Dr. Steven Klein

TRIAL #18

THE STATE OF OHIO,)
) SS: JOHN E. CORRIGAN, J.
COUNTY OF CUYAHOGA.)

IN THE COURT OF COMMON PLEAS

(CIVIL DIVISION)

Doc. 239
part I of II

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ERIC HAWKINS, a minor, etc., et al.

PLAINTIFFS,

VS.) CASE NO. 957170

BEDFORD MUNICIPAL HOSPITAL et al.,

DEFENDANT.

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TRANSCRIPT OF PROCEEDINGS
MONDAY, DECEMBER 1, 1986

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APPEARANCES:

On behalf of the Plaintiffs:

Weisman, Goldberg, Weisman & Kaufman, by
Fred Weisman, Esq., and
Richard J. Berris, Esq.

On behalf of the Defendant, Bedford Municipal Hospital:

Weston, Hurd, Fallon, Paisley & Howley, by
C. Reynolds Keller, Jr., Esq.

On behalf of the Defendant, Bedford Municipal Hospital:

Kitchen, Messner & Deery, by
Steve W. Albert, Esq.

APPEARANCES, CONTINUED:

On behalf of the Defendant, Felino P. Reyes M.D.:

McNeal & Schick, by
Harley J. McNeal, Esq.

On behalf of the Defendant, David Dongwook Choi, M.D.:

Gallagher, Sharp, Fulton & Norman, by
George W. Stuhldreher, Esq.

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MONDAY, DECEMBER 1, 1986

MORNING SESSION

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THE COURT: You may call your next witness.

MR. ALBERT: We would like to call, on behalf of Bedford Hospital, Dr. Steven Klein, if the Court wishes.

THE COURT: Fine,

THEREUPON, the Defendant, Community Hospital of Bedford, to further maintain the issues on its part to be maintained, called as a witness, DR. STEVEN M, KLEIN, who, being first: duly sworn, was examined and testified as follows:

DIRECT EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. ALBERT:

Q Could you state your full name for the record, please?

A Steven M. Klein, K-l-e-i-n.

Q And your occupation?

A I'm a physician.

Q And your professional address, please?

A 26900 Cedar Road, That's in Beachwood, Ohio, 44142.

Q Dr. Klein, would you outline, please, for the jury your educational background and training up until the present time starting with college?

A I went to Washington and Jefferson College in Washington, Pennsylvania for four years.

Then I went to the Ohio State Medical School for another four years.

After that I did an internship in medicine at the Ohio State University and then in 1970 I went to the hospital of the University of Pennslyvania in Philadelphia where, for the next four years, I did a residency in obstetrics and gynecology,

One of those years was spent in doing research, primarily in fertility and endocrinologic work.

Then in 1974 I came to Cleveland as a private obstetrician and gynecologist, and until the present time, that's what I have been

doing, private obstetrics and gynecology.

Q What hospitals, if any, do you hold privileges to practice medicine at at the present time?

A Well, Mount Sinai Hospital of Cleveland is my primary hospital, I take most of my patients there,

I am also associated with University Hospital, with Hillcrest Hospital and with Suburban Community Hospital.

Q What societies and professional organizations, if any, do you belong to?

A Well, I belong to the American Medical Association and the Ohio State Medical Association. I belong to the American College of Obstetrics and Gynecology.

I belong to the American Fertility Society. I belong to the Society of Reproductive Surgeons, I belong to the Cleveland Obstetrical Society.

Q What is the American College of Obstetrics and Gynecology?

A Well, the American College is a group of individuals who are trained in obstetrics and gynecology, and most of whom have passed what

are called the Boards.

These are special examinations given to graduates of residency programs to determine competency in obstetrics and gynecology.

So this group of individuals got together, I believe it was 1950, if I am not mistaken, formed the American College, it is known as the American College of Obstetrics and Gynecology, mainly for educational purposes, post-graduate programs.

The college makes sure we are all kept up to date by producing literature and by conducting these post-graduate programs.

Q What percentage of your time is spent with the practice of medicine and teaching of medicine?

A Well, other than when I am home, it is probably 100 percent of my time, I don't think that I can ever, except on vacation, get away from a telephone or from a sick patient or patient going into labor which they seem to do at all hours of the night.

So I practice obstetrics and gynecology and/or teach it all the time.

Q Okay. Would you tell the jury whether or

not I had requested that you review a matter on behalf of Bedford Hospital pertaining to the delivery of a child by the name of Eric Hawkins at Bedford Hospital?

A Yes. Well, we have known each other for some time and socially, play golf a little bit together, and you had asked me whether or not as an obstetrician and gynecologist, whether I would review cases for you occasionally that pertain to obstetrics and gynecology, and I said that I would be more than happy to.

As such, you contacted me -- I don't remember whether it was by telephone or by letter initially, but you asked me to review some materials concerning Eric Hawkins and Bedford Community Hospital, and I said that I would.

Q Okay. You have a recollection of what materials you have reviewed in order to formulate opinions in this matter?

A To be accurate, I made a copy of the things that I did review.

I reviewed the depositions of Dr. Edelberg, Dr. Horwitz, Dr. Coker, Dr. Kretchmere. I reviewed the testimony of the --

trial testimony of Dr. Horwitz.

I reviewed the Bedford Hospital records of Mrs. Bettye Hawkins and of Eric Hawkins concerning the 11/8/74 delivery of Eric Hawkins.

I then reviewed, very briefly, Dr. Luczek's prenatal records of Mrs. Hawkins.

Those are the materials that I reviewed,

Q Okay. Were you able to formulate opinions with respect to the care and treatment--

A Yes.

a I just want to know if you have some opinions, and are they elevated to reasonable medical certainty and probability, all the opinions which you hold?

A Yes, I do have opinions, and yes, I believe they are very probable.

Q Okay. Setting aside your opinions for the moment, and with the Court's permission, you have obtained, I understand certain visual aids that could assist you in discussing with the jury the relationship of mother and baby at the time of labor and delivery, is that correct?

A Yes.

Q And with the Court's permission, could you come down to the jury and demonstrate for the jury with the aid of the visuals, the situation, the relationship of mother and baby during the labor and delivery of a Frank breech presentation such as Eric Hawkins was?

A Correct, I apologize that we don't have a huge screen, and it is sometimes perhaps a little difficult to see this, but this is a baby, and the baby, ordinarily, would fit or come down the birth canal in that position,

The birth canal, being this boney pelvis, if you can for a minute this being here, but this is the sacrum and this is the ilium and this is the pubis, and this is a boney pelvis that doesn't stretch or give very much.

Ordinarily, the baby would fit down, head first, into this boney pelvis. Can you all see that?

Okay. So this is the picture then of an infant who would ordinarily come down head first into that boney pelvis, but in this situation, the baby is coming down breech first, or buttocks coming,first.

Also, in a Frank breech, which is a term given to describe the position of the baby, these are the legs of the baby, are extended almost straight up and the umbilical cord which is attached right at the belly button of the baby is going up towards the placenta which is attached into the uterus in front, on the back and on the side. We don't know where it was attached in this situation, but the umbilical cord comes up here.

It can go across the shoulder and it can go around the hip of the baby, and again, we don't know, but it is down here,

So picture the baby then coming through the birth canal, breech first, or buttocks first into this pelvis,

Also picture, those of you who are women, perhaps and have had children, will know that as the head goes down into the pelvis first, this way, the bones of the head overlap or can overlap, There are soft spots around the bones. The bone's aren't fused, and it is called molding. This allows far the head which is a fairly sizeable structure, then to fit nicely into the pelvis.

Well, if the breech fits first, it doesn't give -- once the breech or once the abdomen and perhaps the shoulders are delivered, it doesn't give the head too much time for these bones to overlap and fit through the boney pelvis, so sometimes trauma can result, and the baby can be fairly battered as it is being delivered through the boney pelvis,

Mow, this is the textbook of obstetrics and gynecology, and this may be very difficult for you to see, and I would be happy to -- hexe is a baby being delivered in a breech position,

Here's the pubis and the sacrum and that's all you see of the pelvis. These are the forceps and these are the Piper forceps, P-i-p-e-r, forceps, and these are the forceps that Dr. Choi used to deliver this baby in pretty much this way.

It ought to have been delivered, and ought to have been applied to the baby's head in this way. We don't know if that's the way it was, but this is the way it should have been.

Now, notice the umbilical cord here. The umbilical cord is severely stretched, and here

is the placenta way up here. This compression of the umbilical cord or stretching, particularly, even before this event occurs when this breech and when this body is still back up in here, but the breech is down in the vagina enough so that this pubis and the sacrum squeezes the body, this umbilical cord gets squeezed as well.

So when the breech reaches the vaginal opening, there are only a very few minutes the obstetrician has to deliver the baby because the umbilical cord which is the baby's blood and oxygen and nutrition supply isn't going to work very well anymore.

It may either entirely cut off any blood flow at all ok partially, and the baby may suffer because of that, so breech births are extremely dangerous for that very reason.

I just wanted you to understand how a breech delivery occurs, not necessarily technically, but you can see what the situation is.

Q Now, I want to ask you whether or not you have over your professional career, had occasion to supervise and instruct nurses in

obstetrics, particularly with respect to labor and delivery?

A Yes, I have.

Q Okay. Have you been able to formulate an opinion which would come past the period of 1974 as to the appropriate standards for a nurse in the labor and delivery?

A Well, yes, I have. I think that the nurses are of invaluable assistance --

MR. WEISMAN: Objection.

THE COURT: Overruled.

Go ahead,

Q Go ahead, you may express your opinion.

A -- to the delivery process, if you will, to the labor and delivery process. I think that nurses on labor and delivery ought to be able to assess the status of health of the mother and of the fetus and to be able to understand this health status and to be able to report to the obstetrician what the status and the changes of health status, as far as the baby and the mother are concerned.

I think that she ought to be aware therefore, and cognizant of deviations from normal. I think there are normal things that

happen in labor and delivery, and I think that things can be deviated, and I think she ought to be aware of this and ought to contact the obstetrician if and when abnormalities occur.

So she has to monitor mother and baby, fetus, she has to observe the mother and fetus, she has to examine the mother and she may examine her and I would expect her to be able to examine the mother to determine the status of labor, where it is, where the presenting part is, and how high it is, and what the cervix is doing.

She has to be able to administer those things that the doctor wants administered, medications, for example, either for pain, and in this case, she would give Demoral, and if the doctor wanted Pitocin to augment the labor or induce labor, she would be able to administer these medications.

I think she ought to be able to assist the doctor, this may be assisting in the care, and as far as the delivery is concerned, she had to be instructed, for instance, to cut, an episiotomy, to help the doctor. She ought to be able to do that and she ought to be able to

help in the resuscitation of an infant, should it be necessary.

So these are things that I try to get across to nurses as I see them and as I instruct them and that is what I would expect to be the standards of nursing care as it pertains to labor and delivery,

Q Now, with respect to resuscitation, if and when it is needed in the delivery room, assuming that the child, when born, is 1 Apgar at one, and there are two physicians present, an anesthesiologist and obstetrician, do you have an apinion as to the appropriate standard of care for the nurse's participation in this effort?

A Well, if the anesthesiologist is busy with the mother, and/or the obstetrician is busy with the mother, then she is the remaining person in the room, must do what she feels she has to do in order to revive or resuscitate this Apgar 1.

I don't know if you all understand what Apgar is -- it is just the way that we have of telling each other how sick a baby is or how well a baby is.

An Apgar can be a 10, which is terrific, and the baby is about ready to walk home, or 1, which means the baby is extremely ill, perhaps even near death, and the only thing that is going on is a little bit of a heartbeat, if that.

I would think that a nurse, under those circumstances, has to be able to do what any of us would do, and that is to try and save the five of the baby at that point in time.

If, however, the anesthesiologist, and/or the obstetrician can come, then she acts as an assistant, rather than the main resuscitator -- she does those things that the doctor wants her to do in order to help.

Q I want you to assume that there was a Nurse Cerhardstein who was present during the labor and delivery with Mrs. Hawkins and Eric Hawkins, and that her role was to monitor, which she, in fact, did at intervals of 30 minutes during the first stage of labor, and 15 minutes during the second stage of labor or sooner with Dr. Choi, the obstetrician, checking the fetal heart, monitoring it in the interim.

I would like you to assume further that during the time of the delivery she noted to Dr. Choi that: there was a three-minute period of time which had passed in the efforts to deliver the head, and that she also advised at the five-minute period of time or thereabouts that she observed this to be a long period of time, that she communicated with Dr. Choi, the obstetrician, concerning the status of the child by virtue of the fetal heart throughout the labor and delivery as best; she could obtain it, and that she was unable to obtain it, although she made efforts to obtain a fetal heart rate during the final 30 minutes before the delivery, and that she advised Dr. Choi of that fact.

That she suctioned the child's mouth with a suction to remove mucus after the delivery, and that she suggested, although has no recollection at the time of trial, a hot and cold bath being suggested to the physicians who were attempting to resuscitate, and by that she meant warm tap water being run aver the child on a momentary basis, in effect to try to shock the child's system, and that otherwise she

merely carried out the orders of the obstetrician as she was requested to do throughout the labor and delivery.

Assuming those facts to be true, and in evidence, do you have an opinion based upon reasonable medical certainty and probability as to whether or not a nurse, Nurse Gerhardstein, comported with an accepted standard of nursing care?

MR. WEISMWN: Objection.

THE COURT: Overruled.

A I believe that if the facts occurred as you have related to ne, I find no deviation from appropriate standards of care at all.

If you would like to get into specifics, we can discuss then, but I think that she did everything that I would expect a nurse to do.

Q Well, why don't you tell me why you believe that Nurse Gerhardstein did what she was expected to do under the circumstances that I have outlined to you?

A Well, we can go back to labor, As you know, and from my review of the records, Mrs. Hawkins came to the hospital around 2:30 in the afternoon of November 8th, at which tine she

was not in labor. She ruptured the water and that was at home, and she came in at 2:30.

It was known that she had a breech presentation, that it was not a head first -- it was a breech ox buttocks first presentation.

Things, apparently at that time were fairly stable as assessed by the nurses,

Somewhat later on in the afternoon, Dr. Choi, who was apparently covering for Dr. Luczek, suggested that pelvimetry be obtained.

Still, Mrs. Hawkins was not in labor, Pelvimetry is an X-ray study of the pelvis to determine size and from the size and the various diameters of the pelvis, one can then help make somewhat of a judgment as to whether or not the baby can fit through the pelvis adequately,

The pelvimetry was borderline, borderline normal as it was called, the mid pelvis and outlet were tight, but normal, but borderline.

It wasn't a very spacious pelvis. She had a history of having a six-pound child in the past -- six pound, eleven ounce, I believe in the past that had passed through the pelvis before.

Well, at about 4:30 or so in the afternoon, Dr. Choi, because she was not in labor, decided to put her into labor with Pitocin, and he did this according to the record, I believe, to prevent infection.

If membranes have been ruptured for a prolonged period of time, infection can happen, so he wanted to put her into labor, and it was my opinion, or is my opinion that at the time that he put her into labor, the breech was way up high.

The pelvimetry was borderline at best, It was a tight pelvis, The cervis was highly dilated. It was 1 centimeter dilated which is about a fingertip.

It was just, from my experience and my opinion a precarious situation, to stimulate labor with Pitocin, nonetheless, the labor was stimulated and Nurse Cerhardstein and the other nurses, I believe, watched and observed this labor as it occurred.

So at about 5:00 in the afternoon, Pitocin was begin, and was continued.

Finally at about 8:00 in the evening, the cervix was now about 3 to 4 centimeters

dilated, The first part of labor is called the latent phase, just that the cervis is getting ripe and ready to start to dilate.

The second part: of labor from about 3 to 4 centimeters until complete dilation of the cervix occurs is called the active phase of labor, so from the record, I would assume that the active labor started around 8:00.

Mind you, these contractions were continued to be stimulated by the Pitocin. We recorded heart beats and observations of mother about every 30 minutes, which is according to the standards of care, even back in 1974, and especially in 1986, they haven't changed much, if at all.

Pitocin was continued, and the cervix finally dilated to completely -- completely dilated at about 2:00 in the morning, so from 8:00 to about 2:00 is six hours to go from 4 centimeters to 10 centimeters or 6 centimeters -- six hours to go 6 centimeters to be completed dilated.

That's slow, That's what we call dysfunctional labor,

The active phase should be much more

rapid, particularly in a woman who has delivered a baby before -- didn't happen,

She was going at 1 centimeter an hour. She ought to be going at least 1.4 centimeters an hour, even with a breech presentation.

Up to this point, baby's heart beat was recorded as being normal, within normal ranges.

There is no evidence that the baby had decelerations of the heart beat, slow heart beat ok extremely East heart beat, That was never, at least never recorded, and the recordings were done about every 15 minutes, I believe, during this active phase.

Finally, when the patient became complete at 2:00 in the morning, it took from 2:00 to 3:50 a.m., or an hour and fifty minutes before delivery was accomplished.

Now, this is an extremely long time as well. Most women who have had, who have not had babies would be in about 35, 40 minutes, deliver the baby from when they are completely dilated until the time of the actual delivery,

Even in women who have had babies before, probably 20 minutes or 25 minutes should be anticipated for delivery of the baby, but this

took an hour and fifty minutes.

All of these things, to me, in my opinion, which is getting off the track, now, of nursing standards, showed me that this baby and this pelvis were disproportionate, that the pelvis was very tight and that this baby was big, as far as his pelvis were concerned, and one could have almost anticipated from the very beginning that this baby was going to have a very difficult delivery through the vagina, especially as a breech, because the breech, as I said before, as I pointed out to you before, the head doesn't have a chance to mold.

It is like a nice, big -- almost like a bowling ball in there, not molded to the pelvis, and it can't come through very well.

Q Can you distinguish what you would anticipate the obstetrician's role would be in that regard and the nurse's role, if there is any distinction there?

A Hell, at the time the patient is completely dilated at 2:00 in the morning, the doctor, Dr. Choi is in attendance, and he is concerned with getting this baby out as expeditiously as possible, I'm certain, so is

the nurse, but it is the doctor who, at this point, as to determine whether or not the baby is going to fit through vaginally or whether he has to do a Cesarean section.

Now, or whether he should have done a Cesarean section prior to this point in time.

Well, from the records, it was apparent that: Dr. Choi felt that the vaginal route was going to be an appropriate route, and at 3:20 in the morning, I believe they went into the delivery room and he had the anesthesiologist administer a general anesthetic,

Now, the nurse is there to assist Dr. Choi and to assist Dr. Reyes, if Dr. Reyes needs assisting.

She has to have the instruments ready and she has to get the forceps ready and she has to get warm water and towels ready, and she has to have scissors and sutures ready, all kinds of things, suction devices ready.

It is the obstetrician that is delivering this child, At 3:20 in the morning, the general anesthetic is given, because Dr. Choi felt that the baby was ready to be delivered.

In fact, the baby wasn't ready to be

delivered, and apparently, because Dr. Choi allowed the patient to wake up and push some more, push the baby further down into the birth canal, and then finally he decided that he could now deliver the baby.

So he had a second general anesthetic given, and finally delivered the baby, and with the use of forceps as you saw, delivered the baby's head finally, and subsequently, resuscitation took place.

So from the time that he was going into the delivery room, approximately 3:20 when the general anesthetic was given, Nurse Gerhardstein or any nurse, the situation is so critical at this time, you've got to get the baby out.

Whether you listen for heart tones at this paint in tine or record the heart tones at this point, It Isn't going to make any difference. You have got to get the baby out as quickly as possible and as atraumatically as possible.

At this point, even a Cesarean section, had it been done, probably would not have been -- probably would not have gotten the baby out

any sooner, at least in the judgment of Dr. Choi, but the nurse, at this point in time, did all she was asked to do.

I didn't find that there was any, if you will excuse the expression, breech of standard of care.

Q Okay, You have experience in practicing in community hospitals, have you not?

A Well, I have -- well, yes, I have,

Q Okay, Based upon your experience, do you have an opinion with respect to what is the role and standard of care of the hospital in labor and delivery, if any, in 1974?

A Well, hospital is a vague term,

Q I am talking about the hospital as such, not the nursing care and not the physicians, but the hospital.

A The hospital?

Q If you set --

A The hospital is a facility, a building, and it is administered by administrators who are generally not physicians.

It comes under the auspices of a board of trustees who are also nod generally physicians, although they nay be.

It comes under -- I believe they have to provide facilities, adequately equipped and staffed to allow the doctor, in the ease of obstetrics and gynecology, for the doctor and nurses to perform their duties, and that is to deliver a lady in labor in as nice a health environment or proper health environment as possible.

So I think that: that really, their standards of care are simply to provide the equipment necessary with which the doctor and nurses are able to function.

Q Okay. And what is the role of the obstetrician as it would have been in 1974 with respect to labor and delivery?

A The standards of care of the obstetrician?

Q Yes, what's tho role of the obstetrician in relationship to the mother and the child?

A Well, there are several, First of all, he has got -- he has to be able to deliver babies, I think that's paramount. We has got to be able to recognize a high risk situation and in this instance, even in 1974, a breech presentation is a risky situation,

It is not risky for the obstetrician, it is risky for the mother and the baby, so it is a high risk situation.

I think that he has to have the capabilities of performing a Cesarean section, certainly within 20 to 30 minutes. That means that the equipment has to be there, and that means an anesthesiologist has to be available that quickly.

There has to be nurses to assist in the operation, they have to be there. I think that laboratory services have to be there, as far as blood, necessary for blood transfusions, fresh frozen plasma in 1974 would have to be there on a 24-hour basis,

I think in the community hospital, I think that the standards for the obstetrician ought to include consultantive and transfer agreements. In other words, ha ought to be able to have consultants either as far as neonatology, the ability to handle a newborn with great expertise or perhaps consultation, perhaps even with one of his colleagues, and certainly transfer of either the mother and/or the baby on a moment's notice to a hospital

that perhaps is somewhat better staffed, in order to handle the problems.

Those are the standards I think that to practice obstetrics in a hospital and for the obstetrician, I think those are the standards.

Q Thank you,

Have you been able to formulate an opinion as to why Eric Hawkins is brain damaged and when it occurred?

A Yes.

Q And is that based upon reasonable medical certainty and probability?

A If probability means what I think it does? more than likely, *yes*. I definitely have an opinion as to this unfortunate situation.

Q Would you state for: the jury what your understanding is, based upon reasonable medical certainty and probability as you understand it?

A I think that most of the labor, until the mother went into the delivery room, I believe that the baby, although I have no way *of* knowing, but I believe that that baby was, and it's my opinion, that that baby was in good shape.

I think that the baby was doing well --

MR. WEISMAN: Objection.

THE COURT: Overruled.

A -- as evidenced by the heart sate monitoring of the nurses,

I think that when the first anesthetic was given at 3:20 in the morning, it was given because I believe Dr. Choi saw the buttocks coming through the vagina, and that, if you remember the diagrams I showed you, means that the hips and the abdomen was deep into the vagina.

As you know, the symphysis pubis, that pubic bone and sacrum, and the ilium that surrounds it, now, the compression of the baby's abdomen and the baby's breech part is being -- compression is going on.

I believe that the cord is being stretched at this period of time, and I believe that the circulation in the umbilical cord, because of the pressure against the baby's body and pressure against the maternal boney pelvis, I think that the circulation and oxygenation is being compromised to the baby.

I think that for a certain period of time, during this first anesthetic, that this

in fact happened. The baby had a deprivation of oxygen.

Then I think that the anesthetic had worn off. I think that if I am not mistaken, the baby seemed to have gone up in position in the mother's pelvis, and perhaps circulation came back a little bit. Perhaps the baby recovered a little bit from this lack of oxygen episode or deprivation of oxygen episode, and then a second anesthetic was given,

First of all, first, before that second anesthetic was given, the patient was asked to push again, and by pushing again, and by pushing, the buttocks was in the pelvis again, and the same compression occurs, and again, a relative cut-of€, if not a complete cut-off of circulation up through the umbilical cord which is the only way the baby is getting any oxygen happens again.

This time, however, the second anesthetic is given as Dr. Choi feels now be can deliver the baby, and time goes by.

First, the legs, which are straight up on the baby's body have to be brought down and that takes time.

The baby's body has to be pulled down and that takes time. I can often be traumatic as evidenced here, We saw evidence of bruises, black and blue marks on the baby's buttocks from pulling.

Then the chest of the baby has to come down into the vagina, if you will, and out of the vagina, and then the arms --

The arms have to be brought down. Sometimes the arms can be brought down very easily and sometimes the arms can be way up high and they have to be reached for.

The humerus, this bone here, has to be brought down, and sometimes then the baby has to be spun in order to get one shoulder out and spun around to get the other shoulder. This takes time,

Finally, the head now is in the vagina, and all of this takes precious minutes, precious minutes that the baby is without oxygen, totally without oxygen,

The Piper forceps are being applied at this point in time, and remember, an unmolded head, and this is a difficult, difficult pull, but finally, the Pipers have to be put onto the

baby's head, and at this point in time, the baby can actually, because its chest is out, start to breathe, but the head is still inside.

There is no oxygen in the vagina there, and the baby is, in essence, if it were to try to breathe, it would undergo smothering, in addition, no oxygen.

Finally, the head is delivered several minutes later, and the baby comes out very limp, placid, limp, no tone, not breathing, bad color.

The only thing that is there is a heart beat that is less than 100. Moreover, we have learned that the baby suffered a palsy, a left right extremity. It is called Erb's Palsy.

This sometimes happens even under the best of circumstances, but very frequently happens in breechs, in breech deliveries, and that's because of the stretching of the head, stretching of the shoulder here, or injury to the arm as you are removing it. It is an injury to the brachealplexis or the nerves that go up underneath -- certain muscles and bones through the armpit, if you will, an3 these nerves are than damaged and are necessary for

arm movement, motor movements of the arm,

I maintain that the reason we don't see this very frequently is because the baby's generally have *good* muscle tone, and as you know, even when the baby is asleep, they have some muscle tone, rigidity,

I maintain that that baby was so placid and sa ill and so deprived of oxygen for so long that there was no muscle tone at all, and this allowed that injury to occur.

So I think that this baby suffered brain damage because of a lack of oxygen during the delivery process.

Q And in your opinion based upon reasonable medical certainty and probability, do you have an opinion as to when that was permanent?

A I think it was permanent during the delivery process. I think that there is evidence, definite evidence as late as of October, 1986 evidence that a lack of oxygen to the brains of babies for eight minutes, which apparently happened in this situation, can and does cause permanent brain damage,

I see no reason to believe otherwise that this is -- that this isn't the case that

happened hexe.

MR. WEISMAN: Objection.

THE COURT: Overruled.

Q Dr. Horwitz who testified on behalf of the plaintiff referred to a book that he read in between when I deposed him and when he testified that -- hot off the presses -- Neurology of the Newborn, and have you had an opportunity to review the passages that discuss the length of tine that are involved in causing permanent injury with respect to hypoxia --

MR. WEISMAN: Objection.

THE COURT: Overruled.

Q -- or asphyxia?

A Yes.

Q Could you explain fox the jury what we are talking about in this book as opposed to what Dr. Horwitz was discussing?

A Well, if this is the passage that I, in fact, reviewed, what Dr. Horwitz was discussing--

Q It is marked in there. You don't have to read it, but you can reference it.

A There is, first of all, a textbook, at least as they are published now, they are a

compendia of articles, research articles, and usually the author of a textbook is really an editor.

He asks a bunch of experts in the field to write chapters on various subjects and to put it together and get a textbook which is probably the best way to do it, because no one individual is that experienced to write an entire textbook about a subject,

In this situation, a gentleman wrote a chapter here, and what he said was that asphyxia --

MR. WEISMAN: Objection.

THE COURT: Overruled,

A -- or lack of oxygen, enough to cause heart rate changes, so you know, how much is a lack of oxygen?

Well, if you turn off the valve a little bit, you get a little bit of oxygen deprivation. If you turn it off a little more, it is a little more deprivation. Well, now, how do you measure it? They taok monkeys and they constricted the umbilical artery and they got so there was a diminished amount of blood flow, oxygenation, and they got a pattern of

heart rate, what they call late decelerations,

They got fate decelerations, and in the passage, it said that it took quite a long time for nervous system damage to occur, if you have hypoxia or asphyxia, enough to cause late decelearations.

A baby that's undergoing the stress of a lack *of* oxygen, one of the very first things it does, it has to -- has a decreased heart beat, and then it comes back, decreases, and comes back and it's being deprived *of* this oxygen.

It responds, and these are late decelerations as a measuring device here, and it took quite a while, perhaps 30 minutes or an hour for permanent brain damage to occur -- certainly not just a few minutes, six or eight minutes,

I don't believe that this is the situation that transpired here.

Q And why not?

A Because of the condition --

MR. WEISMAN: Objection.

THE COURT: Overruled.

A -- of the baby and because of the length of time of squeezing ok asphyxia, if you will,

or hypoxia or anoxia. All of these terms are used to describe a situation where the baby isn't getting any oxygen.

I think a significant length of time, at least from 3:20, and perhaps with a little bit of time period there, the baby may have recovered partially, but may not have recovered partially,

I think again, with another pushing, we have 30 minutes, 30 minutes of irrefutable diminishment, if you will, diminishing oxygen to that baby, and I think that it's not this type of experimental design at all -- it's a real life unfortunate experiment, and that baby was brain damaged during this delivery process, during this 30-minute period of time,

Q What, if any, significance is there with respect to the prolonged second stage of the one hour and fifty minutes -- what's that indicative of?

A Well, the first thing it indicates to me is that the baby is too big for the pelvis.

Well, I guess I am proven wrong in that the baby did come through the pelvis and maybe not proven wrong -- maybe I'm right. The baby

came through the pelvis and injured, really injured badly.

And for an hour and fifty minutes to go with pushing and pushing and trying to yet this baby out, I believe represents pelvic disproportion, pelvic body disproportion. That's what it means to me.

I think another route should have been done, I think a Cesearean section should have been done.

Q Who does the decision making with respect to that?

A That would have been tho obstetrician's decision.

Q If you would, with the Court's permission, review Dr. Luczek's complete office record for a moment.

Could the witness have just a moment, your Honor?

I will ask you a couple of questions on that.

Okay. Can *you*, based upon that record, render an opinion with respect to the pregnancy, comparing it to normal -- abnormal?

A Well, the pregnancy wasn't entirely

normal.

Q Okay. What, if anything, were the abnormalities, and of what significance were they?

A The patient had some bleeding. In pregnancy, that's not normal, not necessarily abnormal, only in that the vast majority of women don't have bleeding at pregnancy.

In this instance, the bleeding was treated with Delatutin, a hormonal agent.

The paient also experienced some pain in her lower pelvis, and was thought tu have had a bladder infection and was treated with Azo-Gantrisin. That occurred early in pregnancy, although I don't know exactly when, because I don't believe there is a date there, but at around six months of pregnancy, this patient experienced some swollen glands and was complaining of upper respiratory tract infection, bronchitis or pneumonitis, and she was prescribed some Ampicillan for that, which is another antibiotic and some Tuss-Ornade, which is a combination of an antihistamine and decongestant and anti-cough medicine for this.

So we have evidence here that there was

some bleeding, which could be a potential problem with the placenta, in that it could have had a difficult time implanting or nay have separated somewhat OK it may be nothing.

We have a problem here in that the patient may have experienced a bacterial infection, and a bacteria can traverse the entire body of the mother and certainly cross the placenta and get across to baby.

We have evidence of an upper respiratory tract infection, which can either be bacterial or, apparently, it was thought that because Ampicillan was given or viral, and certainly that might have affected the pregnancy -- might have affected nom or the placenta or the baby at six months of time, so just from those records, I can't assume that. I don't assume pregnancy was not normal.

Q Given the state of modern knowledge plus science and medicine at the time, what effect would that medication have on the brain development of the child?

A Given what our limited -- our limited abilities, certainly it is a very imperfect science, medicine, an imperfect art.

Prom the medicine she took, 1 can't state one way or another, She may have had an effect, but i can't state what effect it would be or give a percentage that it may have had an effect.

Certainly they could have had an effect, and certainly bacteria or a virus could have an effect much like a Rubella.

Rubella is a virus, and you all know about Rubella syndrome. Certainly it is a virus which makes woman feel as though she has got a cold or headachey or cough, but it can devastating to the fetus, *so* I have no idea, nor can medicine say at this point in time what effect these medicines and/or the diseases or illnesses that she had during this period of time -- how they affected the baby, but they --

MR. WEISMAN: Objection,

THE COURT: Overruled.

MR. ALBERT: Your Honor, I am clone with my direct examination of the doctor,

---oOo---

(Thereupon, a short recess was had.)

Exhibit #18

TESTIMONY SUMMARY OF
DR. STEVEN KLEIN
December 4, 1986

RE: ERIC HAWKINS

PAGE	LINE	SUMMARY
1656	5	Dr. Klein plays golf with Steve Albert and is happy to review cases for him.
1663	5	The obstetrical nurse needs to know how to examine the mother and the fetus to determine the status of labor,
1663	13	The obstetrical nurse needs to be able to administer medications prescribed by the doctor.
1663	20	The obstetrical nurse needs to be able to assist the doctor as far as delivery is concerned and to assist in the resuscitation of the infant should it be necessary.
1665	11	The nurse must be in a position to do whatever is necessary if the apgar is 1 at one minute if the obstetrician and anesthesiologist are busy with the mother. If the anesthesiologist or the obstetrician are available then the nurse must act as an assistant rather than the main resuscitator.
1667	12	If nurse Gerharstein monitored Mrs. Hawkins' labor at intervals of 30 minutes during the first stage of labor and 15 minutes during the second stage of labor and Dr. Choi checked the fetal heart and monitored it in the interim, and further that at the time of delivery if she noted to Dr. Choi that there was a 3 minute period of time that passed in the efforts to deliver the head and that she advised at a 5 minute period of time and that she made efforts to obtain a fetal heart rate during the final 30 minutes before delivery but was unable to obtain it and that she advised Dr. Choi of that fact and lastly that she suctioned the child's mouth after delivery and suggested a hot and cold bath to shock the child's system and that otherwise she merely carried out orders of the obstetrician then, she did not deviate from appropriate standards of care.
1668	3	Mrs. Hawkins came to the hospital at 2:30 p.m. on November 8th and was not in labor. It was known that she had a breech presentation and Dr. Choi suggested pelvimetry be obtained. Her pelvimetry was border lined-it wasn't a very spacious pelvis-she had delivered a 6 pound 11 ounce child in the past through her pelvis.
1669	1	At 4:30 p.m. Dr. Choi put her into labor with pitocin to prevent infection.

1669 16 It was a precarious situation to stimulate labor with pitocin.

1670 23 It took 6 hours with pitocin to completely dialate the cervix- that is slow-it is called dysfunctional labor.

1671 1 The active phase of labor (from 3-4 centimeters to fully dialated) should be much more rapid particularly in a woman who has delivered a baby before.

1671 3 She was proceeding at 1 centimeter an hour and should have been proceeding atleast 1.4 centimeters an hour even with the breech presentation.

1671 18 From complete dialation until delivery was accomplished, took 1 hour and 50 minutes - this is an extremely long time.

1672 2 All of these factors show that the pelvis was disproportionate and that the baby was going to have a very difficult delivery through the vagina.

1673 1 Dr. Choi is the obstetrician at 2:00 a.m., is the one that must determine whether the baby is going to fit through vaginally or whether a Cesarean section is necessary,

1673 25 At 3:20 a.m., Dr. Choi felt the baby was ready to be delivered- in fact, the baby wasn't ready to be delivered and he allowed the patient to wake up and push the baby down further into the birth canal.

1674 23 In Dr. Klein's opinion, even a Cesarean section at this point would not have gotten the baby out any sooner and the Dr. believes that the nurse did all she was asked to do.

1676 9 A hospital must provide the equipment necessary with which the doctor and nurses are able to function.

1676 20 The obstetrician's standard of care is to be able to deliver the baby, to recognize a high risk situation, and must have the capability of performing a Cesarean section within 20 to 30 minutes.

1677 16 At a community hospital, the standards for obstetricians should include consultative and transfer agreements - the ability to handle a newborn with great expertise and transfer the baby at a moment's notice to a hospital somewhat better staffed to handle problems.

1683 11 Dr. Klein believes that Eric Hawkins is brain damaged because of a lack of oxygen during the delivery process.

1683 17 The brain damage was permanent during the delivery process.

1683 24 A lack of oxygen to the brain of babies for 8 minutes causes

permanent brain damage and this the doctor believes occurred in the Eric Hawkins' delivery.

1687 9 The doctor believes the 30 minutes of irrefutable diminished oxygen to the brain to the baby during the delivery process caused the brain damage.

1687 21 The prolonged second state of labor (the 1 hour and 50 minutes) indicates that the baby was too big for the pelvis.

1688 8 A Cesarean section should have been done.

1688 13 The decision to do a Cesarean should have been the obstetrician's.

1689 5 In reviewing the pregnancy records of Dr. Luczek's, it is noted that the patient had some bleeding during pregnancy which is not necessarily abnormal, but the vast majority of women don't bleed. Mrs. Hawkins also had some pain in the lower pelvis, thought to have been a bladder infection. She also experienced some swollen glands and complained of an upper respiratory tract infection and was given ampicillan.

1690 1 With the evidence of bleeding there could have been a potential problem with the placenta. The patient may have also had a bacterial infection which can transverse the body of the mother and cross the placenta to the baby. The evidence of the upper respiratory infection may have effected the pregnancy.

1690 1 The medication she took could have had an effect but he cannot give a percentage that it may have had an effect.

CROSS EXAMINATION BY GEORGE STUHLDREHER

1692 19 Dr. Klein did not read Dr. Choi's deposition.

1693 2 Dr. Klein did not know that Dr. Choi testified at the arbitration hearing either.

1693 13 Dr. Klein was not aware that Dr. Choi testified from the witness stand in the trial of this matter either.

1694 15 Dr. Klein and Steve Albert belong to the same country club and are personal friends.

1694 24 Steve Albert did not tell Dr. Klein that Dr. Choi testified that the cord was compressed around the baby's body. - Dr. Klein learned that from his knowledge of breech births.

1696 6 Dr. Klein's opinion is that the baby came out extremely ill and sick due to a lack of oxygen, and the only way that that could have happened was by cord compression.

1699 2 The two anesthetics, tenthranen and nitrus oxide cross the placenta and can add to the baby's depression or lack of the baby to respond quickly and to breath on its own.

1699 22 The fact that Dr. Choi testified that the cord was lose around the baby and that the there was no cord compression does not change Dr. Klein's opinion. - Dr. Klein still feels that there was cord compression.

1781 6 The lack of oxygen to Eric occurred within a 30 minute time frame before the baby was delivered.

1705 4 Dr. Klein is of the opinion that 90% or more of infants with apgar scores of 0-3 at five minutes can recover withou ill effects.

1705 25 Dr. Klein admits that while he believes that Eric had brain damage at birth, he does not know whether 1% or 100% of (the ~~entire~~ brain was damaged at birth. ~~100~~ 100% of 4%

1706 4 He is not an expert in determining when brain damage is permanent or not.

1708 21 Dr. Klein disagrees with Dr. Horwitz's opinion that there was no brain damage-permanent brain damge-at the moment of birth of Eric.

CROSS EXAMINATION BY HARLEY MCNEAL

1709 13 There were several occasions throughout Mrs. Hawkins' hospitalization that Dr. Choi should have done a Cesarean section.

1710 24 The two advantages to doing a Cesarean section include that the baby can be delivered quickly before it suffers cord compression and anoxia and it avoids the trauma that breech babies sometimes undergo.

1712 2 In a vaginal delivery where there is cord compression, not only is there oxygen deprivation, but the foreceps squeezing the baby's head can cause a problem.

1712 9 It is the obstetrician who determines the type of anesthesia to be used.

1714 23 If Dr. Klein had seen the buttocks already showing beyond the vagina, Dr. Klein probably would have chosen to push the baby back up and do a Cesarean section.

1716 21 In 1974 bag and masking was a choice of resuscitation especially where people feel uncomfortable about an endotracheal down a little infant.

1717 6 The dangers *of* an endotracheal intubation include injury to

vocal cords, injury to larynx, hemorrage, damage to bronchus.

1719 21 The use of demerol would be additive to a lack of oxygen caused by the umbilical being squeezed.

1720 6 The anesthesiologist is directing his attention to the mother to make sure she is well oxygenated. The anesthesiologist must resuscitate the baby by establishing an airway.

1723 8 While Dr. Reyes could have considered the use of bicarbonates, Dr. Klein feels that the resuscitation with the bag and mask was probably the safest approach, and that is exactly what Dr. Reyes did.

CROSS EXAMINATION BY FRED WEISMAN

1734 25 Dr. Klein's report is dated May 28, 1986.

1735 10 Dr. Klein was first contacted on May 22, 1986 by 'letter from Mr, Albert-6 days before his report.

1736 2 Dr. Klein has reviewed three or four other cases from Mr. Albert.

1736 8 Dr. Klein has never testified for any injured patients.

1736 19 Dr. Klein knows of no genetic or chromosomal defect that would be suggestive of or caused Eric's brain damage.

1737 18 The doctor does not believe that there is any evidence of infection that relates to the brain damaged Eric Hawkins.

1739 5 There is no evidence to suggest interuterine growth retardation to cause Eric's brain damage.

1739 15 There was no chronic condition in during Mrs. Hawkins' pregnancy that is related to Eric's brain damage.

1739 19 There is no evidence of placental insufficiency in this case.

1741 23 The standards during the second stage of labor from complete dialation to birth require the taking of the fetal heart rate every 15 minutes.

1742 20 Dr. Klein acknowledges that the nurse's notes record heart beats every hour and that this is substandard recordation of the fetal heart rates.

1745 24 Between 3:20 a.m. and 3:50 a.m. an acute asphyxia episode occurred.

1749 23 When asked what percentage of oxygen was lost or deprived at 3:20 a.m. or 3:50 a.m., Dr. Klein could not do that.

1750 8 All Dr. Klein knows is that between 3:20 a.m. and 3:50 a.m. there was a significant lack or diminution of oxygen but he cannot quantitate it any better,

1751 6 The doctor admits that after Eric was born he was asphyxiated and severely depressed,

1751 24 The doctor admits that if a baby is asphyxiated at birth that he will become more asphyxiated if he is not given adequate resuscitation.

1752 6 The doctor claims that he can state with medical certainty whether the lack of oxygen occurred within the womb or afterwards-he was then cross examined based on his report where he stated that he could not state with any medical certainty where the lack of oxygen occurred.

1757 1 Dr. Klein believes that the resuscitation by Dr. Reyes in terms of bagging and masking the baby was the best that he could do under the circumstances and he thinks that it was a good method of resuscitation-he does acknowledge that he is not an expert however in perinatal resuscitation.

1761 21 The doctor acknowledged that it is customary to look to the anesthesiologist to do the resuscitation at Mt. Sinai Hospital.

1762 7 The doctor expects that the hospital staff was reasonably skilled and experienced people to do resuscitation.

1763 16 Bedford Municipal Hospital was ill equipped to handle breeched births.

1764 8 The doctor admits that Bedford Hospital did not have the means to deal with the breech delivery and to handle obstetrical emergencies.

1766 23 The doctor admits that the hospital must supply the facility and make sure its physicians are well qualified.

1767 9 If the hospital is not equipped to handle asphyxiated or severely depressed children, it should not be handling obstetrics.

1769 24 The doctor admits that in his letter of May 28, 1986 he stated that Bedford Hospital was a low risk hospital, ill equipped and unprepared for potentially catastrophic obstetrical occurrences-this is incontravention of what Mr. Pollock, Bedford Hospital Administrator stated that the hospital held itself out to handle high risk pregnancies.

1770 24 Sodium bicarbonate should have been used on Eric to counter act the acidosis.

1771 11 When sodium bicarbonate is not given, the baby becomes more acidotic.

1775 15 At 7:30 Eric's bicarbonate level was 9 and for it to be norma it should be in the 20s-this was indicative that the baby did not have a lot of base reserves with which to fight the acid and this was a protraction of the acidotic state.

1776 1 The doctor admits that the longer the acidosis is prolonged and the acidotic state continues, things continue to get worse.

TUB BATH.

1781 3 If the nurse put Eric in a cold tub bath, that was not appropriate.

1783 4 The doctor agrees that cold causes the acidosis to become worse, and its standard practice d ctates that one does not use a tub bath.

REDIRECT EXAMINATION BY STEVE ALBERT

1789 1 Dr. Klein believes that 94% of cas s that do not h ve residul ! brain damage are cases where the patient did not have permanent brain damage when they were resuscitated to begin with.

1790 3 Dr. Klein is of the opinion that Eric suffered brain damage in utero.

1793 21 It was the obstetrician's responsibility to surround himself with people who were expert in neonatal resuscitation or to have transferred the mother to a place where she was able to receive expert neonatal resuscitation.

1794 9 Dr. Klein meant by the words "ill equipped at Bedford Hospital", not that there wasn't proper equipment at the hospital, but that there was not the immediate availability of a perinatologist or neonatologist and the obstetrician was the one responsible for having those specialists available.

1791 1 The obstetrician is the one that is responsible to communicate with the patient as to what is available and what is not available and what is not available in the level of care that he can effectively provide at a particular hospital.

1799 18 If Eric was only placed in some warm tap water, the doctor does not believe that that had any effect on Eric as to his brain damage.

1806 16 Dr. Klein believes that the permanent brain damage occurred intrauterine to Eric.

1809 22 The doctor does not believe that the resuscitation was inadequate, and he believes that the permanent brain damage occurred in 6-8 minutes while it was deeply pressed into the pelvis.

her employment problems.

Now, my question for you -- fairly stated, gentlemen?

MR. McNEAL: Yes,

MR. WEISMAN: Yes, your Honor"

THE COURT: You've all rsad the letter?

MR. McNEAL: Yes.

THE COURT: We, of course, would prefer that you remain, I suppose, for very obvious reasons. You've heard all the evidence at this point.

It's my judgment, although I do not know, that we could very well go perhaps another week, A guess.

We have not heard from either of the two -- the other defendants in this case.

There may also be more testimony for the plaintiff in the form of rebuttal, and it could very well take us through the balance of this week and even into *the* following week.

Now, have you had any contact

with your employer *over* the holiday weekend *to* determine what your status is going to be if you continue missing work?

JUROR NO. 8: I went to work Wednesday after we were dismissed and I talked to my supervisor, he said there is no problem,

THE COURT: Keep your voice up so we can hear you.

JUROR NO. 8: There is no problem in me missing the time, The only problem is me missing the money,

THE COURT: You're missing Mr. Green, as we say?

JUROR NO. 8: Yes.

THE COURT: The star witness, Mr. Green. Oftimes lawyers tell the Court, when they want a continuance, the star witness is not available, Mr. Green. In other words, he hasn't received his fee yet.

Just an effort at humor here,

JUROR NO. 8: Yes.

THE COURT: Poor. I could in fact call your employer and urge him

to pay you. I've done this in the past. I don't know whether that would put you in a better status or a poorer status.

What do you think?

JUROR NO. 8: Well, I've only been working there two months and I have never met the owner of the company. This is the person to whom you would probably have to speak with. He's vary eccentric, and everyone there that I've mentioned my problem to, they just sort of laughed, and I sort: of got the opinion myself that, no, I wouldn't be getting paid, even if you did call.

You know, I don't want to jeopardize my job.

THE COURT: I understand that.

Gentlemen, does anyone wish to ask any questions of Miss Melnar at this point?

Fred, do you have any?

MR. WEISMAN: I have none, your Honor, I understand her problem.

THE COURT: Steve or Ren?

MR. KELLER: I don't believe we have any questions.

THE COURT: George?

MR. STUHLDREHER: I have no questions,

THE COURT: Marley?

MR. McNEAL: I'm just sorry to let you go, but I understand what the situation is.

JUROR NO, 8: I dont' really want to leave, I would like to hear out the case.

THE COURT: I believe that you would, Pat, and we would very much like to have you. I certainly do not want to cause you an economic problem here.

As we indicated when we started, we did, I think clearly indicate to the jury that we expected that *the* case could very well *go* a fairly long time. I don't have any idea how long, and you never do.

Lawyers always tall me, "Judge, it will take two clays," And that means a week for me.

If they say a week, that means two weeks, and so forth, because we do have two dockets. It isn't their fault, but it's basically my own, We have two dockets, and I'm running between both of them,

I guess that we will just have to let you go, eat, if that's your desire.

MR. KELLER: Your Honor?

THE COURT: Yes?

MR. KELLER: Perhaps the Court could inquire of Mrs. Melnar a little more to see how she feels a call from the Court would affect the employer?

As I've stated to the Court and counsel before, I think it's aggregious that this situation occurs, and I would just as soon, if Mrs. Melner believes it would not be detrimental to her position, that the Court should give her employer a call,

THE COURT: I think there is no question that you may stay, that: *the* boss is not demanding that you return, but the problem is, he is not

paying you for your service,

Unfortunately, there is no rule, no law, nothing at all that I can say to this individual, to insist that he pay you.

I have in the past, on more than one occasion, called employers and urged them to pay our jurors, and some have and some have basically, you know, made some unkind comment to the Court. I have kept a list, of course.

No, I'm just teasing. There just isn't anything in the law that would allow me to insist: that that be done. It's up to them, your employer, like yourself, and all of us in this courtroom are citizens to this community, and it's each of our obligations, if you take the opportunity to vote, as you have -- I don't know whether yaux employer has -- if you take the opportunity to vote, you have indicated to all af us that you are a caring citizen of our community and you have the possibility of serving OR a jury.

To serve on a jury and to be picked on a jury, in my humble view, is the highest service that any individual can return to our community, and it's also a great, great honor, I believe, be it a criminal case or a civil case, there just isn't anything other than service perhaps to one's country. I would put service on the jury in the same realm, I truly would, because without jurors such as yourself and your fallow jurors, we simply cannot do our process here, and that's what makes America such a great country. This is not the case, unfortunately, *in some* countries in Europe.

Our system is one that allows citizens, ordinary people like yourself to come together, hear the evidence and be the judges of the fact and to return a just verdict, and beyond that, I cannot make your employer pay you.

I can in fact call him, and if you would like me to do that and want to stay on, and hope, you know, that would

make a difference, you know, you have to assume, first of all, he'll say, "No."

JUROR NO. 8: Right,

THE COURT: Now, where are you? You're going to go broke. You can't pay the mortgage, you can't buy food, this and that,

The $10 a day I guess is not sufficient, that we pay.

JUROR NO. 8: No.

THE COURT: Do you want me to call him and urge him to pay you or would you prefer that I just simply release you from your service? Tough decision.

JUROR NO. 8: Yeah. I would prefer if you called him.

THE COURT: All right, I will do that,

Can you tell me his name and the phone number?

JUROR NO. 8: David Maclaren, M-a-c-l-a-r-e-n.

THE COURT: M-a-c--

JUROR NO. a: --l-a-r-e-n.

THE COURT: And the phons number?

JUROR NO. 8: 461-2000.

THE COURT: All right. I will do that immediately. Why don't you go to lunch then and come back at 1:00 and I'll let you know how my efforts have gone.

JUROR NO. a: Okay.

THE COURT: Now, if in the event he says, "We can't pay her because we're a small little company," then I'll basically, if you wish to be relieved, we'll allow you ta be relieved.

JUROR NO, 8: Okay.

THE COURT: All right?

JUROR NO. 8: Thank you very much.

THE COURT: All right.

David, do you want to take Pat out, please?

All right, gentlemen? 1:00.

---oOo---

(Thereupon, a luncheon recess was had from 12:05 p.m. until 1:00 p.m. at which time, all parties being present, the fallowing further proceedings were had:)

MONDAY, DECEMBER 1, 1986

AFTERNOON SESSION

---oOo---

THE COURT: Fred, cross-examine --

MR. WEISMAN: Thank you, your Honor.

CROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. WEISMAN:

Q Dr. Klein, I questioned you previously on deposition, did I not?

A Yes.

Q And all counsel were present at that time, sir?

A Yes, sir.

Q And when were you first contacted by Mr. Albert about this case?

A I do not recollect.

Q All right.

A I don't remember what date it was.

Q Well, as I see it here, your report which you submitted is dated May 28th, 1986?

A Right.

Q Can you tell or does it refresh your recollection at all as to whether it was a week before, a month before, or two months before or what?

A It probably was several week5 before. Again, I don't have -- excuse me.

Q Feel free to refer to any of your records to make sure you give us the most accurate answers you can on dates or anything else.

A May 22nd, 1986 I received a letter from Mr. Albert asking me to review the enclosed materials which included testimony of Dr. Edelberg and Dr. Horwitz and the hospital records of Bedford Hospital.

Q All right.

Sir, that would be six days before your report. Did he speak to you about it prior to the time that he wrote the letter?

A I don't have any notation that he did. I don't remember.

Q So you mean the first contact might have been just a letter that you received from him on May 22nd, sir?

A Yes.

Q Okay. Had you reviewed some other

matters for Mr. Albert before?

A In the past, I believe I have reviewed three ok four cases for him.

Q How many injured patients have you testified for, sir?

A Have I testified for?

Q Yes.

A I don't think I have ever testified for any injured patients.

Q Tell me, first, let's see if you and I can agree on a few things, Doctor.

You agree with me, here, that there is no evidence in this case of any genetic or chromosomal or inborne defect that would be suggestive here of causing this baby's, or this plaintiff, Eric Hawkins' brain damage?

A I don't know of any.

Q Yes.

A That's not to say there might not have been, I just don't know of any.

Q Doctor, let's not talk about the specla-tions though, I want to know what or if there is evidence, You know the difference, don't you, bet'ween speculating, Doctor, and stating what there is evidence about?

A Yes, sir.

Q Let's confine ourselves, then, to what you, as the professional, have discovered and ascertained based on your extensive study of this matter.

Did you study this extensively?

A Yes, I did.

Q All right,

Can you tell us, based upon your intensive investigation whether ok not there's any evidence in this case to tell this jury t of infection of this baby?

A Yes, there were two instances where the baby could have been affected.

Q Is there any evidence of infection of the baby that you think relates to the brain damage to this baby?

A No.

Q That's what we are talking about and what we are trying to find out here, what caused the brain damage to the baby, All right, sir?

A . I understand that.

Q All right.

Was there any -- do you understand that there's no evidence of any infection causative

of brain damage to the baby that you can tell this jury about, is that right?

A I don't know if I am understanding the question. I don't think that any infection, perhaps -- I don't think that any infection or infectious agent was the cause of Eric Hawkins' brain damage.

Q That's all I am asking.

A That's correct, but I don't know that infection in the past in the mother's early pregnancy might not have been responsible for its brain damage, but I don't think so.

Q All right.

Doctor, I am going to ask you, if you will, to answer my question, though, something about some infection of the mother in the past to be rank speculation, would it not, as it relates to brain damage to Eric Hawkins?

A Yes, sir.

Q For example, asphyxia is a clear producing cause of brain damage that there is evidence of here, is there not?

A Yes, sir.

Q All right.

Was there any evidence, Doctor, in this

case to demonstrate or suggest for this jury that there was any interuterine growth retardation of this baby that relates to the brain damage to Eric Hawkins?

A There is no evidence of that.

Q No. Doctor, is it true that there is no evidence of chronic condition that occurred throughout the pregnancy of Bettye Hawkins with Eric in her womb, that was of a chronic nature and throughout the pregnancy OK for a significant time during the pregnancy that indicates evidentiary-wise that it is related or causative of some brain darnage to Eric Hawkins?

A No, I don't believe so.

9 Doctor, is there any evidence of placental insufficiency in this case, some defect in the placenta?

A No.

Q That is shown by evidence in this case as being attributable or causative in whole OK in part of the brain damage to this child?

A NO.

Q No. Doctor, there is -- did you ever mention the word, bleed, in your report, sir,

bleed?

A I don't recollect whether I ever mentioned the word, bleed.

Q All right.

Do you want to check it?

A I did not mention the word, bleed.

Q Did you mention the word, hemorrhage, in your report, Doctor?

A No, sir.

Q No. Doctor, in your deposition that was taken, your deposition was taken September 13, 1986, is that right?

A That's correct,

Q All right.

And when all of us questioned you, I, particularly began the questioning, do you recall that?

A Yes.

Q And at that time, did you mention the word, blood, in your -- bleed, in your testimony there?

A No, not to my recollection.

Q No. Now, Doctor, how many of us who are born into this world of ours are in breech position, percentage-wise, based on your

statistics and knowledge?

A About 3 percent.

Q About 3 percent, All right,

And in this particular case at 3:20 a.m., the last fetal heart rate was taken on Baby Eric Hawkins when he was still in utero, in the mother's womb, is that right?

A I can't answer that, It was the last one recorded,

Q Last one recorded, yes. You are absolutely correct. The last one recorded,. and it was 152, is that accurate?

A I thought it was 154. 152, you're correct.

Q All right, sir.

Now, what are the standards of professional nursing and obstetrical care according to the American College of Obstetricians and Gynecologists as to the recording and monitoring of, that is the taking and recording of the fetal heart rate during the second stage of labor?

a The second stage of labor is the time from complete dilation to the birth of the baby, and that would be every 15 minutes.

Q Yes, and that would be true as to not only the taking of it, but of the recording of it, isn't that the standard?

A That's the standard.

Q Yes. Was that done here by Nurse Cerhardstein? Do you see the recordings, notes, that is made every 15 minutes of the fetal heart rate?

The record might show Dr. Klein is referring, I assume, to the hospital records?

A That's correct.

Q All right.

A The fetal heart tones, according to the record, labor and delivery room nurses notes, record, showed heart beat recorded at 1:30, 2:30 and 3:20. Those were the recorded fetal heart rates.

Q Certainly substandard from the standpoint of appropriate recordation, right?

A It was not according to the standard.

Q That's right, and however --

A I might say that the standards that we are talking about, however, only came into being in late 1974 for nurses at that time.

That's just an aside, but nonetheless,

that's --

Q Doctor, those standards were prevalent with respect to obstetrical care, fundamentally, in 1974 and before, were they not, even without the written standards for nurses that later came into force, isn't that so?

A Well, the written standards, as I say, late 1974 --

Q *Yes.*

A And I would think that the labor floors, the departments of obstetrics, together with nursing in each individual hospital were responsible for establishing protocals and for the recording in early labor and late labor and second stage of labor and so forth.

Q Doctor, there were standards for obstetrics and gynecology issued by your American College of Obstetricians and Gynecologists that date back to 1951, do they not?

A I don't know.

Q You don't. Did you see any from 1962 or '65, the second and third and fourth editions and so forth? Have you ever observed those or

seen them?

A Those are standards for the -- yes, for the obstetrician, but the obstetrical nurse, as such, is all I am referring to.

Q I understand, sir, but weren't there standards -- weren't the standards of obstetricians inclusive of establishing what the standards were for nurses to do, and each of those were called manual standards and for obstetrics and gynecology, and not professional nursing standards as such, do you understand what I am saying?

A Yes.

a Isn't that true?

A If you say so. I am not unfamiliar with those early editions, but I know that they existed as early as 1960.

Q You aren't suggesting that there weren't any -- I am not talking about written standards?

A I am not suggesting that.

Q What were the standards in 1974 and before as to how regularly there is supposed to be a recordation of fetal heart rate?

a It should have been every 15 minutes.

Q So it was substandard, right?

A Right.

Q Mow, however, it may not have been meaningful to cause a problem even though it was substandard, not to record it, that's also true, isn't it?

A Yes, sir.

Q Because if the fetal heart rates were all normal and everything was fine with the fetus, and the fact it wasn't written, would be a substandard approach for protocal, but. it would not necessarily harm the baby, correct?

A Correct.

Q All right,

Mow, at 3:2Ø, however, and before, there wa5 never a suggestion of less than a fetal heart rate or a fetal heart rate that was within the range of normal for that little fetus, correct?

A That's correct.

Q Now, the question is between 3:2Ø a.m. and 3:5Ø a.m. when the baby was born an acute asphyxia episode occurred, is that correct?

A Yes, sir,

Q All right,

During this period, during this period of 3:20 a.m. and 3:50 a.m., for whatever reasons, some lack of oxygen occurred to baby or fetus Eric, is that accurate?

A Yes, sir.

Q As to when the lack of oxygen began to occur to Baby Eric, you do not know, do you?

A Yes, I know when it began to occur.

Q All right.

Then what time was it?

A 3:20 a.m.

Q At 3:20 a.m. it began?

A Yes.

Q All right.

And how do you know that?

A I know that because a general anesthetic was given to the mother.

Q Well, is there anything that suggests it was 3:20 a.m.?

A I'm sorry, at 3:20 -- I apologize. If I may, excuse me.

Q Certainly.

A Yes, at 3:20 a.m., it is my opinion, because the patient was given a general anesthetic, the first general anesthetic Dr.

Choi felt that was the breech, sufficiently far down in the reproductive tract that it could be delivered,

General anesthetic was given and it was -- it's at that point in time that I believe that the baby suffered some lack of oxygen, began to suffer some lack of oxygen.

Q All right.

Is it inevitable when oxygen is given that the baby suffers some lack of oxygen?

A I'm sorry.

Q Is it inevitable whenever a woman gets a general anesthesia, that the baby suffers some lack of oxygen?

A No.

Q All right,

Are you able to tell us how much lack of oxygen was involved there when the anesthesia was given to the mother?

A No, sir.

Q Are you able to tell us, in other words, what diminution of oxygen supply took place at any time between 3:20 a.m. and 3:50 a.m. in any quantitative manner?

A Yes. At the time that the baby was

definitely given the second anesthetic, and it was unable for the breech to retract back into the vagina, in my mind it's irrefutable that there was a diminution of the amount of oxygen to Baby Eric Hawkins, and that diminution, the amount of oxygen increased until the baby actually was born.

Q Yes --

A And particularly, when the baby's head was still in the birth canal, and not delivered during that period of time also.

Q Doctor, what I am asking, though, is can you, for the folks on this jury, quantitate how much oxygen was the baby deprived of at any given time between 3:20 a.m. and 3:50 a.m.?

Do you actually have a way of measuring for this group?

A The condition of the baby at the time of birth and its response or lack thereof makes me suspect that it was deprived of oxygen for enough time to cause brain damage.

Q That's not what I asked you, sir.

What I am asking you, can you quantitate how much oxygen was lost by that baby?

How do you measure oxygen -- liters,

point? How do you measure the quantity of oxygen, please, doctor?

A The quantity of oxygen is actually measured by the amount of oxygen saturation in the fetal circulation or in circulation.

Q Is it a percentage?

A It would be a blood test that tells you a partial pressure, actually, and it would tell you in differentiation to partial pressure of mercury -- PO_2 it would be called.

Q PO_2, and what do you -- what's the right question for that, to get the quantity, that amount of PO_2?

A Yes.

Q Can you tell us what amount of PO_2 was diminished from Eric's oxygen supply?

A I would say when Eric was born, the amount of PO_2 was virtually zero.

Q What's when he was born -- that's at 3:50?

A Yes.

Q Tell me what it was at 3:27?

A I can't.

Q What it was at 3:29?

A I cannot say.

Q How about 3:45?

A No,

Q Doctor, what you know, and all you know is that there is certainly -- certainly was a significant lack or diminution of oxygen sometime between 3:20 a.m. and 3:50 a.m. and that's really all you know, isn't it?

A Yes.

Q Yes. You cannot quantitate any better than that -- can you? It would be a guess, speculation --

MR. McNEAL: I object.

THE COURT: Overruled.

He may cross-examine.

Q Isn't that true? It would just be a speculation, correct?

A I cannot quantitate that as I sit here.

Q Well, then, to quantitate it would be a speculation ok guess, correct?

MR. McNEAL: To quantitate--

MR. ALBERT: You mean not to quantitate?

HR. WEISMAN: Withdraw it.

Q Now, Doctor, let me ask you this, isn't

it true that after Baby Eric was born, the thing that you know, let's say absolutely, based on this record, or as close as one can get to absolute certainty is that Eric was asphyxiated and severely depressed?

A Yes.

Q You would agree with me on that?

A Yes.

Q That's just as clear as a bell, correct?

A Yes.

Q He needed resuscitation, didn't he?

A I think he was unresuscitatable.

Q Doctor, as a matter of fact, if an individual who is born such as Eric does not get adequate resuscitation, does not get adequate resuscitation, then his asphyxia will increase even more, won't it?

A You're presuming that he was resuscitatable.

Q No, no. Doctor, isn't it true that if you have an asphyxiated baby at birth, that he will become more a5 asphyxiated and acidotic if he is not given adequate resuscitation?

A That's true,

Q All right,

Now, Doctor, you cannot say with any medical certainty whether the lack of oxygen that caused Baby Eric's brain damage occurred within that womb of Bettye Hawkins or occurred afterwards, can you?

A Oh, most certainly I can.

Q Well, then, Doctor, will you tell me, did you or did you not, in your report of May 28, 1986, second paragraph at Page 3, state exactly this, and I am quoting -- tell this jury if I am reading it correctly or wrongfy.

"One cannot say with any medical certainty whether the lack of oxygen that caused the brain damage occurred intrauterine (secondary to cord compression, narcotics and anesthesia) or extrauterine (secondary to inadequate resuscitative efforts.)"

Did I read that correctly?

A That was quite correct.

Can I expound --

Q No, you cannot. Counsel will ask you and you will have a chance -- he will have a chance to ask you anything he wishes.

Did I read that correctly?

A That was correctly read.

Q Now, Doctor, as a matter of fact on direct examination wasn't a question really asked of you as to what was done by way of resuscitation by Dr. Reyes, was there?

A No, sir,

Q Why, that's important in this case, isn't it?

A I don't believe it --

Q You don't think it is? You don't think it is important anymore?

A No.

Q Since you wrote your report, apparently, it is not important, is that right?

Did it become less important after you wrote the report?

A If I can expound on that paragraph, I can tell you.

Q Just answer it, Either it became less important after you wrote the report and it's more important?

A It didn't change my opinion at all.

Q Okay. As a matter of fact, you indicated that the resuscitative efforts you thought were not all that bad, that's what you wrote in your report, didn't you?

A Not all that bad --

Q Yeah. The third paragraph, Doctor, fourth line down to help you?

A That's correct.

Q Not all that bad -- is that a new standard for medical care? Is that a new standard that's acceptable to give resuscitation, that's not all that bad?

A I am not aware of that being a standard or not the standard.

Q No. When a practitioner or any professional administers care to another whether it is resuscitation or anything else, he has to deliver reasonable and safe and acceptable care, docs he not?

A Tnat's correct.

Q Yeah, that's the standard, isn't it?

A To the best of his ability to perform.

Q Yes.

A That's right,

Q And, yes, and he has a duty, doesn't he, to provide to his patient, as a professional, a reasonable amount of skill, knowledge and experience, isn't that true?

A That's true.

Q Because if he doesn't, he is violating the standard of reasonable care, professionally--

MR. McNEAL: Objection.

THE COURT: Overruled.

Q Isn't that true?

A I follow your reasoning.

Q Do you agree with me too?

A I agree with your reasoning,

Q All right.

Now, Doctor, with respect to the care that should be given where a baby is I Apgar at one minute, you agree, don't you, that that baby first is severely depressed as is written on this chart here, is that correct?

A Yes, sir.

Q And that he is hypoxic, correct?

A Well, hypoxia and narcosis and brain hemorrhaging can all give you the same clinical picture,

They call all potentially give you an Apgar of 0 to 3 at one minute, so I will say, yes, severely depressed, hypoxic, and it might not be the situation, but in this situation, I believe it was.

Q Yes. Well, let's not bring in these possibilities now, because we are talking about what you think about this.

MR. McNEAL: I object to that conclusion, if the Court please.

THE COURT: I am going to overrule that, Mr. McNeal. Go ahead.

Q In your opinion, was the baby hypoxic?

A Yes, sir.

Q Was the baby acidotic?

A Yes, sir.

Q And was the baby severely asphyxiated, or at least, asphyxiated?

A Yes, sir.

Q All right,

Now, if you don't get breathing spontaneously, especially with a 1 Apgar, isn't it true that you move in promptly to do an endotracheal intubation according to the standards?

A There are several who believe that bag masking is a good method of resuscitation and you might want to continue on with it.

I am not an expert in perinatal or fetal resuscitation, but in my opinion, I think that

bagging and masking the baby as Dr. Reyes did was not improper -- was proper for the expertise that he had as far as infant resuscitation.

And I think he did the best he possibly could under the circumstances and I think he was the most expert of those in attendance of Baby Hawkins at the time.

Q Doctor, and if you will, rather than give a speech, just answer my question.

MR. ALBERT: Objection to the statement of counsel.

MR. McNEAL: Your Honor, if the Couxt please --

THE COURT: Sustained.

Q Will you tell me whether or not, according to the standards, if the baby doesn't breathe spontaneously, whether or not the standards are that an endotracheal intubation is to be done on a 1 Apgar baby?

A If there are people in attendance who can pass an endotracheal tube without injuring the baby.

Q Doctor, you told us, didn't you, that you are familiar with Greenhill's Obstetrics?

A I was familiar that Greenhill wrote a book, Greenhill's Obstetrics.

Q Yeah, 1974 edition, the very year that Baby Eric was born, and by the way, if a bag and mask is used and the baby starts to cry or breathe, then no problem, you're home free, you might say. Isn't that so, fundamentally, there's nothing more to do, right?

A Right.

Q Because what you are trying to do is get the baby to breathe, isn't that correct?

A That's correct.

Q And the problem with it, this is a reference or an adjective used by some of the testimony before, and maybe you will disagree, the newborn's lungs are sometimes stiff -- was the woxd used.

Is that a word that's acceptable to you?

A Yes, newborns' lungs are somewhat like uninflated balloons, and with that first little puff, has to inflate that balloon and it becomes easier to expand after that.

Q Why is it that an endotracheal tube is the most efficient way to deliver air to those stiff lungs or oxygen to those stiff lungs?

MR. McNEAL: Again, I will object,

A Most efficient way, it is not a question--

THE COURT: I will overrule it. Do you understand the question?

THE WITNESS: Would you please repeat: it?

Q Tell the jury about dead space, what your knowledge of dead space is, please?

A There is an amount of space in the back of the throat around the laryngeal area. This is considered dead space. If one were to bag mask, just put a bag over here and squeeze the bag to get oxygen into the baby as is done with mouth-to-mouth resuscitati8on, for example, then the oxygen, air and oxygen going into the baby's lungs would have to pass through that dead space and would be alluded a little bit by the dead space, depending on how much dead space there was.

By passing an endotracheal tube into the trachea, and you bypass that dead space, and therefore, any air that -- any air and oxygen

that you are administering is administered directly into the lungs, bypassing the dead space and therefore is considered more efficient.

Q Doctor, as a matter of fact, you have had experience in connection with resuscitation of newborn babies, have you not?

A I have.

Q However, in your practice as an obstetrician, you serve at Mount Sinai Hospital, is that right?

A Primarily.

Q Is that a community hospital?

A It is considered a hospital that serves the community, yes.

Q And as a matter of fact when you have a newborn baby that requires resuscitation, ordinarily you dont' do the resuscitation at all, do you?

A That's correct.

Q Yeah, and I asked you if you **could** think of any time within the year, for example, before the deposition, that you personally were involved in resuscitation, and the answer is that you --

MR. ALBERT: I object.

Q What's your answer to that?

THE COURT: Overruled.

A I think it was, no.

Q So I asked who usually does that, and the fact is that there are two people in your association that generally do it where you practice, is that right?

A That's correct,

Q And that would be either the anesthesiologist or sometimes the pediatrician?

A Yes.

Q Right.

A Yes.

Q And the nurse participates in some way depending on the situation, is that right?

A Yes.

Q So it certainly is customary to look to the anesthesiologist as you do to do resuscitation for you, right?

A Where I practice, yes.

Q And you expect to have hospital staffing with people who are reasonably skilled and experienced to do the job of resuscitation, isn't that true?

A That's true with qualification.
Q And if that's true, you also expect that they're going to do their job according to reasonable and safe standards for newborn babies so their babies would not be hurt by their work?
A If they had been trained and if they're experienced in infant resuscitation, which the anesthesiologists are at Mount Sinai.
Q You don't train those anesthesiologists, do you?
A NO.
Q They have to be credentialed, don't they, to get on the staff, is that right?
A Yes.
Q And they have to be adequate to do the job that they are doing there, don't they?
A Yes,
Q And you talked about a hospital providing a properly equipped staff and properly equipped hospital before in your testimony, did you not?
A Well, the hospital serves a limited role in that it chooses the department heads which are physicians and these physicians then must attest to the adequacy of the people who they

hire to do the job.

Q Absolutely.

A That's correct.

Q 3ut the ultimate responsibility of that being with the board of trustees, isn't that so?

A *Yes.*

Q That's how you got your credentials and privileges to practice your noble profession at Mount Sinai Hospital, correct?

A Yes, that's true.

Q And this hospital, Bedford Municipal Hospital, as a matter of fact, Doctor, was in your own opinion ill equipped to handle breech births, is that corxect?

A That's what I wrote.

Q Yes, you did.

A May I say something?

Q No. No, Doctor, you can answer Mr. Albert's questions. Mr. Albert can ask you questions as long as he wants.

Now, Doctor, if indeed the hospital -- Bedford Hospital was ill equipped ox not prepared to deliver breeches, don't you agree that the least they could have done was to make

that known to any patient who came in to get admitted, who was in, for example, a breech position?

What's your opinion on that as to that?

A I don't believe that Bedford Hospital in 1974 did not have the means with which to deal with a breech delivery,

I think that it was not entirely, completely manned or geared up, should I say, all the time for which to handle obstetrical emergencies,

Q Like an asphyxiated baby?

A Like an asphyxiated baby,

Q Okay. How many babies have asphyxia that are born?

A Don't have a percentage.

Q Approximately, of all the births, how many have asphyxia?

A Three percent, three to five percent.

Q So three or five out of a hundred of us born into this world have some degree, some element of this asphyxia, is that right?

A Yes.

Q And any given one of those could be a severely asphyxiated baby, is that right?

A Yes.

Q And that can happen, can't it?

A Yes.

Q In an acute episode, particularly, isn't that right?

A Yes, usually those situations are known well in advance to the attending obstetrician.

Q Okay. Fine.

A In those instances, particularly in those community hospitals, it would behoove the obstetrician to obtain and surround himself with those people that might help him to gear up the equipment that, in fact, does exist, for instance, the gas machines, and to have the blood bank ready, in case the patient needed an emergency Cesarean section, and to maybe notify the pediatrician or neonatologist and to have him help manage the situation.

It is an extremely rare situation and unfortunate if somebody were to -- if the obstetrician were to find that all of a sudden, a baby came out which was severely asphyxiated,

Q Yes.

A Yes.

Q But, Doctor, whatever an obstetrician

could have done, we can separate ourselves for a moment from that, can't we, and decide what the hospital could or should have done, and then maybe separate ourselves from that and say what an anesthesiologist could have or should have done.

In other words --

A In my mind, the hospital --

Q Doctor, just --

A The hospital is not practicing medicine, Mr. Weisman,

Q Doctor, the hospital, you know, has the ultimate duty of patient care in getting those people into the hospital and giving them privileges who are competent, qualified to be in that position, isn't that so?

A The hospital should --

Q Can you answer the question?

A -- should supply the facility. I just can't answer yes or no in your words, I have to do it in my words.

Q Go ahead.

A The hospital must supply the facility and make sure that its physicians are well qualified.

Q Wouldn't it be reasonable, Doctor, that if a hospital was not equipped to handle asphyxiated babies, that it would be the responsibility of the hospital to advise the patient that if asphyxia or severe depression occurs in your case, that we are not qualified to handle it, wouldn't you expect the hospital to do just that?

A I think that if a hospital could not handle situations or was unable totally to handle situations that they should not be doing obstetrics -- they should not be permitted to have an obstetrician, or be permitted to do obstetrics at their facility,

Q You would expect the hospital to tell any patient that, so maybe they could go somewhere else?

A I don't think that it would be anything that the hospital should have to inform the physicians who admit the patients, that they can't help the doctor at the time he needs the help.

Q Very good,

Do you know of any evidence in this case where Bedford Hospital or its administration or

any of its staff advised Dr. Choi that they were not equipped to handle asphyxiated babies?

A I think --

Q Will you please answer the question?

A I think the word, ill equipped and unequipped are two different words.

Ill equipped deals with manpower and not necessarily the total availability of machines and all devices necessary for infant resuscitation.

There was equipment there or else a blood gas wouldn't have been done, and all the technical things were available. The question was, were there people available to use them and that versus unequipped, where totally there were things not available.

Q Doctor, all I asked you, do you have any evidence or knowledge that Bedford Community Hospital said anything to the obstetrician in this case, who happens to be Dr. Choi, to indicate to him there was any shortcoming in any way on this, their ability to handle asphyxiated newborn babies?

A They would have had no reason to say that to Dr. Choi. They would have had no reason--

Q Do you have any knowledge as to whether or not there was any such notice by the hospital to Mrs. Hawkins or Mr. Hawkins?

A No reason to have made such things known to Mr. and Mrs. Hawkins.

Q Well, as a matter of fact, if I tell you that the testimony in this case from Mr. Polack who's the administrator of the hospital is that Bedford Hospital held itself out to handle breech births, do you have any basis for understanding otherwise?

A No, sir. I think that breech births can be handled at hospitals that purport to allow obstetrics to be done at their facility.

Q Well, that's a high risk pregnancy, a breech birth?

A Yes, it is.

Q Yes. And in your letter of May 28th, 1986, didn't you state very specifically, in your writing that Bedford Hospital was a low risk hospital, ill equipped and unprepared, for potentially catastrophic obstetrical occurrences -- aren't those your words?

A Yes.

Q Please check your paragraph there. Is

there any question about that? That's the third paragraph, Page 2 of your: report.

1'11 read it again. Bedford Hospital, which was a low-risk hospital, ill equipped and unprepared for potentially catastrophic obstetrical occurrences -- is that what you wrote?

A Yes. I would like to qualify and explain that.

Q Well, you may. Counsel is going to ask you all about it, I'm sure.

A Okay.

Q You will have your chance to tell all about it.

A Okay.

Q Now, Doctor, as a matter of fact, sodium bicarbonate, I think you mentioned, your direct examination, could have been used on Eric. Is that what you stated?

A Yes.

Q Doctor, the fact of the matter is, sodium bicarbonate should have been used, isn't that true?

A Yes.

Q And it was the standard to use it, to

counteract the acidosis in this infant, isn't that true?

A Yes.

Q And Doctor, Eric never received sodium bicarbonate, did he?

A That's correct.

Q And Doctor, when sodium bicarbonate is not given to an already acidotic and oxygen deprived infant, what happens to that acidosis and condition over the next period of time?

A Well, if nothing else occurs, the baby will become more acidotic, and in fact, we know that oxygen being delivered to the baby, the baby being breathed for artificially, helps to reduce that acidosis, and if, in fact, given for a long enough period of time, the baby would go from metabolic acidosis to a normal pH, and all that the bicarbonate does, it decreases the acidosis quicker and allows for more efficient, but not necessarily better resuscitation.

Q Doctor, did you say that you reviewed Dr. Horwitz's trial testimony also?

A Yes, sir.

Q Dr. Horwitz testified that the baby was

born at 3:50 a.m. and that the first blood study was at 7:30 a.m., three and a half hours later.

Does that square with the facts that you saw in these records, that the first blood study on this baby to determine his acidosis was three hours and forty minutes later after his birth?

A I was unaware of the time,

Q You want to check it? Is there any dispute?

A I have looked at the records and I was unable to determine the time that the blood gases were obtained,

Q Are you willing to accept it was 7:30?

A If Dr. Horwitz *says so*, I would like to -- like you to show me.

Q Well, you have the record there,

A And I couldn't determine from my record, I'm sorry. I am either missing something or my eyesight is bad, but I can't determine it.

Can you show me where the blood gas is?

Q I am not sure that I can. I don't remember right off myself.

It should be in the baby's record, I

should think.

A Right here is the only report that I see. I am holding up the report, and I see 11/9/74.

Q Yes.

A And I see the values, but I don't see a date.

Q All right.

The only study that was made was the one ordered by Dr. Daniel Shapiro, the doctor of pediatrics, is that your recollection of it?

A That's my recollection,

Q And did it appear that Dr, Daniel Shapiro arrived at 7:30 in the morning, sir?

A Yes, sir.

Q All right,

So then it is quite obvious that he, if he is the one who ordered the blood study, sir, that then the blood study certainly wouldn't have been ordered before 7230, and he ordered a blood study immediately when he arrived or on the phone before, perhaps when he was called at 7:00?

A Well, if he ordered it prior to that, it may have been done prior to him arriving at the hospital.

Q Possible.

A 7:00, 7:30, I don't refute that.

Q Dr. Shapiro, Dr. Horwitz testified that this blood study is the only blood study done -- you agree with that, based on your review?

A Blood gas study,

Q Yes, blood gas study, is that correct?

A That's the only one I could find, yes.

Q And it showed that the pH of the blood or the level of acidity, first, is that the correct term, that the pH of the blood is the level of acidity?

A Yes.

Q And Dr. Horwitz said it was still depressed or below normal?

A Yes.

Q Do you agree with that?

A Below normal on a pH is more acid. The more low you go, the more acid it is. Yes, it is low.

Q And that the bicarbonate level was 9. Is that what you find in that blood study?

A Yes, sir.

Q And the bicarbonate level he says should have been in the twenties. Do you agree with

Dr. Horwitz on that?

A Yes.

Q Why should it be in the twenties?

A That would be normal.

Q Yes,

A Normal to have it in the twenties,

Q And 9 is abnormal?

A Yes.

Q And indicative of what?

A It means -- indicative that the baby did not have a lot of base reserve with which to fight the acid.

Q Yes. And that the child is still acidotic?

A That's correct.

Q Still acidotic, and the question was put to Dr. Horwitz as to whether or not or as to the matter of protraction of the acidotic state--

Isn't it true that the longer an infant is in an acidotic state, the less likely it is that his cells or brain cells would recover?

A Given the condition of Baby Eric Hawkins, I can say that the longer it takes for the baby to become responsive, the longer it takes for

him to become responsive, one can then say that the amount of damage is greater as far as acidosis is concerned and its prolongation, is probably as you say, true, and I would say that the acidotic state continues, things continue to get worse and worse.

Q Thank you, Doctor,

The next thing I wish to ask you about is the nurse. She also resuscitated Baby Eric, didn't she?

A I believe she aided in the resuscitation -- she and Dr. Reyes.

Q Well, she and Dr. Reyes handled the resuscitation work, did they not, the both of them?

A Yes.

Q Now, as a matter of fact, the testimony is here that the nurse came up with the idea of giving the baby a hot and cold tub bath, and according to her own testimony, she says we did it, so I assume that means she and Dr. Reyes gave hot and cold tub baths or both --

MH. McNEAL: Objection.

MR. ALBERT: Objection.

THE COURT: You want to

rephrase it?

Q Assume that Dr, Reyes and Nurse Gerhardstein gave Baby Erie hot and cold tub baths.

MR. McNEAL: I object,

MR. ALBERT: Show an objection.

THE COURT: Overruled.

Q Assume that. Assume that they did that, or she suggested that that be done, and they did it --

MR. McNEAL: Objection.

Q -- to shock a severely depressed --

THE COURT: Overruled.

MR. McNEAL: I object to the question. That's the testimony.

THE COURT: Overruled.

That is the testimony.

Q -- *to* shock the severely depressed newborn baby. Doctor, are hot and **cold** tub baths consistent with reasonable resuscitative care €or the newborn?

A Any attempt or attempts made to stimulate the child, in order to overcome narcosis, that **would** be from the Dernerol, or from the

anesthetic that the baby was trying to recover from, sometimes to stimuli, such as pain, such as josseling, such as rubbing the back, such as hitting the heels are all -- have been used in the past and are still being used and is part of a reasonableeffort at stimulating the baby in order to breathe on its own, and in fact i.e. resuscitation.

I don't know about tub baths. I don't know how long this baby was emersed in any water, I don't now the temperature of that water, I only know what you told me about what they apparently testified to.

Q Doctor, anything that is done to provide coldness, especially to a severely depressed baby in the state that Eric was in would be negative and not indicated for acceptable for his condition, isn't that true?

A Given the state that Eric was in, or the state that I believe Eric was in, I don't think that any attempt to stimulate Eric damaged Eric in any way.

Q Doctor, I didn't ask you that, sir.

A I'm sorry.

Q I'm asking you whether or not tub baths

for Eric was acceptable or standard care for him?

A I've never heard about tub baths.

Q Well, Doctor, you read Williams On Obstetrics, did you not, that's one of your basic textbooks, is it not, in your field?

A I have read Williams textbook in the past, *yes.*

Q And Doctor, here's Williams On Obstetrics. This happens to be the 15th Edition, which is 1976.

There wouldn't be any significant difference, would there, between 1976 standards, as expressed in Williams, on resuscitation in 1974, would there?

A I doubt it.

Q All right.

Doctor, do you agree with the statement in Williams On Obstetrics -- did you use this book, by the way, in law school -- law school -- Did you use this book in medical school?

A In my residency.

Q Did you? All right.

Doctor, do you agree with this: "Tubbing, jacknifing and dilitation of

sphinctors are condemned as wasteful of valuable time and may cause serious injury,"

Do you agree with that, sir?

A The jacknifing or dilitation of sphinctors may cause injury, serious injury.

Tubbing, yes, emersing in water. I agree that is a waste of time. I don't know that that would cause serious injury.

I think what you're getting at is that if a baby is hypothermic, is a cool tub bath going to make the baby more hypothermic, and is that going to make a bad, and --

Q What do you say to that?

A I think that it would.

Q All right.

Then it is certainly not consistent with acceptable nursing standards, is it?

A I don't know what Nurse Gerhardstein did.

Q Well, assume she dunked him in a cold tub bath.

MR. McNEAL: Show an objection.

MA. ALBERT: Show an objection.

A I don't know if that's the case, but if

that's the case --

Q Assume that.

A Then it wouldn't have been very appropriate.

Q It would not be consistent with acceptable nursing standards, correct?

A That's correct.

Q And it would not be consistent with acceptable resuscitation standards for any of the specialties, whether it's an anesthesiologist, a pediatrician, an obstetrician or a nurse, isn't that true?

A Well, you're assuming --

Q Is that true, Doctor?

A You're assuming that Nurse Gerhardstein or Dr. Reyes, together, who did the resuscitation, were very enjoined and adept and an expert in infant resuscitation and --

Q Doctor, I'm not assuming --

A I don't know that they read Williams. I don't know that they knew that dipping a baby in cold water or jacknifing or dilitation of sphinctors wasn't the appropriate manner of care.

Q Doctor?

A Yes, sir?

Q Was Eric Hawkins entitled to decent and reasonable resuscitative care, no matter what they read?

A Yes, he was.

a Very good.

Dr. Horwitz says in his testimony, and I asked if you agree with this, that cold tub bath was highly detrimental. Do you agree with that?

A In this instance?

Q Yes.

A I don't think it made any difference.

Q He said that this requires the infant to use excessive amounts of oxygen to try to get its temperature up.

a That's true.

Q And do you agree with this, that cold --

MR. ALBERT: Excuse me, Could you give the page?

Q -- cold causes the acidosis to become worse.

MR. ALBERT: Could we have a page?

MR. WEISMAN: 762.

Q Dr. Horwitz, he says the cold causes the acidosis to become worse. Do you agree with that or don't you?

A Yes, I do.

Q He says that it is the basic and a recognized view that no one does tub baths. Do you agree or disagree?

A I agree.

MR. WEISMAN: Page 766.

Q That it is certainly not consistent with -- well, withdraw that,

Doctor, it is true, isn't it, that not only sodium bicarbonate should have been given, but blood gases should have been obtained, blood studies of his blood gases should have been obtained also immediately after he was born with a 1 Apgar, isn't that true?

A That would be the standard of resuscitation --

A Yes.

Q -- in 1986. Yes, of infant resuscitation, yes.

Q In 1986?

A Yes.

Q And they were different in 1974, sir?

A No, I agree, blood gases would have been obtained in 1974 as well.

Q Doctor, why did you say in 1986, when we're talking about 1974?

MR. ALBERT: Objection.

MR. McMEAL: Objection, if the Court please.

THE COURT: Overruled. Any particular reason why you used that?

THE WITNESS: I was taking the time to think about 1974.

THE COURT: All right.

Q Very good. Very good, sir.

MR. WEISMAN: Excuse me, your Honor.

Q Referring to Greenhill's book, Page 695--

MR. ALBERT: Show an objection. There is no disagreement yet from the witness on any question.

MR. WEISMAN: I was questioning him before and I diverted --

THE COURT: This is cross-examination. Go ahead.

Q We were talking about endotracheal intubation previously, and then I lost it and

moved to some other point. Rememberwe were talking about that before?

A Yes.

Q Do you agree with this OK not -- and by the way -- well, Page 695: "For infants severely depressed at birth with Apgar scores 0 to 3, no time should be lost before proceeding to intubate the trachea."

Do you agree with that?

A It all depends on the situation and the condition of the situation. I can't agree with that 100 percent of the time. Medicine isn't practiced cookbook style. It would be nice if it would, and it would be nice if people responded to the way that the cookbook would indicate that they might, but what we have to remember here is that the situation was different than what Dr. Greenhill may have thought would be the --

MR. WEISMAN: Your Honor, I just asked if the gentleman agreed with it or not, and I'd appreciate an answer,

Q Either you agree or --

A I agree, but there is a qualification to disagreement.

THE COURT: Ask another question.

MR. WEISMAN: Yes.

Q Even with whatever disagreement you have with me, in my, perhaps meager cross-examination of you, you will agree with me that he was not, Eric was not given adequate resuscitation for a severely asphyxiated baby, isn't that true?

A No, I don't agree with that.

Q Well, I thought you said that he should have had blood studies of his gas?

A Blood studies, it never resuscitated an infant. You get blood studies to guide you perhaps in the amount of sodium bicarbonate perhaps for the baby to make the resuscitation effort less arguous and quicker.

Q What about sodium bicarbonate, is that part of the resuscitation?

A Sodium bicarbonate is given, if possible, by trained persons who know how to give it, and it would shorten the period of resuscitation. It might shorten the period of resuscitation, but as I said before, by breathing and breathing off carbon dioxide and giving oxygen

to the baby, it might very well reverse the acidosis itself.

I have no reason to suspect that the resuscitation efforts were inadequate or substandard, as they were attempted.

Q Well, Doctor, you do state, don't you, you don't back down from your statement in your own letter, do you --

MR. McNEAL: Object as to that statement, if the Court please.

THE COURT: Sustained.

The jury will disregard that.

Q Doctor, did you or did you not state in your letter that you can't say whether the lack of oxygen here was extrauterine and secondary to inadequate resuscitative efforts, Didn't you say that in your own letter?

A Yes, but the inadequate resuscitative efforts must be qualified, in that they -- I retract that. Yes, I said that.

Q You did say that,

MR. WEISMAN: Excuse me one moment, your Honor.

Thank you very much. That's all.

THE COURT: All right.

Now, based on all the cross-examination, Mr. Albert, do you wish to engage in redirect?

MR. ALBERT: I would, your Honor.

REDIRECT EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. ALBERT:

Q To refresh your recollection, Mr. Stuhldreher asked a question about the percentages of 80 percent, and you referenced a 94 percent figure, I believe, pertaining to Apgar 1 children becoming normal?

A Yes.

Q Do you recall that scenario?

A Yes.

Q What significance do you place, if any, on those statistics?

A Well, simply that fetal recovery from severe hypoxia and acidosis with good resuscitation yields, in my figures, 94 percent without residual brain damage, without apparent residual brain damage, and from that, I conclude that that presupposes that tnose

babies, of course, didn't have permanent neurologic injury at the time that resuscitation was undertaken, and it's simply -- that's all it means, is that they didn't have -- is that those 94 percent did not have permanent brain damage when they were resuscitated.

Q What if any significance does it have in assisting in determining when permanent brain injury occurred?

A Well, if they recovered, most certainly their brain injury didn't happen altogether. Those that didn't recover from their resuscitative efforts, one has to assume that the brain injury occurred intrauterine.

Q How would that be applicable to this case?

A We have a situation here where a baby is severely acidotic, severely depressed, severely hypoxic, is resuscitated by a nurse and by an anesthesiologist in the best manner that they knew how to do, bag and mask breathing, good axygen being tried to be delivered to the baby, I think that they did the best they possibly could from what the records show --

MR. WEISMAN: Objection.

THE COURT: Overruled.

A And we have a brain damaged infant that was obviously brain damaged very soon after birth, people knew that it had experienced some damage, and I have to assume from that, going along with the statistics, that that baby suffered this insult in utero.

MR. WEISMAN: Objection.

THE COURT: Overruled.

Q Which leads to the next question. Mr. Stuhldreher asked you about the percentage of injury done in utero versus extra utero or outside the uterus.

Your opinion is what, based upon reasonable medical certainty and probability?

A That Eric Hawkins was damaged in utero, that's my opinion.

Q Mr. Weisman asked you about your testifying on behalf of injured parties. How many times have you testified?

A This is my first time. I didn't realize that I was testifying for a party. I thought that I was here as a witness --

MR. WEISMAN: Objection.

A -- trying to --

THE COURT: Overruled.

Go ahead.

A -- explain to the jury and to the people asking ne questions, to the best of my ability as an obstetrician, what happened.

Q A5 a point of clarification, Mr. Weisman asked you a number of questions about oxygen deprivation during the delivery period.

Could you clarify for the jury t period of time when you believed the oxygen deprivation occurred, what was going on at those time periods?

A Well, 1 believe that when the, according to my records and according to the records, at 3:20 the mother was given a general anesthetic, and I believe that she was given the genexal anesthetic because it was believed that she was deliverable, meaning something had to be extruding from the vagina at that point in time, Usually the head will crown in the vertex down, or a breech, and this was a breech, So, the head wasn't coming out of the vagina, and this, as I tried to explain before, means that that cord is being depressed between

the body of the baby and the pelvis, and I think the baby experienced oxygen, some bit of oxygen deprivation, unquantifiable, I don't know how much at this time, and I don't know if it ever recovered from this episode, but it might have, until the second anesthetic was given, the second anesthetic the baby is again down deep in the pelvis being given a second -- the mother's being given a second general anesthetic, again, cord compression is occurring, and from then on, which was I think the 3:47, I believe, which means that the head, the breech head had to come down before that anesthetic, that's several minutes before, from 3:47 until 3:50, at feast with a general anesthetic, again the cord is being squeezed, and it's at this time that the baby is getting perpetual decreased amount of oxygen without any possible way of recovering from this, because it's not going back up and it can't get cord circulation any longer.

Q What's the object of resuscitation, what are you attempting to do there?

A To re-establish circulation, blood flow, if there is none, and to re-establish

respirations with good oxygenation.

Respirations is if the person or child is not breathing on its own, you have to breathe for it until it can breathe on its own, and you have to supply oxygen for this brain and for this body to live.

So, resuscitation is somebody who can't either circulate or breathe on its own or her own, and resuscitation is the attempting to get them to do that,

Q And whose responsibility in the obstetrical arena, if I may use that term, for determining who's present to accomplish that task?

A The obstetrician's role in instances where he's got to be able to recognize potential situations, this being one of them --

MR. WEISMAN: Objection,

A -- where it was extremely high risk --

THE COURT: Overruled.

A -- common knowledge that breeches are often born hypoxic, lacking in oxygen to some degree and may need resuscitation, and it was the obstetrician's, from my point of view, responsibility to either surround himself with

people who were expert in neonatal resuscitation or to have transferred that mother to a place where there were people who were able to give expert neonatal resuscitation.

Q And what did you mean in your report by use of the words, "ill equipped at Bedford Hospital"?

A I tried to explain that.

They had the equipment, they had the ability to do the blood gases. I'm sure that they had sodium bicarbonate, they had oxygen, they had umbilical catheters, they had everything there.

What they lacked on a 24-hour basis, and this makes them the lower risk hospital, is the immediate availability of a perinatologist or a neonatologist who can use the equipment, and Bedford had an anesthesiologist certainly capable of handling Mommy but was unfamiliar with babies, perhaps.

He did the best he could under the circumstances. But not having an anesthesiologist there, or a neonatologist or perinatologist who is familiar with the

newborns was the responsibility of the obstetrician, but in this instance, and as I said in my report, that I don't think that because of the way the baby came out, the length of time that; the baby was deep in the birth canal and so forth, I don't think that even if the baby were to have been given the soidum bicarbonate, umbilical catheters, had all the blood gases drawn, that it would have been any less damaged.

Q Mr, Weisman asked you a number of questions pertaining to competency, evaluating competency.

In your experience in the hospitals, when applying for medical privileges, who makes the substantive evaluation, that is, determines actually the qualifications, how does that work?

A Well, a doctor applies for privileges to practice medicine or take care of patients at a hospital, and initially, usually it's the administration's responsibility to make sure that that doctor has a license to practice medicine, and as far as the doctor practicing within a special field, it's usually the head

of the department in which he wants to practice.

As an example, anesthesia. The head of the department of anesthesia would look over the resume of this doctor's application and determine, either by talking to the doctor, looking at the resume, calling up, asking for references, would determine the level of experience and of competency that this person who was applying to practice anesthesia at this hospital has, then the chief of the department of anesthesia would bring it to an executive, a medical executive committee.

This medical executive committee would listen to the chief's testimony, that: "Yes, this doctor's applying in my department," and, "Yes, I find him to be competent."

The medical executive committee would then say, "Fine." If they had no objections, and they would go ahead and refer that to the board of trustees of the hospital.

The board of trustees has to depend entirely upon their medical personnel to ascertain the competency of these individuals, and if they found no reason to overrule their

medical executive committee, they would say, "Okay. You're given or granted privileges to practice at this hospital."

Sa it falls really, in answer to your question, upon the chief of the department to ascertain the level of expertise and competency within a given field.

Q Okay. And that's a physician?

A Yes.

Q With respect to communication with the patient, remember Mr. Weisman asked a series of questions pertaining to discussing particular matters with patients.

Assuming, as in this case, it was the case that Mrs. Hawkins had a private obstetrician, in that circumstance, who is looked to as being responsible for communicating with the patient pertaining to all the patient's needs and concerns?

MR. WEISMAN: Objection.

THE COURT: Overruled.

A It's the obstetrician that admits the patient, it's the obstetrician that takes care of the patient, and it's the obstetrician's responsibility to communicate with that patient

what's available, what's not available, the level of care, his feelings and so forth and how he can effectively care for her at a particular hospital.

Q Do you remember Mr. Weisman asking you to assume that Baby Eric was put into an ice bath, or something along those lines, do you recall those questions?

MR. STUHLDREHER: Objection. I don't think he said "ice bath."

THE COURT: Water bath,

MR. ALBERT: Whatever. I would like to get it straight so that I can --

THE COURT: I don't remember anything about an ice bath.

Q Very cold bath, an ice tub, something along those lines.

MR. WEISMAN: Objection.

MR, STUHLDREHER: There was no testimony, your Honor, and I object to this.

THE COURT: I think he said "hot and cold baths," is that correct?

MR. WEISMAN: Yes, sir, precisely.

MR. ALBERT: Hot and cold baths.

THE COURT: Yes. Hot and cold baths.

MR. ALBERT: Very good.

Q Do you have any evidence that Eric was placed in the hot and cold baths?

A Only by hearsay that I've heard today, and I don't know, I've not read anything that Baby Eric was placed in a cold tub of water.

Q Okay. I would like to have you assume that what Eric was placed in was some warm tap water, okay, I wish you to assume that, Do you believe that had any effect on Eric whatsoever as to his brain damage?

A No.

MR. WEISMAN: I object to that.

THE COURT: Overruled.

Q Do you agree with Dr. Horwitz in that regard, that you don't believe that occurred or happened either, brain damage?

A Yes, sir, that I would agree with Dr.

Horwitz.

MR. ALBERT: Excuse me one moment, your Honor, if I may.

I have no further questions, your Honor.

THE COURT: All right.

Mr. Stuhldreher, you may have the opportunity to formulate questions on recross in response to the redirect and your fellow lawyers' cross. So, you may have both opportunities at this time for recross.

RECROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. STUHLDREHER:

Q Dr. Klein, when you were asked about the hot and cold tub baths, you say that the first you heard of that, that was hearsay8

Everything you know about this case is hearsay, isn't it, isn't what you got out of the records and what people have told you about the facts, isn't that true?

A I don't perhaps know the definition of hearsay and maybe I used it --

Q Well, you used the term, sir.
A Would you like to tell me --
Q I just want you to answer my questions, that's all I would like you to do, is just answer my questions.
A Well, I don't know the definition of "hearsay," and if I used it improperly, then I can't answer your question.
Q Well, you told us that you never read Dr. Choi's depositions or any of his testimony.
A That's correct.
Q So what you know about this case is what you've taken from the hospital records and what Mr. Albert has told you, isn't that the fact?
A And what you told me and what Mr. Weisman told me.
Q What we told you in our questions, is that what you mean?
A That's correct.
Q All right.

Now, Doctor, when you were examined by Mr. McNeal, you will recall there came a time when he asked you -- you were talking about the crowning of the buttocks --
A Yes.

Q -- and he said: "Well, what would you have done at that time?"

Do you recall that?

A Yes, I do,

Q And you responded that there were two things, then you said, "Well, no, there are three things, three different approaches that I would have made."

Do you recall that?

A Yes.

Q I don't want to misquote what you said, And then you said that, "Number one would be to use a total breech extraction." Is that right?

A Yes,

Q And then I believe the second one was that, you said you would have pushed the baby back up into the uterus and then you would have done a C section,

A Yes.

Q And then the third one was, my notes, I tried to get it down, you said that you would have the mother awakened and then you would have her push down some more and deliver the baby vaginally, isn't that true?

A Yes.

Q And I think you added, if the fetal heart rate was -- I wrote down here "okay" or "normal'' or "acceptable," right?

A Yes.

Q Now, isn't the number three choice that you gave precisely what Dr. Choi did in this case? He had her awakened, there was an anesthetic and then she was awakened and then he had her push down some more, and then there was another anesthetic and the baby was delivered, isn't that what occurred here, according to the records?

A He did not determine fetal status, at least it wasn't recorded that he determined fetal status at the time.

This would be an extremely frightening time for the obstetrician, and what Dr. Choi did was one of, as I say, as you say, one of the three things, and *yes,* Dr. Choi elected to allow the patient to awaken and to push some **more** to get the baby further down so that it could be delivered, but the baby has to be delivered, it's got to be delivered either vaginally or by Cesarean section, but the

baby's got to be removed.

Q Well, it's a frightening time because you have to move pretty fast, you don't have much time to decide what you're going to do, isn't that true?

A You have no idea.

Q Pardon me?

A You have no idea how frightening it could be.

Q All right.

And there was some testimony that -- you said you do have to most fast, I believe you indicated, and if there were a compressed cord, umbilical cord, while the baby is in the vaginal canal and just before delivery, if you then decided to stop the delivery and perform a C-section, isn't it entirely possible that you would get more cord compression in the delay by the time you got the equipment necessary to perform the C-section in place?

a Well, the mother was already, had a general. anesthetic and it might have been entirely possible to have taken the hand and actually push the breech back up into the vagina and loosen up the cord so that

circulation of the umbilical cord was re-established, and in essence, during that period of time it would loosen up the body from being compressed and it might allow the baby to actually be resuscitated on its own by enough passes of circulation while it was in Mommy, and as long as you kept Mommy well oxygenated, the baby might self, if you will, self-resuscitate, so that when the C-section is done, the baby's condition may be good, providing that there was no permanent damage to that point,

Q Of course, in that scenario that you just went through, you're assuming that all of those things could be accomplished?

A Yes.

Q We don't know that you could accomplish that, that you could free up this cord compression and that eerything would work out satisfactorily.

Now, you've indicated that your statistics show that 94 percent of the babies that are born asphyxiated can be resuscitated and become normal babies, isn't that true, is that what you said?

A Yes. Here the perinatal collaborative study demonstrated that infants with Apgar scores of 0 to 3 found 94 percent of term infants without evidence of cerebral palsy.

Q So that leaves us 6 percent that end up with either --end up dead or brain damaged, is that true?

A Correct.

Q That would be true, wouldn't it?

And because Eric is brain damaged, you then conclude, do you not, that he must have been brain damaged before the resuscitation began, isn't that right, isn't that the way you have theorized this case, aren't those your conclusions?

A Oh, statistics aside, I think the condition and my knowledge of the time that the baby was in the birth canal makes me believe that the injury, permanent brain damage occurred intrauterine.

I think that the statistics only corroborate the fact that if the baby was unable to be resuscitated, then it had permanent brain damage, or resuscitated and eventually wound up either dead or with brain

damage, then I think that corroborates the fact that it was intrauterine.

Q Well, in your answers to questions just a moment ago by Mr. Albert, you said that the brain damage was in utero?

A Yes.

Q And then you said you assumed that. Didn't you say you assumed it?

A I assumed it,

Q You assume that's what happened here, don't you, isn't that true, Doctor?

A It's my opinion that that's what happened.

Q It's your assumption, isn't it?

A Yes,

Q You just said that?

A Yes.

Q All right.

Well, you told us in the report that one cannot say with any medical certainty whether it occurred intrauterine or extrauterine, isn't that what you said in your report?

A I wrote that, *yes.*

MR. STUHLDREHER: That's all I have.

THE COURT: Mr. McNeal, you're up.

RECROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR, McNEAL:

Q Do you want to explain that last statement, Doctor, as to what you wrote?

A well, brain damage ofttimes cannot be -- if brain damage is caused by a lack of oxygen, and I think that everybody's in agreement that it was a lack of oxygen that caused the baby's brain damage, at least that's what I think, it either was because the baby suffered it permanently and enough lack of oxygen in utero or it suffered outside due to inadequate resuscitation.

I did not mean to infer, either in my report or now, that there was in fact inadequate resuscitation, but should or if it was inadequate resuscitation, then one couldn't begin to determine whether or not it was brain damage inside or outside,

And I tried to qualify that further by saying, in this situation, there is such

overwhelming, in my opinion, evidence, the number of minutes that the baby was in the birth canal, knowing how much it was in a situation of a breech, how much cord compression there is, and knowing the condition and hour and fifty minutes in the second stage deep down in the pelvis, the Piper forceps, the number of minutes it took to finally deliver the head.

So, we had two situations, one, the body was deeply pressed into the pelvis with cord compression; two, the baby's head had yet to be delivered when the best of the body was delivered.

So you have a quote, kind of a smothering effect, if you will, that all of this, in my mind says that the baby had enough lack of oxygen during those minutes that according to statistics it only needs about six to eight minutes before permanent brain damage occurs in an instance like that.

And so this statement, that it could be extrauterine, it certainly could be extrauterine, but I don't believe in this instance it could be extrauterine, if it was

inadequate resuscitation, and I don't believe it as inadequate resuscitation in this instance.

Q Thank you.

Now, as to sodium bicarbonate, as all medicine is, it advances, and the thinking in 1974 that sodium bicarbonate should be utilized in order to overcome the acidity that would be present. Now, what is the thinking concerning sodium bicarbonate, the use of it?

A Well, it's still considered a prime tool by the resuscitating team because the quicker one is able to neutralize the acidity, the quicker the response of the infant, the better off the infant is going to be.

However, a sophisticated -- the danger lies in overusage of bicarbonate, and I think that that is a relatively reasonably learned phenomenon, that in fact brain hemorrhages can occur by overuse of sodium bicarbonate.

But the initial use of bicarbonate, a measurement of blood gases to tell the doctor where, what the situation is, is more sodium bicarbonate needed, in other words, is still an extremely effective and good and recognize

standard of good neonatal infant resuscitation, no question about that.

Q One has to be most careful about the amount of sodium bicarbonate administered, keeping in mind --

A One has to know how to use it, one has to know the amount of how to use it, that's correct.

Q And watching very carefully as to whether or not the resuscitation which is being undertaken is again overcoming the need for sodium bicarbonate?

A Yes.

Q Fine.

MR. McNEAL: Thank you.

THE COURT: Fred, recross,

RECROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. WEISMAN:

Q You were not in the picture here at the time of the arbitration, were you, Dr. Klein?

A No.

Q You were brought in after the arbitration

several months later, correct?

A Yes, sir.

Q Did you have occasion to read any of the multiple expert reports that had been produced by the defense over the last ten years that this lawsuit has been filed?

MR. ALBERT: Show an objection.

THE COURT: Overuled.

A I read the reports that I told you that I read earlier,

Q Other than the reports of the defense, the defense reports?

A I'm sorry.

Q Of any other defense experts, did you read any other defense experts reports?

A 1 only read the ones that I told you that I read. I didn't read any others. I read the depositions of Dr. Edelberg, Dr. Horwitz, Dr. Coker, Dr. Kretchmere, and I read the trial testimony of Dr. Horwita. I have not read any other reports from any other doctors.

MR. WEISMAN: Thank you. No further questions.

THE COURT: Steve?

MR. ALBERT: No, your Honor. I'm finished. Thank you

THE COURT: All right, Doctor, you may step down. Thank you.

THE WITNESS: Thank you.

THE COURT: Ladies and gentlemen, we're going to recess early today.

As I understand it, the next witness also is a medical doctor, and he is coming in from -- what is it, Chicago?

MR. ALBERT: Chicago, Illinois, your Honor.

THE COURT: He will be here tomorrow morning. So we will again renew the Court's admonition, that is, do not discuss between yourselves nor allow anyone to discuss the subject matter of this case until you've heard the balance of the testimony and the Court's charge.

We will allow the jury to go at this point, David. We'll ask them to be back at 9:30 in the morning. And Mrs. Melner, if you will stay, I will discuss further with you my conversation with

regard to your letter. All right?

Please rise, ladies and gentlemen.

---oOo---

(Thereupon, the jury was excused for the day, whereupon, the following proceedings were had in open court:)

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THE COURT: All right. Mrs. Melner, I have attempted at the noon recess to contact your employer, Jet, Incorporated.

JUROR NO. 8.: Yes.

THE COURT: He was not there. His secretary told me that she didn't expect him to return. So, I have not had the opportunity to communicate with him, although I did tell her that I would appreciate very much if he would pay you, and in fact, believed it to be his duty, his obligation as a corporate citizen of this community, I am hoping that I will hear from him, the balance of this day or tomorrow. Beyond that, I

can't tell you any more.

So, if you would like to stay with us until I do in fact talk to him, maybe the persuasiveness of the Court may in fact see to it that you are compensated.

I have been listening very closely to the brilliance of all the counsel in this case, and perhaps I can adopt some of their persuasive abilities and convince your employer, and convince your employer that you in fact ought to be compensated.

It is incredible to me that corporate citizens of this community do. not in fact pay their employees for jury service.

En looking at this case, we have the University Hospital, and she is being compensated by her employer, a good corporate citizen of Cuyahoga county.

Juror No. 2 is in fact, belongs to a small corporation and apparently she is being compensated, Another good corporate citizen of Cuyahoga county.

Juror No. 3 I believe is retired, homemaker. So, therefore, doesn't qualify.

The issue of corporate citizens, everyone, in fact there is a Postal Service employee here who is being compensated,

Juror No. 7 works for the City of Cleveland, also a corporate citizen, being compensated, and you apparently are the only one.

So, I have contacted your employer. I will continue to impress upon him that he pay you, as a good corporate citizen of this community, just as you are a good citizen.

Corporations and citizens stand on the same basis, as far as I'm concerned, and you ought to be paid, and I wish very sincerely that we were able to pay you out of our funds here in the county, but unfortunately we cannot.

We give you $10 a day, which is hardly enough to pay your parking and allow you to eat lunch. It is just an

unfortunate situation. But I'm going to talk to your boss.

Now, whether or not I will, as I've mentioned during the voir dire, raise particular hell with him or not, I'm not sure, but I might, depending on how he responds to my request.

I'm going to not attempt to put you in a position that might cause any problem with this fellow, I will try to use the persuasiveness of drawing on the skill and ability of all these lawyers that I've been privileged to have work with me for the last three weeks, learning from them how to use this persuasive ability that they have. I'm going to use that on your boss. Okay?

JUROR NO. 8.: Very good,

THE COURT: Okay. Now, you can come out around this way. If you can come back tomorrow at 9:30, we hopefully will have an answer.

All right.

---oOo---

(Thereupon, at 3:00 p.m., Monday, December 1, 1986, this cause was recessed until Tuesday, December 2nd, 1986, at 9:30, all parties being present, the following further proceedings were had:)

Dr. KLEIN TRIAL #19 1692

THE COURT: Please be seated, folks.

All right, George.

Doc. 239 part II of II

CROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. STUHLDREHER:

Q Dr. Klein, --

A Sir?

Q -- you reviewed various hospital records and some depositions before you came here to testify today?

A Yes, sir.

Q You've testified here about the delivery of tho baby and what Dr. Choi did or did not do.

Did you ever review Dr. Choi's deposition that was taken in this case?

A No, sir, I have not.

Q You never were given that deposition, were you, to review?

A I never reviewed it.

Q And do you know that this case was arbitrated before a panel of lawyers and that Dr. Choi's testimony was taken durng that

arbitration hearing, did you know that?

A No, sir,

Q You didn't know about that? You indicated no?

A No.

Q So you've never reviewed the testimony of Dr, Choi that he gave during the arbitration hearing in this case, have you?

A No, sir.

Q And do you know that Dr. Choi testified from the witness stand in this case during this trial, are you aware of that?

A No, sir, I'm not,

Q Nobody told you about what he said during that testimony, what he told this jury when he was on the witness stand, nobody told you about that?

A I don't recollect specifics at all. There may have been vague allusions, but I don't recollect anything that was said about Dr. Choi's testimony.

Q So the fact is, Doctor, that you don't know anything that Dr. Choi said about what he did in delivering this baby, isn't that a fact?

A I discussed with Mr. Albert -- or Nr.

Albert discussed with me certain of the aspects of the trial that have occurred thus far, and alluded to certain things that apparently had come out at the trial, among them were certain things that apparently Dr. Choi did or didn't do.

So, those are the only facts. I have not read the actual testimony of Dr. Choi.

Q The only facts then you've got about what Dr. Choi did or did not do were from Mr. Albert, is that what you're telling me?

A That is correct.

Q You and Mr. Albert belong to the same country club?

A As a matter of fact, yes.

Q Personal friends, aren't you?

A We are friends, yes.

Q Play golf together, is that right?

A Yes.

Q Did Mr, Albert tell you that Dr. Choi testified in this case that the cord was compressed around the baby's body, did he tell you that?

A No, sir.

Q Where did you get that fact?

A My knowledge. My knowledge of breech births, breech deliveries.

Q You assumed that because this was a breech birth, that this particular cord probably was around the baby's body, is that what: you're telling us?

A 1 don't know if it was around the baby's body at all. I know that cord compression occurs when that breech gets deep down into the pelvis.

Q But you told the jury in this case that the card was depressed, in this case, that Eric's cord was depressed, isn't that what you said in direct examination?

A I said that the *cord* was compressed, not depressed.

Q All right. Compressed.

A And I gave as an example when I showed the boney pelvis and the breech, as I demonstrated to the jury, of how the cord could be.

Q But you don't know whether it was in this case, isn't that right?

A I don't know. where the location of the cord was, but I do know that in this case that

cord was compressed.

Q You know that it was compressed in this case?

A Yes.

Q Haw do you knaw that?

A That baby came out extremely ill and sick and could only have gotten it one way, and that was by anoxia or a lack of oxygen to it, and the only way that that could have happened was for it not to have received oxygen from the placenta or the mother, and the only way that could have happened is by cord compression.

Quite possibly the season that the baby was limp could have been excessive amounts of anesthesia, the Penthrine and the nitrous oxide and the narcosis from the Dernerol,

Q So there are a lot of reasons that could hove been related to the anoxia, isn't that right?

A No, there was only one cause, and that was the cord compression. There are a lot of other reasons why the baby took perhaps as long to respond, that's right.

Q Isn't then the use of Narcan, isn't that a possible basis for the anoxia?

No, Narcan isn't the cause of anoxia. Is that what you said?

Q Yes. Isn't that one of the causes?

A Narcan?

Q Yes, the use of Narcan?

A The use of Narcan is to counteract the effects of a narcotic, such as Demerol, and Dernerol can have a narctizing effect. It can make a baby sluggish, as far as response, sluggish, as far as muscle tone, as far as movements are concerned, and certainly enough of a narcotic can make a baby not want to breathe or not breathe on its own, and it has to be stimulated.

Narcan is a nacotic antagonist, and it's used to reverse some of these depressant effects on a fetus.

Now, it is well known that a baby compensates when it has a lack of oxygen relative or complete lack of oxygen by shunting blood towards the brain, which is the vital thing that has to persist, and it shunts it away from things such as muscle, and if Narcan was given, and I believe the records show that it was given, it was given intramuscularly, as

Narcan is typically given, and the muscle from which the blood has been shunted away towards the brain, the Narcan would have probably sat around in the muscle and would not have been distributed to the baby,

So, I don't. think that the baby would have gotten the benefit of the Narcan, as far as the Demerol *is* concerned.

Q How about the use of the anesthetic, couldn't that cause anoxia or hypoxia at: birth?

A No.

Q The injection of an anesthetic into the mother, wouldn't that cause some deprivation of oxygen to the brain of the baby?

A No, I don't *see* how that would have occurred or caused anoxia,

Q I'm not asking you whether that occurred--

A Oh. I'm sorry.

Q -- I'm asking you whether that isn't one of the causes of hypoxia to a newborn?

A The mother was given two anesthetics, as far as I could determine from the record, Penthrane and nitrous oxide.

MR. WEISMAN: Objection.

THE COURT: Overruled.

A Both of these cross placenta and get into the baby's circulation. The baby is in essence as asleep as the mother is asleep.

If the baby cannot breathe because of an excessive amount of anesthesia, then the baby has to be breathed, artificial resuscitation, artificial respirations have to be afforded the baby with oxygen.

It's not the anesthetic that causes hypoxia, but it night be the anesthetic that adds to a baby's depression, or a lack of the baby to respond quickly and to breathe on its own.

Q All right.

Wall, Doctor, Dr. Choi testified here that in his opinion -- and he delivered the baby -- the cord was loose around the baby and that there was no cord compression.

Would tnat change your opinion, if you knew that fact?

A No, sir.

Q Even though the doctor who delivered the baby states that, you still say that there was cord compression, is that right?

A Yes, sir.

Q Is there anything in the record of the hospital record that you had before you that indicates there was cord compression?

A Yes, sir, the condition of the baby at birth.

Q Other than that though. You assume that though, do you not, Doctor, based upon the condition of the baby at birth, then you relate back and say, "There must have been cord compression," isn't that how you arrived at it?

A I arrived at that conclusion based on the things that I've told the jury before, and that is the 30 minutes of pushing, the body being deep in the pelvis and the cord having to be compressed during that period of time, and particularly when the baby's trunk is out and the cord is stretched and also compressed and isn't working at all, and the head's still being in the vagina or the lower uterine segment still having to be delivered, all of that is consistent with a lack of oxygen.

Q And based on that, you say there was cord compression?

A There was cord compression, yes.

Q This lack of oxygen to this Baby Eric, it occurred, you just said, within a 30-minute time frame, is that riqht?

A Yes.

Q Just before the baby was delivered?

A *Yes.*

Q Correct?

A That's correct.

Q And at that time, that's when this asphyxia occurred, is that your testimony, during this 301-minute period this asphyxia occurred, is that correct?

A How are you defining "asphyxia"?

Q Well, how do you define it?

A Asphyxia is either a lack of oxygen and/or circulation to a, in this instance, the baby, such that there is an increase in carbon dioxide levels, both intracellularly and intravascularly, with a lowering of pH.

Q That's what occurred here, wasn't this baby born with an Apgar 13

A Yes.

Q And did not the baby has asphyxia at: birth?

A Yes.

Q That's what I thought I asked. And that occurred within the 30-minute period before the baby was born, you told us that?

A Right.

Q So that asphyxia then was an acute form of asphyxia rather than a chronic form, is that correct?

A If 30 minutes is being talked about as being acute, yes.

Q Well, it is an acute form of asphyxia, is it not?

A Yes.

Q And you're not aware, I believe you said on your deposition, that you were not aware or weren't familiar with the studies that indicated that 80 percent or 80 to 85 percent of babies that are born with asphyxia can be resuscitated to normalcy, can be normal at the end of the proper resuscitation effort, you weren't aware of that, were you, at the time we took your deposition?

A Can you let me know where I said that?

Q Yes, sir. On Page 75 of the transcript of your deposition.

A May I review it?

a Pardon me?

A Can I just take a look?

Q Sure. Line 1.

A That's correct. May I clarify that?

Q Listen *to* the question, Doctor: "You're familiar in fact with studies that indicate that 88 percent of babies with Apgar scores of 1 at one minute, if properly resuscitated, come out with no brain damage whatever and are entirely normal children, are you not;?"

And your answer was: "No. As A matter of fact, I think that that was from the testimony of Dr. Edelberg, that I obtained that 88 percent from. I am not familiar myself with the literature that says that."

And then Mr. Weisman asked you: "Do you disagree with it?"

And you said: "I nave no basis from which to agree or disagree,"

Isn't that what you said at the time of your deposition?

A 'That's exactly what the deposition said that I said, and I asked you if I could clarify that statement.

Q When did you ask?

Do you want to clarify it now, you mean?

A Yes, I would like to clarify that.

Q All right. Go ahead.

A Yeah. As a matter of fact, the literature that: I am familiar with and was familiar with at that time says -- and this was from the perinatal collaborative study, October, 1986 was the article that reviewed the study and made some other: comments, but it says that: "Fetal recovery --"

MR. WEISMAN: I object to this, your Honor.

THE COURT: Overruled.

Q Is this the article that Mr. Albert referred to?

A No, sir, this is the article that I'm familiar with.

Q This isn't the same one that you referred to earlier, the October '86 article?

A No, this is a different one.

Q All right.

A It said that --

MR. STUHCDREMER: Objection overruled, your Honor?

THE COURT: Yes.

A It said that infants with Apgar scores of 0 to 3 at five minutes found that 94 percent of term infants were without cerebral palsy.

So, I agree. I don't know about 80 percent, but I know that 90 percent or more can recover without ill effect, as a matter of fact.

MR. WEISMAN: Withdraw the objection,

Q So it's a higher percent?

A That's correct,

Q All right.

Now, you indicated on direct examination here a few moments ago that in your opinion, when the baby was born, it had permanent brain damage, I believe you said? Is that what y'ou told us?

A Yes.

Q Now, you don't know the extent of that brain damage, do you?

A No, sir.

Q Could be, possibly it could be 1 percent of that 100 percent of the entire brain, isn't that true?

A Yes, sir.

Q You don't hold yourself out as an expert in the field of determining when brain damage is permanent OK not permanent, do you?

A No, sir.

Q In fact, I believe you told us earlier in the deposition that you thought that Dr. Horwitz, who is a pediatric neurologist, would be better: equipped OK better able to respond to that type of question, isn't that true?

A As to the permanency of brain damage?

Q Yes.

A Or when it occurred?

Q Whether in this particular case, whether there was brain damage at the time of the birth of Baby Eric?

A Oh, I don't think that -- Dr. Horwitz is certainly a pediatric neurologist and deals with brain injuries and understands them perhaps far *better* than I, but I think that there is irrefutable evidence here that there was a significant period of time of lack of oxygen, and in my medical training, a lack of oxygen can and does cause central nervous system and brain damage. There is no question about that, and the baby inost certainly had

enough anoxia or lack of oxygen for a long enough period of time to have caused permanent brain damage. The extent of that brain damage certainly cannot be determined by me, particularly at that time, but now I think that there is evidence of the significance of that brain damage.

Q Well, didn't you answer questions of this nature?

MR. ALBERT: Where are we at?

MR. STUHLDREHER: Page 74.

Q You were asked: "What is the physiological progression that takes place medically fxom the point of oxygen lack to the end point of brain damage, are you aware of that?"

Mr. Albert: said: "In the fetus?"

Question: "In the fetus or the newborn?"

And your answer was: "Once oxygen fails to be delivered in adequate amounts to the brain, then the brain cells are not able to continue to live, they then become irreparably damaged because they can't utilize the oxygen in their metabolism and in their respirations

and they die. I think that's what causes brain damage.'?

Question: "Is this the area that: you are an expert in, particularly?"

And your answer was: "This is not an area in which I am an expert."

Question: "The area of expertise that should be called upon really for careful explanation *of* it would more likely be a pediatric neurologist, isn't: that so?"

And your answer was: "I would think that a pediatric neurologist would understand the scheme of anoxic brain damage Setter than I would."

Now, Dr. Horwitz testified here that in his opinion, in his judgment there was no brain damage, permanent brain damage at the time Eric was born, at the moment of birth. And you disagree with that, is that what you're telling the jury?

A Absolutely.

MR. STUHLDREHER: That's all I have, your Honr.

THE COURT: Mr. McNeal.

MR. McNEAL: Yes, your Honor.

CROSS-EXAMINATION OF DR. STEVEN M. KLEIN

BY MR. McNEAL:

Q Dr. Klein, as I understood your testimony, you did state that this was a big fetus, a big baby?

A In relationship to this woman's pelvis, yes.

Q *Yes*, Under those circumstances, what is your opinion as to whether or not Dr. Choi should have undertaken another procedure other than the delivery which was attempted?

A Well, it's my opinion as an obstetrician that there were several times throughout the woman's hspitalization where Dr. Choi should have done a Cesarean section, in my opinion.

Q That Cesarean -- how *is* a Cesarean section accomplished, would you explain that to the jury?

A Yes. A woman is given an anesthetic, one of various types of anesthetics, so that: anesthesia, pain free, an incision is made through skin down to the level of the uterus itself, the bladder, which is intimately involved with the uterus is pushed down well

away from the front of the uterus, and then the uterus is entered, the uterus is entered with a knife, and it's either in an up and down cut or in a cut, a transverse cut, horizontal cut, and the baby is then delivered,

This happens, the baby in a breech situation is delivered with much of the same maneuvers that a breech is delivered vaginally, with the exception, of course, that the head, if it seems to be difficult in removing, the incision in the uterus can be made larger and the head can then be removed.

So if you're deliering a breech through a Cesarean section, it's easier and quicker to deliver the baby, but nonetheless, the baby can still be injured even with a Cesarean section, again, because you're doing the same maneuvers with the head and the arms and the legs, and then finally delivering the baby's head. But it's done in a very relatively short period of time.

Q That's the real advantage of doing a Cesarean, is that correct?

A Well, the two advantages, one, that it can be done quickly before the baby suffers

from cord compression and anoxia for any length of time, and certainly it avoids the trauma, most of the trauma that breech babies sometimes undergo.

Q And is it necessary that Piper forceps be used in a Cesarean or can the baby's head be delivered manually?

A A baby's head, in a vast majority of instances, is delivered manually without the need for forceps.

Q And the problem with forceps in a vaginal delivery is what?

A Well, in this particular instance the forceps that were applied to a baby that was already acidotic, asphyxiated -- these are all phenomenal terms, and I applaud you if you're able to understand them -- but a baby is rather ill, and its brain is rather ill, and it's been with this lack of some oxygen or a lack of oxygen and it's becoming swollen because of that, and forceps arc applied, and the squeezing effect in and of itself in a baby's brain or head that has been exposed to this lack of oxygen could be dilitarious, in that it could cause hemorrhages within the capillaries

in the brain itself.

So not only could the oxygen deprivation cause a problem, but the forceps squeezing the baby's head can cause a problem, But that would be the trauma from the Pipers, from the forceps, if that happened.

Q Is it the obstetrician who determines the type of anesthesia to be used in a delivery?

A Yes.

Q What other types of anesthesia can be administered other than the general anesthesia that was chosen apparently by Dr. Choi in this case?

A Well, one can use a pudendal block, which is a local infiltration of a Novacaine like material through the vagina or through the buttock area to the nerves that affect mainly the vagina.

This is sometimes incomplete. A patient may experience severe pain even with a pudendal block. This is a local. Or the patient could receive what's called an epidural or a caudal, which is the same as an epidural except that the placement is different, medicine is placed around but not into the spinal canal or where

the cerebral spinal fluid is, and by placing the medicine around this area, it bathes the nerves, bather; the nerves, the nerves then pick up this medicine and are anesthetized, the pain fibers are anesthetized, she doesn't feel pain.

Or she could have been given a spinal anesthetic, where medicine is placed actually into the spinal canal, This then not only takes away the pain, but it takes away her ability to move, at least from this part of the body, which is >subzyphoid, down, and of course, anesthetizes her completely, but if I remember correctly, Mrs. Hawkins said she did not want a spinal.

Q That's correct.

Did Dr, Choi, was Dr. Choi the one who decided that the anesthesia that had been administered should be stopped and the mother revived in order to do more pushing?

A That was my -- that's what I gleaned from reviewing the records, that the anesthetic that was given at first was given toa early.

Dr. Choi couldn't deliver the baby, couldn't get -- ha didn't describe it. So, I don't know, But apparently couldn't deliver

the baby at that time, and therefore decided to have the mother wake up and enlist her help by pushing with her abdomenal muscles to push the baby down further into the birth canal.

Q I believe the testimony and the evidence is that at the time Dr. Choi was in the delivery room, he saw that the buttocks were already showing beyond the vagina, and it was at that time, as I understand the testimony and evidence, that he wanted *the* mother *to* be awakened.

Does that cope with what you would have done under those circumstances with the buttocks effacing?

A I would have been extremely frightened under those circumstances.

MR. WEISMAN: Objection.

THE COURT: Overruled.

Q Rut what would you have done?

A I --

MR. WEISMAN: Objection.

THE COURT: Overruled.

A If the buttocks were showing and the baby was still undeliverable, I would have had one of two choices -- one of three choices, total

breech extraction while the mother was still anesthetized, which is a mechanical means of pulling the baby down manually, decomposing it, it's arms and it's legs and maneuvering to get the baby out, fraught with a great deal of potential fetal trauma.

I could have, while the mother was still under a general anesthetic, pushed the baby back up actually into the birth canal, up into the uterus, because part of the body was out of the uterus, could have pushed it back up and done a Cesarean section at that time, or have allowed the mother to waken and push some more, only if I had evidence that the baby's heart rate was still going along well, and I would have probably, in 1986, have obtained some blood from the baby's buttock area and tested it for pH acidosis and oxygen content to give me a bettor hint as to how the baby was doing at that time.

Those would have been the choices that I would have had, and I probably would have chosen to push the baby back up and do a Cesarean section.

Q Did you read in the hospital records

anything that had any report of the other having difficulty with the first birth?

A No. Well, I didn't read anything in the hospital records except that somebody took an admitting history and physical. I don't know who that was, And no, as a matter of fact, it did not show that he had any trouble with her first baby, but upon review of the deposition of Dr. Edelberg, he said khat -- he said, Dr. Edelberg said that she had delivered vaginally with difficulty, her first baby, which was 6 pounds 11 ounces, but I don't know the documentation of that.

Q Nor what the difficulty was with the baby after delivery?

A Or whether there was any, right,

a Now, in 1974, at that time, based upon what you have learned and what you have read, at that time was bag and masking a choice of resuscitation?

A Oh, yes, sir, bag and masking was very common and still is common, particularly in situations where people feel a might bit uncomfortable about endotracheal tubes down little infants, but bag and masking is a

tine-proven method of resuscitation of adequately breathing for the baby and giving the baby oxygen through that, yes.

Q What are the dangers that are involved with doing endotracheal intubation?

A Well, there are dangers and there arc good points as wall, but the dangers that nay occur are injury to the vocal cords, injury to the larynx, hemorrhage by poking the tube down into the laryngial area or the vocal cord area injuring the structures, perhaps putting the tube down too Ear into one bronchus and therefore underaerating one lung. These are all potential dangers. It has to be dons, that is, intubation, with an endotracheal tube has to be done by somebody who is familiar with doing it.

Q And the laryngoscope size has to be determined also, is that correct?

A Yes, it has to be small enough to fit into the little baby's mouth and push the tongue out of the way and visualize the vocal cords and how the passage of the endotracheal tube. So that takes a bit of experience to choose which one,

Q And whereas using the bag and mask, the effect is immediate, as soon as the delivery is accomplished, the bag and mask procedure can ha undertaken immediately?

A That's correct.

Q And the other endotracheal intubation takes time of choosing the laryngoscope in getting the proper size of the endotracheal tube, so that all of those things in a ease suck as this, the oxygen will be administered almost immediately with a bag an3 mask, is that correct?

A That's correct.

Q Now, what part does the placenta play insofar as oxygen is concerned?

A Well, the total oxygen available to a fetus, when it's in the mother, is through the umbilical cord and it obtains the oxygen from the placenta. So, it's entirely, the fetus is entirely dependent upon the placenta for oxygenation, for its oxygen.

Q And during the tine of delivery, are there pauses where the baby does not have oxygen, in where the placenta is a barrier, that does not let the flow of oxygen through

the umbilical cord?

A Well, it's *very* rare that a loss of circulation through the umbilical cord would occur in a vaginal delivery of a vertex or a head first baby, but in breeches, when the breech reaches -- when the breech from the buttocks reaches the vagina and can be seen protruding through the vagina, then the rest of the baby must come relatively quickly because it's at this time that the cord, the umbilical cord is being squeezed and the amount of circulation is diminished, the amount of oxygen reaching the baby is diminished, and that's why breech deliveries through the vagina are so very serious and so risky.

Q And the use of Dernerol also plays a part in affecting a delivery of the fetus, and moreso where you have this type of delivery that was undertaken by Dr. Choi, is that correct?

A Well, the Dernerol is an additive, as Ear as the baby being able to respond. It may delay a baby that would respond somewhat more quickly, yes. It would be additive to a lack or a deprivation of axygen. It wouldn't be the

cause of the deprivation of oxygen though.

Q And what is the obligation of the anesthesiologist in the delivery raom, what part does he play and to whom should he be directing his attention?

A well, the anesthesiologist is directing his attention first and foremost to the mother to make sure that she is well oxygenated with her general anesthesia to make sure she is okay, that her heart rate is akay, that she's getting an adequate amount of oxygen, is breathing well and so forth.

If he has an assistant, then that assistant can take over for the mother while he then attends to the infant's resuscitation, and resuscitating the infant is much the same as resuscitating OK keeping the mother healthy, and that is, he's got to establish an airway and he's got to make sure that the baby is being adequately breathed, that oxygen is being delivered to the baby's lungs, and he's *got* to make sure that the baby's heart is beating.

These are the main things that he's responsible for.

Q And in this case, from what you read from

the records and so forth, what is your opinion relative to Dr. Reyes' participation?

A Well, I think Dr. Reyes attended to the baby when Nurse Gerhardstein finished with her suctioning and bag breathed the baby with oxygen, in essence, artifical resuscitation until the baby finally had spontaneous respirations at 15 minutes.

Q Based upon what you read, do you see any fault or other things that Dr. Reyes could have done under the circumstances?

A Well, I believe that he could have given bicarbonate to the baby. This would have necessitated either catheterizing the part of the umbilicus, that's the umbilical cord that's left in the baby, either to catheterize it with a catheter and push it into the baby and then inject medicine through that, which again would take some expertise, but without the expertise, one could generally inject with a needle right into the umbilical, vessels of the cord left on the baby the bicarbonate, and this bicarbonate would serve to buffer, if you will, the acidosis, the build-up of acids.

The baby, when it's not getting enough

oxygen, has to rely on what's called anerobic glycolisis. Fancy word. It's still metabolizing, but instead of using oxygen, they are using different substrates, and instead of oxygen they are using a different method of obtaining energy that's vital to cell health,

And the build-up of acids, elastic acid, peruvic acid is built up acid, isn't very good for the environment, Cells, it has to be buffered with the base, hydrochloric acid for instance can be buffered with sodium bicarbonate, and that's to decrease the acidity to raise the pH, so that the cells are then in a goad, healthy environment,

Well, we know for a fact that breathing for the baby with a good amount of oxygen can accomlish almost the same thing. It in essence, by breathing the baby, you push oxygen in, but carbon dioxide, which is part of the acid that's built up in the baby is gotten rid of, and by doing this enough, you effectively help the baby get rid of this metabolic acidosis and create a good state for the baby's cells and €or the baby's environment,

The bicarbonate would have allowed that

to perhaps have been accomplished a lot sooner, I believe, but it's also a fact that bicarbonate, if given excessively, can causa brain hemorrhage.

So, you're really, really in a quandry here, particularly if you're not experienced in giving bicarbonate.

So, the beat thing to do is to do what you can do, as best as you can do it, and that is to resuscitate the baby by artifical resuscitation with bag and mask, which is probably the safest, and I believe that that's what Dr. Reyes did.

Q That's what he did in this case, is that correct?

A I believe that's true.

MR. McNEAL: Thank you very much.

THE COURT: Fred, I don't think you can do yours in five minutes.

MR. WEISMAN: No, that's right, sir.

THE COURT: All right. We'll take our lunch break now at this point.

All right, David, we'll take our lunch break, 1:00, please,

Mrs. Melnar, if you'll remain, we'll discuss your problem after the jury is out. All right?

All right, ladies and gentlemen, please rise.

---oOo---

(Thereupon, the jury was excused fax the luncheon recess, whereupon, the following proceedings were had in open court:)

---oOo---

THE COURT: For the record, the Couxt received a letter from Juror No. 8, Pat Melnar. The Court received a letter on Wednesday, just before we took our holiday recess, that is, November the 25th.

Again, for the record, the Court has circulated the letter to all of the lawyers involved in this matter.

To sum up the letter, Mrs. Melnar requests that she be relieved from her duty as Juror No. 8 in this case due *to*