make the assumption that there was a Grade 2 interventricular -- intraventricular hemorrhage that was bilateral on the 3rd is not supported by the report that's in the medical record.

Q So you don't even believe there was a interventricular bleed as of August 3?

A I don't know whether there was or wasn't. All that I'm telling you is that they're using the term Grade 1 to Grade 2 -- is an iffy term. That all that means is that probably we need to look again to see what is going on.

And in fact, most radiologists, that I'm aware of, give you a timing of when they'd like to look again to confirm whether there is or isn't a Grade 2 hemorrhage present. That was not the case here.

Q Well, you're not going to testify as to the standard of care of a radiologist in this case, right?

A No, I'm not. But you'll have to deal with that fact.

MR. KULWICKI: Chris, let's go off the record for a second.

(Discussion off the record.)

MS. REID: Q Dr. Sherman, before we took our break, we were talking about Dr. Segal's report, and you had mentioned to me that her opinion doesn't fit the clinical picture in this case; is that what you said?

A Yes.

Q Tell me what you mean by that.

A Well, the -- one would have anticipated, if you had clotted blood in the sub -- in the general matrix, if you had an interventricular hemorrhage, you would have had clotted blood within

the ventricle, and there's no description of clot by the radiologist at MetroHealth.

In addition to that, if you have a serious intraventricular hemorrhage, oftentimes it will be manifest by alterations that are significant in the prothrombin time, the INR, and in the fibrinogen.

The PT and INR will be significantly prolonged, the fibrinogen may be abnormally low, and the platelet count may be abnormally low. And in this instance, none of those things had occurred, so making the assumption that -- that there was some type of serious bleeding going on is simply not demonstrated by the laboratory facts. And there's no mention in the clinical record whatsoever of pulmonary hemorrhage, skin bleeding, or any other type of disorder that would be associated with bleeding.

So in addition to that, the baby has not had seizures, the baby's not obtunded, the baby's not making abnormal movements, the baby's not having an encephalopathy that's described by the caregivers. So none of the things that we might have associated with an interventricular hemorrhage

are not substantiated in the clinical laboratory records.

Q All right. And I just wanted to make sure I'm understanding this.

You understand that it's Dr. Segal's opinion that this hemorrhage occurred in utero, correct?

A Well, I guess under that circumstance, since you're making that assumption, then for sure the blood should have been clotted in the ventricle since you've made that -- that -- that comment.

One would assume that if there's clot and there's a cystic change in the subependymal and the germinal matrix hematoma, that there should have also been clotted blood and a blood clot within the ventricle. And she -- there's no mention of that on the record.

Now, let me -- let me read very closely because this was just given to me earlier today about her opinions. It says that the blood is several days old. Okay. This was done on the 3rd. Okay. The mother was in labor -- or I'm not -- I really can't say whether she was or wasn't in labor really, that's a conclusion of the

obstetrician.

But she was -- she was -- she was presenting in the intrapartum period for a period of time and there was stress placed upon her by the administration of Pitocin, by the amnioinfusion, etc., etc. So there would be ample opportunity, with the decelerations, for the baby to have a hemorrhage related to the intrapartum care that was given by the obstetricians.

And so it may be that it is several days old but caused by the care delivered by the obstetricians. But in no place does she clearly state, that I can say here, other than she says that the cystic change and the perventricular brain tissue supports an intrauterine injury. Okay.

Well as you're probably well aware, Grade 1 intracranial hemorrhages or subependymal hematomas carry a 90 percent or better chance of being totally neurologically normal later on. And so if that was the thing that occurred, the outcome for the baby would still be -- the prognosis would still be excellent. And you can't exclude the fact that the injury was not caused by the intrapartum obstetrical care.

Q We're not communicating here. And I'm obviously reading Dr. Segal's report differently. So let me ask it this way: Let's assume for the purposes of this question that the hemorrhages occurred in utero.

A Right.

Q If we assume that, would you still expect to see alterations in the coagulation studies during the initial neonatal period?

A If the -- if the bleeding -- you know, because she has this cystic change, appears 10 to 14 days, you know, before, and you're more likely to have coagulation abnormalities if you have an intraventricular hemorrhage: I-N-T-R-A. Okay. Subependymal bleeds, in my experience, rarely cause coagulopathy problems, okay, as opposed to intraventricular hemorrhages because the interventricular hemorrhages release much more brain thromboplastin, which sets off the coagulopathy cascade. So you've answered your own question.

If -- if, as a hypothetical, the subependymal hemorrhages that occurred 10 to 14 days before when there may have been no

coagulopathy associated with them, okay, and if there had been, chances are, it would have recovered by the time the baby was born.

But those -- again, those may require conclusions on the part of an obstetrician, not a neonatologist.

Q Doctor, you stated earlier that in your opinion betamethasone would have either eliminated or reduced the incidence of the intracranial hemorrhage. Are you aware of whether any double-blind studies have been done and reported in the literature to support that position?

A The -- there are a variety of descriptive studies that have done just that. And in fact, the National Institutes of Health felt so strongly about this issue that they actually held a national conference and actually put out a consensus statement to encourage the administration of betamethasone in just this type of situation.

So I think when you have the National Institutes of Health and a panel of quotes, experts, behind the use of betamethasone, I think -- I hope you can have some expert that is maybe bigger than God.

Q When was this consensus statement published by the National Institutes of Health; if you know?

A It's a monograph, and I forget the exact year but -- I don't recollect, but it was -- I'm pretty sure it was before the birth of this baby.

Q And they put together a consensus stating -- statement setting forth when and under what circumstances you should administer betamethasone?

A That's my recollection that they strongly encourage the use of betamethasone. And then there was people that tried to advocate that hospitals undertake this.

This was, I remember, in the 19 -- 1996, 1998 period of time when I was at Texas Children's Hospital that people were advocating the antenatal use -- increasing the antenatal use of betamethasone to prevent neonatal complications in just this context. And we're in the process of educating family practitioners and obstetricians who cared for pregnant woman.

Q Does this literature that you describe discuss the association between betamethasone and reduced incidence of PVL, as well?

A I think that was among the complications that they thought could be reduced. Okay. And there's ever increasing literature over that time to the present time that would suggest that's the case.

But again, those would be questions that I think would be best posed to an obstetrician or perinatologist, he's probably the person that will answer those questions. I think it will be very difficult, given the literature, for anyone to refute the benefits of betamethasone in reducing the neonatal morbidity in extremely low birth weight infants.

Q Can we agree, though, that the literature or the scientific studies are less supportive of the relationship between betamethasone and reduced incidence of PVL?

A I think that's a question that is best posed to an obstetrician or perinatologist, you know, because they're the ones that are administering it to reduce that complication. And PVL is a complex pathophysiologic disease.

Q Absolutely. All right.

So you're not -- you don't feel

comfortable addressing that --

A Well --

Q (Continuing)--question as a neonatologist?

A If -- if -- well -- when I meet with a mother who might be in preterm labor or at 27 weeks, and there is no evidence of infection, as there was in this case, I would strongly encourage her to take betamethasone.

I did that consult just two nights ago. And I also encouraged her to give betamethasone a time to work to reduce those complications. And she were -- and I encouraged her to do that by receiving tocolysis until a 48-hour period had taken place after she received the drug. So -- and that's pretty standard fair of what neonatologists doing intrapartum or antenatal consults would say to a mother of a potential 27-week gestation baby.

Q All right. I understand that. I think my question was different, more on an academic standpoint as to the proven efficacy of betamethasone and the prevention of PVL.

A Well --

Q I mean, those are two different --

A Well, I think that -- I think there is reasonable evidence to say that it reduces PVL because if it reduces the patent ductus ateriosus, okay, or it reduces inflammation from chorioamnionitis, then it would reduce PVL.

Because if you don't have ductal runoff, you're not going to have hypotension in the cerebrovascular. If you don't have a rigorous cytokine response related to some type of subtle infection of the utero placental unit then you're going to reduce the occurrence of PVL.

And there's an article about antenatal steroids reducing those kinds of complications, I believe it's in "Obstetrics and Gynecology" in 2000.

Q Could you be any more specific about that article?

A I'm not your expert. You'll have to have your expert tell you which one.

Q I won't get into that battle with you again because it sounds like it's not a winning one.

A You're right there.

Q Well, it's not going to be a winning one

for you either, so.

A Don't bet on it.

MS. REID: Let's talk about -- well, David, I'm going to get into the Doctor's opinions regarding the treatment of the PDA.

MR. KULWICKI: Okay.

MS. REID: If you want me to get started, I will. If you want me to stop, we can stop. It's up to you. I won't be done in ten minutes.

MR. KULWICKI: Understood. Understood. Maybe for purposes of making it contextual, maybe now is a good time to break. And what we can do, I think we ought to try to reschedule this as quickly as we can so everybody's fresh and we don't have to reinvent the wheel.

I don't know if you have your calendar with you or your schedule or...

THE DEPONENT: I'm pretty filled up because from the 16th of August to the 31st, I'm the attending at St. John's.

MR. KULWICKI: Okay.

THE DEPONENT: Starting next week, I'm the attending at Memorial Medical Center. I have another deposition on the 8th. And there may be an

opportunity in the afternoon to perhaps do something 9th, 10th, 11th, but I could be called away for an emergency to the level 2 nursery.

MR. KULWICKI: Chris, how does your 9th, 10th or 11th look?

MS. REID: I'm starting a trial on the 9th as we speak right now, so, you know. Whether it goes or not, we won't know. You know how that goes, but.

MR. KULWICKI: And then, Doctor, you're off at the end of -- beginning of September?

THE DEPONENT: Beginning of September, I think I will have some open dates --

MR. KULWICKI: Okay.

THE DEPONENT: (Continuing)--in September.

MR. KULWICKI: Well, why don't we do this. Why don't we tentatively schedule something for the 9th, 10th or 11th. Chris, if you go forward, obviously this doesn't. And we will confirm this and get back with everyone hopefully tomorrow or early next week. Does that sound okay?

MS. REID: Sounds like a plan.

MR. KULWICKI: Okay. All right. We'll see you, Chris.

MS. GUDGEL: This is the Court Reporter, I need to find out what size you like your transcript, Ms. Reid.

MS. REID: A mini script, please.

MS. GUDGEL: And you said you wanted an E-Tran, earlier?

MS. REID: Yeah. Could you do that?

MS. GUDGEL: Yes. And is regular delivery good?

MS. REID: Yeah. How long is that?

MS. GUDGEL: Within two weeks.

MS. REID: That's fine.

MR. BALDWIN: This is the Videographer. Do you like VHS, DVD, CD?

MS. REID: DVD, please.

MR. BALDWIN: DVD, all right.

MS. GUDGEL: And what size do you like your transcript?

MR. KULWICKI: Just regular transcript.

DEPOSITION TO BE CONTINUED.

I, WILLIAM PARKER SHERMAN, M.D., having read the above and foregoing, find the same to be true and correct with the following additions and/or corrections, if any:

Page_____Line_____Change:

Page_____Line_____Change:

Page_____Line_____Change:

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WILLIAM PARKER SHERMAN, M.D. (8/3/06) DATE

STATE OF ILLINOIS)
) SS
COUNTY OF MENARD)

C E R T I F I C A T E

I, Tricia L. Gudgel, a Notary Public and Certified Shorthand Reporter in and for said County and State do hereby certify that the Deponent herein, MICHAEL PARKER SHERMAN, M.D. prior to the taking of the foregoing deposition, and on the 3rd of August A.D., 2006, was by me duly sworn to testify to the truth, the whole truth and nothing but the truth in the cause aforesaid; that the said deposition was on that date taken down in shorthand by me and afterwards transcribed, and that the attached transcript contains a true and accurate translation of my shorthand notes referred to.

Given under my hand and seal this 14th day of August A.D., 2006.

Notary Public and
Certified Shorthand Reporter
License No. 084-004053