

# Court of Claims State of New York

JUSTICE BUILDING BOX 7344, CAPITOL STATION ALBANY, NEW YORK 12224

(518) 432-3431

Richard E. Sise Presiding Judge

March 20, 2008

Robert T. DeCataldo Chief Clerk

Feldman, Shephard, Wohlgelernter, Tanner & Weinstock Attn: Daniel S. Weinstock, Esq. and Edward S. Goldis, Esq. 1845 Walnut Street, 25th Floor Philadelphia, Pennsylvania 19103

Honorable Andrew M. Cuomo Attorney General The Capitol Albany, New York 12224

Attn: Asst. Attys. General Bryant, Brooks & MacRae

Re: Kayla DuPont, an Infant Under the Age of Ten Years by and through Mary and

Michael T. DuPont, her Parents and Natural Guardians v. State of New York

Claim No. 108040

Dear Counsel:

I am enclosing herewith copy of Court's Decision, Fitzpatrck J., filed in the Clerk's office March 20, 2008, making award to claimant in the above entitled and numbered claim.

Exhibits from the trial decision will be forwarded under separate cover at a later date.

Very truly yours,

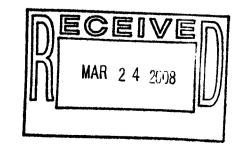
Robert T. DeCataldo

Chief Clerk

RTD/amr Enclosure

cc: Bottar & Leone

Attn: Edward S. Leone, Esq.



# STATE OF NEW YORK

# **COURT OF CLAIMS**

KAYLA DuPONT, an Infant Under the Age of Ten Years by and through MARY and MICHAEL T. DuPONT, her Parents and Natural Guardians,

Claimants.

**DECISION** 

-V-

STATE OF NEW YORK,

Claim No.

108040

Defendant.

MAR 2 0 2008
STATE COURT OF CLAIMS ALBANY, N.Y.

BEFORE:

HON. DIANE L. FITZPATRICK Judge of the Court of Claims

**APPEARANCES:** 

For Claimants:

FELDMAN, SHEPHERD, WOHLGELERNTER, TANNER &

WEINSTOCK

By: Daniel S. Weinstock, Esquire Edward S. Goldis, Esquire

**BOTTAR & LEONE** 

By: Edward S. Leone, Esquire

For Defendant:

**ANDREW M. CUOMO** 

Attorney General of the State of New York

By: Patrick F. MacRae, Esquire Assistant Attorney General

This is the claim of Kayla DuPont brought by her parents, on her behalf, as a result of the alleged medical malpractice of the defendant in treating Kayla's mother, Mary DuPont, during the course of her pregnancy from July 23, 1992, until Kayla's delivery on January 14, 1993. Kayla was delivered on January 14, 1993, by caesarean section when it was noted that a full

placental abruption<sup>1</sup> had occurred and resulted in her suffering intrapartum asphyxia,<sup>2</sup> and later being diagnosed with cerebral palsy, mental retardation and a seizure disorder.

## A. The Issue of Liability

#### 1. Factual Findings

#### a. Pregnancy and Prenatal Care

When Mary DuPont was pregnant, with her fourth pregnancy, she was referred to the State University of New York Health Science Center (hereinafter University Hospital), Perinatal Center of the Department of Obstetrics and Gynecology, as a result of three prior habitual abortions and a suspected bicornuate uterus based upon an ultrasound<sup>3</sup> performed at eight weeks. The expected due date for this pregnancy, based upon Mrs. DuPont's last menstrual cycle, was January 18, 1993. Mary DuPont was 21 years old at the time, weighed 117 pounds, and was 5 feet, 1 inch tall. On July 23, 1992, she began to treat with Dr. Richard Aubry, Professor and Director of Obstetrics at the Perinatal Center. An ultrasound confirmed a bicornuate uterus that was heart-shaped. A bicornuate uterus, as defined by the medical professionals in this case, is a congenital abnormality which presents as a uterus divided into two "horns" or cavities separated by a septum. The extent of the division varies in each case, and the septum can be a small protrusion into the uterine cavity or it can be so dramatic as to actually divide the uterus into two separate uteruses. By ultrasound performed later in Mrs. DuPont's pregnancy, the septum was

Placenta separates from the wall of the uterus prior to the birth of the child (Dr. Pressman, Transcript, p. 926, lines 11-14).

<sup>&</sup>lt;sup>2</sup> During labor there is a lack of oxygen which causes a buildup of carbon dioxide causing acidosis and asphyxia (Dr. Cetrulo, Transcript, p. 165, lines 9-15).

<sup>&</sup>lt;sup>3</sup> An ultrasound is a machine that uses sound waves to permit a view of the uterus, ovaries, cervix and the baby (Dr. Silverman, Transcript, p. 853, lines 2-5).

measured and found to be 10 millimeters thick and extending down into the uterus about 2½ centimeters. At trial, Dr. Robert Silverman, another doctor in the practice with Dr. Aubry at the Perinatal Center, described this septum as very small.

During the first visit with Dr. Aubry on July 23, 1992, he found, based upon a screening ultrasound, that the fetus was appropriate for gestational age based upon the last reported menstrual cycle, and lying in a transverse position - making it difficult to identify the side of the uterus on which the placenta was implanted.<sup>4</sup> Dr. Aubry planned to perform a cerclage<sup>5</sup> on Mrs. DuPont within four weeks. He noted, at that time, that the pregnancy was "very high risk because of her recurrent miscarriage history and the seemingly clear diagnosis of bicornuate uterus."

Another ultrasound was performed on July 28, 1992, by a Dr. Vinu Patel, another doctor at the Perinatal Center. At that time, the gestational age calculated from Mrs. DuPont's last menstrual period was 15 weeks, 1 day, and the fetus measured at 14 weeks, 1 day (a 7-day lag). With a 2-week margin of error, the fetus measured at an appropriate size for that gestational age. It was noted that the pregnancy was in the right horn of the uterus. Based upon the ratio of the abdomen to head circumference, the fetus's growth at this point was symmetrical. This growth ratio, according to Dr. Aubry, should stay fairly consistent and remain at less than a critical level.

<sup>&</sup>lt;sup>4</sup> Exhibit 2, p. 21.

<sup>&</sup>lt;sup>5</sup> A cerclage is a "noose or purse string" that is put around the cervix to keep the pregnancy intact (Trial Transcript, p. 119, lines 7-10).

<sup>&</sup>lt;sup>6</sup> Exhibit 2, p. 21.

Mrs. DuPont saw Dr. Aubry again on August 5, 1992, and her blood was drawn for a Maternal Serum Alpha Fetal Protein (MSAFP) test. This test screens for neural tube defects such as spinal bifida or meningomyelocele, and chromosome abnormalities such as Down's Syndrome or Trisomy 21. Even when these abnormalities have been ruled out, the test may identify a pregnancy that may be at risk of intrauterine fetal growth restriction (IUGR), or suboptimal growth, that is weighing less than the tenth percentile weight for gestational age. On August 7, 1992, the MSAFP test results came back significantly elevated. Her blood was drawn again on August 11, for a repeat MSAFP test which, again, came back elevated. As a result, another ultrasound was performed on August 18, by Dr. Silverman. The gestational age was 18 weeks, 1 day, and the age determined by the ultrasound indicated 17 weeks, 3 days (a 5 day lag). The humerus, the long bone of the arm of the fetus, measured at only 16.3 weeks. Other measurements and observations were "unremarkable," and Dr. Silverman found no explanation for the elevated MSAFP test. The fetus's heart rate, the amniotic fluid levels, and the placental grade were all good.

Mrs. DuPont saw Dr. Aubry again on September 10 and 24. On September 24, she was referred to a registered dietician because of poor weight gain. An ultrasound was scheduled for October 8, 1992. On that date, the sonogram reflected the age, by last menstrual period, was 25 weeks, 3 days, and the age by ultrasound measurements was 23 weeks, 6 days (a 1 week, 4 day lag). The humerus measured at 23.9 weeks. The head and abdomen circumference showed symmetric growth development. No fetal abnormalities were found, and the heart rate and amniotic fluid level were normal. The fetus was cephalic or in a head-first position.

Mrs. DuPont was seen on October 29 and November 4, 1992. She had no complaints and reported that the baby was active. On November 19 she saw Dr. Aubry again, and another ultrasound was performed by Dr. Silverman. The fetus's gestational age on that date was 31 weeks, 3 days, measurements reflected an age of 28 weeks, 4 days (a lag of 2 weeks, 6 days). It was noted that the biometry, measurements of the head and abdominal circumference and femur length, indicated less than expected interval growth and possible early IUGR. The sonogram noted the heart-shaped uterus, and that the placenta was implanted posteriorly in the right side. The fetus was in a frank-breech position, that is butt first with the legs up near the head. The fetal heart rate and amniotic fluid were normal.

A Continuous Wave Doppler (CWD) study was also done on November 19. A CWD is a different type of ultrasound which looks at pulsations in the umbilical and uterine vessels, and it allows an approximation of the blood flow through different vessels in order to assess the level of oxygen and nutrients being delivered to the baby. For this study, a measurement or S/D ratio is taken, the systole (S) and the diastole (D): the filling and pumping. Three measurements are taken to obtain the mean for each vessel. These measurements indicate how much resistance there is to the blood flow within a vessel in the placenta or uterus. So, the S/D ratio is taken for the umbilical artery, and for the right and left arteries that bring blood to the uterus. The S/D ratio for the umbilical artery on that date was 2.83, 1.71 for the right uterine artery, and an elevated reading of 4.86 for the left uterine artery. The amniotic fluid level was normal. Dr. Aubry's orders from that date directed Mrs. DuPont to return to the office in two weeks and have another CWD. Dr. Aubry testified at trial that he suspected early IUGR at that point.

Mrs. DuPont was seen again on December 10, 1992. At that time, she noted occasional contractions and increased vaginal discharge, but denied any fluid leak. Positive fetal movement was noted. A CWD study was done and the S/D ratio for the umbilical artery was 2.46, for the left uterine artery 2.50, and 1.49 for the right uterine artery.<sup>7</sup> The S/D ratio for the left uterine artery was again elevated. The amniotic fluid level was normal. The fundal height measurement, that is a measurement taken from approximately the 22<sup>nd</sup> to the 34<sup>th</sup> week of gestation which measures from the woman's symphysis, the bone just above the pelvis, to the fundus,<sup>8</sup> the large, upper end of the uterus, in centimeters, should equal the number of weeks of gestation. On this date, the fundal height was 31 centimeters, although Mrs. DuPont was at 34 weeks gestation. A discrepancy of 4 centimeters is usually a benchmark for some concern or pursuit of further inquiry.

On December 17, Mrs. DuPont voiced no complaints and described the fetus as active. A nonstress test was performed, and all of the medical professionals who testified agreed that it was "reactive." A nonstress test uses an electronic fetal heart rate and uterine contraction monitor to predict fetal well-being by looking at the fetal heart rate to see whether there are two episodes of acceleration of the baby's heart rate of at least 15 beats per minute over a 20 minute period. If there are two such accelerations then the test is called "reactive." In simpler terms, it is the ability of the fetus to increase its heart rate in response to fetal movement. It is, by all accounts, the best predictor of a well-oxygenated fetus.

<sup>&</sup>lt;sup>7</sup> Exhibit 2, p. 50.

<sup>&</sup>lt;sup>8</sup> Merriam-Webster Medical Dictionary [1996], p. 292.

The last ultrasound before January 14, was also performed on that date due to the "uterine anomaly" or bicornuate uterus. This ultrasound report reflects a gestational age of 35 weeks, 3 days, and an age, based upon the measurements, of 31 weeks, 1 day (4 weeks, 2 day lag). The head/abdomen ratio was 1.05, and the growth development, according to Dr. Aubry, was symmetrical. The baby's position was still breech, the heart rate was normal, and the amniotic fluid was normal. Again, no gross anomalies were noted, but there was less than expected interval growth, and the lag had increased to 4 weeks. All measurements fell below the 10th percentile for a 35-plus week gestational age. It was noted in the ultrasound report that "symmetrical IUGR" must be considered. Symmetrical IUGR, as opposed to asymmetrical IUGR, was a distinction of greater import in 1992-93 than currently. As noted by all the experts in this case, symmetrical IUGR refers to a fetus that has symmetrical restricted growth, or is consistently small, whereas asymmetrical, also referred to as "head saving," reflects that the baby's brain and head continue to grow at a steady rate, but the rate of growth slows for the abdomen and the rest of the body. A CWD study was also conducted which reflected a mean S/D ratio for the umbilical artery of 2.29, 4.38 for the left uterine artery, and 1.80 for the right uterine artery. The measurement was, again, high for the left uterine artery.

On December 21, a nonstress test was performed and was "reactive." The cerclage was removed. Notes from that visit reflect that the sonogram (conducted on December 17) showed the baby in a cephalic presentation, although the ultrasound report reflects "breech," the amniotic fluid index (AFI) was 8, reflecting no oligohydramnios or insufficient fluid. Notations from

<sup>&</sup>lt;sup>9</sup> Exhibit 2, p. 50.

<sup>&</sup>lt;sup>10</sup> Exhibit 2, pp. 66 and 46.

that visit also state that the sonogram "shows IUGR probably secondary to uterine anomaly." Dr. Aubry also noted that the daily fetal motion recording (DFMR), the CWD, and the nonstress test were okay. DFMR instructions are given to the patient to keep track of the baby's movements and to report if less than 10 movements are perceived within an hour. Dr. Aubry's note then provides, "hope labor starts soon, will do 2 x/wk NST [nonstress test twice per week]. Probably induce if no labor in 10-14 days." Dr. Aubry's orders from that visit were for a nonstress test to be conducted on Thursday, in the morning, and to have the patient return in one week to see him.

The next visit was December 24 for a nonstress test. The nonstress test was again "reactive." Mrs. DuPont complained that she thought the baby had turned to breech. The office notes reflect that Dr. Aubry<sup>13</sup> indicated the baby was cephalic, and Dr. Aubry's orders direct Mrs. DuPont to return to the office on Monday afternoon for a nonstress test and a recheck of her cervix for possible induction.<sup>14</sup>

On December 28, Mrs. DuPont returned to the office for her next visit. At that time, she complained of decreased fetal movement. A nonstress test was performed and was reactive. The fundal height measurement for that date was 33 centimeters, although Mrs. DuPont was at 37-plus weeks gestation. Notes from Dr. Aubry's examination indicate that the "cervix [was] unfavorable" based upon palpation. This referred to the fact that the cervix had not yet become

<sup>11</sup> Exhibit 2, p. 46, Trial Transcript, p. 697.

<sup>&</sup>lt;sup>12</sup> Trial Transcript, p. 701, line 22, p. 703, line 6.

<sup>&</sup>lt;sup>13</sup> Exhibit 51, p. 128, lines 10-17.

<sup>&</sup>lt;sup>14</sup> Exhibit 2, p. 47, Trial Transcript, p. 705, lines 18-21.

"ripe" for labor, or in other words had not become effaced, shortened and softened. Dr. Aubry's orders from that visit were for Mrs. DuPont to return to the office in one week to have daily fetal motion recording, nonstress test, CWD, and fluid check at next visit. Mrs. DuPont was given the telephone number of labor and delivery. These orders reflect a change from his earlier direction for nonstress tests twice per week to once per week. Dr. Aubry testified that any plan for a patient's care is reevaluated at the next visit, based upon the circumstances and findings at that time. Based upon the results of the office visit of December 28, the reactive nonstress tests, the normal CWD findings, the normal amniotic fluid levels, and the sonograms showing the fetus was progressing, it was his judgment that twice weekly nonstress tests were no longer necessary.

The next visit was on January 7, 1993. Mrs. DuPont had no complaints, and she reported the fetus was active. A nonstress test was performed that was reactive. A CWD was also done which indicated a S/D ratio for the umbilical artery of 2.86, 2.00 for the left uterine artery, and 1.67 for the right uterine artery. The notes reflect the left uterine artery reading was okay; although, in charting the ratio, it was shown to be above the 95<sup>th</sup> percentile, which would be abnormal. The amniotic fluid amount was normal. The fundal height measurement was 31 centimeters, the same measurement obtained at 34 weeks, and 2 centimeters less than the measurement on December 28. Dr. Aubry's orders were to have Mrs. DuPont return in one week and to schedule a sonogram for that visit.

Mrs. DuPont never made it to her next scheduled visit, because on the morning of January 14, 1993, while staying at a friend's house during her last weeks of pregnancy to be

<sup>15</sup> Exhibit 2, p. 50.

closer to the hospital, she started bleeding. The blood was bright red and formed a puddle on the floor. Mrs. DuPont also had some pain. She told her friend's son to go and get his mother who was upstairs. She came down and helped Mrs. DuPont lay down on the couch while she called 911. An ambulance arrived and took Mrs. DuPont to Crouse Irving Memorial Hospital. When she arrived at 8:30 a.m., it was noted that she was having red vaginal bleeding; she was pale and complained of lower abdominal pain, her abdomen was tense, and a fetal heart beat could not be found. Later, a fetal heart rate of 110 beats per minute was found but it dropped to 30-40 beats per minute. A heart rate of less than 110 beats per minute for 10 minutes or longer is referred to as fetal bradycardia. By 8:45 a.m., Mrs. DuPont was prepped for a caesarean section, pediatrics and anesthesia were called. A placental abruption was suspected. The infant claimant was delivered at 8:52 a.m., by Dr. Silverman. The baby was in the uterus in a cephalic position and had not yet descended into the pelvis. When delivered, Kayla's Apgar score at one minute was zero. The Apgar score, is a score from 0 to 10, which is given for appearance or color (A), pulse or heart rate (p), grimace (g), aptitude (a) and respirations (r). At five minutes, her Apgar was 1 and at ten minutes it was 4.16 The ph lab testing of the umbilical cord artery showed a result of 6.64, which was flagged as low.

It is fairly undisputed among the experts that the bradycardia and hypoxia in the infant claimant, to the extent presented at birth, resulted in her spastic quadriplegic cerebral palsy.

The infant claimant was born weighing 2,485 grams, below the 10<sup>th</sup> percentile in weight for her gestational age.

<sup>&</sup>lt;sup>16</sup> Trial Transcript, p. 156.

## b. The Medical Professionals/Experts

Four doctors testified in this case, and each had a slightly different assessment of the risks associated with Mrs. DuPont's pregnancy, a different understanding of the standard of care and evaluation of the facts.

Dr. Aubry testified at trial and his deposition transcript was admitted into evidence.<sup>17</sup>
Dr. Aubry had no independent recollection of treating Mrs. DuPont, all of his testimony, both at the deposition and at trial, was based upon the medical records and notes, his custom and practice, and his medical knowledge. Dr. Aubry was part of a group practice at the Perinatal Center. Mrs. DuPont was Dr. Aubry's patient, although she did see other doctors in the practice. Dr. Aubry did not consult with any other doctor about her case, and he acknowledged responsibility for the medical decisions that were made about Mrs. DuPont's care and treatment. Based upon the medical records, Mrs. DuPont was compliant with the orders and directions given.

It is clear and undisputed that Dr. Aubry was a specialist in the area of maternal fetal medicine. He not only had extensive training, but was one of the doctors who started a high risk pregnancy clinic locally which evolved into one of the first Regional Perinatal Centers, joining the disciplines of high risk obstetrics with neonatal intensive care. The center provides prenatal care for high risk pregnancies to women in 15 counties locally. He also educates and trains new doctors in the area of obstetrics and gynecology as a full professor at Upstate Medical Center.

<sup>17</sup> Exhibit 51.

Dr. Aubry testified at trial that the major risks for a pregnant patient with a bicornuate uterus were habitual miscarriage, often due to implantation on the septal area where there is less blood supply, premature labor, premature rupture of membranes, more likely to have a breech presentation, problems with labor with discordant uterine contractions, placenta previa or placental abruption, postpartum hemorrhage or incomplete delivery of the placenta. During his deposition, Dr. Aubry's list of complications consisted predominantly of recurrent miscarriages, premature rupture of membranes, premature labor, "and all the sequela from it to do with neonatal death, neonatal morbidity," fetal growth restriction, and intrauterine fetal demise. He did not mention a placental abruption as a risk.<sup>18</sup> A placental abruption, he testified at trial, is a risk in any pregnancy at a rate of 1 in 100-200 births, or ½ to 1 percent, which increases 2-to-3fold for a woman with a bicornuate uterus. He testified, however, that when the placenta is not attached to the septum, and the pregnancy is entirely within one horn of the uterus, the risk falls to slightly over 1 percent.<sup>19</sup> On cross-examination, Dr. Aubry acknowledged that a placental abruption is a known complication of a bicornuate uterus, and the increased risk to a woman with a bicornuate uterus is 2-to-4-fold. He also testified that there is an increased risk of a placental abruption regardless of where the placenta is attached to the uterus. Yet, at his deposition, Dr. Aubry testified that he did not recognize that Mrs. Dupont's bicornuate uterus placed her at an increased risk of a placental abruption, and he did not factor that into his treatment and care decision-making.

<sup>&</sup>lt;sup>18</sup> Exhibit 51, p. 56, lines 1-6.

<sup>&</sup>lt;sup>19</sup> Trial Transcript, pp. 651-652.

Dr. Aubry testified during his deposition that having a bicornuate uterus predisposes a fetus to IUGR, and when a woman with a bicornuate uterus has a growth-restricted fetus, the mechanism for the growth restriction is probably placental insufficiency. Dr. Aubry did not pursue the cause of the IUGR for Mrs. DuPont's fetus, as he testified at his deposition, but he later testified that he thought the cause was something other than placental insufficiency. specifically, that it was an issue with uterine blood flow. Unlike his deposition testimony, Dr. Aubry testified at trial that patients with uterine anomalies, such as Mrs. DuPont, have a higher incidence of symmetrical growth restriction which suggests something intrinsic to the fetus or caused by the limited space, as opposed to asymmetrical growth restriction which is associated with placental insufficiency. Despite the references in the office notations and sonogram report that this was symmetrical IUGR, Dr. Aubry, at his deposition, in response to a question inquiring as to why he felt Mrs. DuPont was at less of a risk on December 28 than on December 21, testified, "[w]ell, she was gaining weight. The baby was continuing to be active. The testing results were consistently reassuring. So, it appears that the placental insufficiency that was diagnosed, was not so much something that affected oxygenation. And, therefore, the baby was not as - seemingly not as in an acute edge of problems as it had been in earlier visits."20 Thereafter, he testified that he had not made a complete diagnosis of placental insufficiency; rather, IUGR can be based upon a number of etiologies, only one of which is placental insufficiency and the testing revealed placental function.<sup>21</sup> At trial, Dr. Aubry testified that his December 21 office note that the IUGR was "probably secondary to uterine anomaly" suggested

<sup>&</sup>lt;sup>20</sup> Exhibit 51, p. 132.

<sup>&</sup>lt;sup>21</sup> Trial Transcript, p. 769, Exhibit 51, p. 132, 133.

that his underlying thought process was that the cause was uterine anomaly and not placental insufficiency, although he never ruled out placental insufficiency.

Dr. Aubry testified that his notation from the December 21 office visit indicating that he would do twice weekly nonstress tests and probably induce labor in 10 to 14 days, reflected his intention to stay on top of the fetal status for the next couple of weeks, because Mrs. DuPont was "starting to show some indicators of some concern," despite the fact that up to that point the "parameters of fetal welfare were okay." He testified that when babies show IUGR he "like[s] to see the baby in the nursery if it's ready." <sup>23</sup>

Dr. Aubry's reference in the notation to possible induction was not, he testified, his intention to deliver Mrs. DuPont within that time frame, but rather an indication of his thought process for the other doctors in his practice. Although he testified that Mrs. DuPont was always scheduled to see him on her visits from December 17 until delivery.

Dr. Aubry testified at trial that at Mrs. DuPont's December 28 visit, the preceding intensified surveillance had revealed "no trending [toward] further...problems,"<sup>24</sup> and he felt it was no longer necessary to continue the twice weekly nonstress test regimen. At that visit, palpation of Mrs. DuPont's cervix indicated it was not favorable for delivery. Dr. Aubry testified that without some indication that the fetus wasn't doing well, to induce labor with an unfavorable cervix would be adding a hazard to the fetus of prolonging labor, developing perinatal asphyxia or fetal hypoxia due to hard to control contractions. At his deposition, Dr. Aubry indicated that

<sup>&</sup>lt;sup>22</sup> Trial Transcript, page 692 lines 19-23.

<sup>&</sup>lt;sup>23</sup> Trial Transcript, p. 702 lines 13-18, and lines 1-3.

<sup>&</sup>lt;sup>24</sup> Trial Transcript, p. 712, lines 6-11.

induction could result in a hypertonic pattern that could put the baby in distress or cause placental abruption.<sup>25</sup> In Dr. Aubry's opinion, with an unfavorable cervix, it was safer to allow the baby to remain in utero. However, on cross-examination, Dr. Aubry acknowledged that during the last four weeks of Mrs. DuPont's pregnancy, he had no evidence that the fetus was growing in light of the stagnant fundal height measurements and no sonogram measurements. At trial, Dr. Aubry testified that the risks for delivery of a 38-week-old fetus, compared to a 40-week-old fetus are greater and complex beyond just fetal lung maturity, but he could not identify other risks during his deposition. At trial, Dr. Aubry opined that fetal lung maturity at 38 weeks was generally around 70 percent and at 39 weeks approximately 80 percent. The amniocentesis, to test for lung maturity at this stage, Dr. Aubry agreed was "a low risk procedure." 26 Dr. Aubry agreed that if the risks associated with performing an amniocentesis were considered, and fetal lung maturity was shown to be adequate, then delivery of an IUGR fetus at 38 weeks would be appropriate. In fact, he said that the standard of care in a fetus with IUGR with demonstrated fetal lung maturity requires delivery at 38 weeks.<sup>27</sup> When weighing the risks of delivery at 38 weeks, the increased risks of a placental abruption and fetal death are factors which the standard of care requires be considered.<sup>28</sup> Dr. Aubry never mentioned the risk of a placental abruption in his deposition and testified then that it was not a factor in his decision making process for this pregnancy; it was not until trial that he added it to the risks to be considered. When the risk of another two weeks in

<sup>&</sup>lt;sup>25</sup> Exhibit 51, p.108, lines 3-9.

<sup>&</sup>lt;sup>26</sup> Trial Transcript, p. 813, lines 5-9.

<sup>&</sup>lt;sup>27</sup> Trial Transcript, page 814, lines 2-16.

<sup>&</sup>lt;sup>28</sup> Trial Transcript, page 816, lines 6-11.

utero is greater than the risk of an induction or a C-section, Dr. Aubry agreed that the standard of care requires delivery.

Dr. Aubry found Mrs. DuPont's cervix still unfavorable on January 7, 1993, and ordered a sonogram for the next visit. He reasoned that at the next visit, approximately four weeks from her previous sonogram on December 17, would have passed, and he likes to watch fetal growth with serial sonograms every two to four weeks. At his deposition, he testified that the reason he ordered the sonogram was because he was concerned that the fetus's growth restriction had continued to worsen.<sup>29</sup> On cross-examination, Dr. Aubry testified serial sonograms mean having a sonogram done every four to six weeks. He continued his direct testimony by adding that at the next scheduled visit (January 14) Mrs. DuPont would have been 39-plus weeks, and he would have "almost certainly" induced her within days after the next visit after seeing the fetal weight.<sup>30</sup>

Dr. Aubry opined that the last two office visits (December 28 and January 7) showed a well-oxygenated fetus by the reactive nonstress tests, normal amniotic fluid levels by the January 7 CWD study, and normal umbilical artery flow, which he felt was critical to show the fetus was normally perfused with no evidence of placental insufficiency. With these test results and without evidence of placental insufficiency, Dr. Aubry, at trial, felt that the uterus was not a hostile environment for the fetus, and the standard of care did not require delivery, despite his later testimony on cross-examination that with fetal lung maturity the standard of care does require delivery of an IUGR fetus at 38 weeks.

<sup>&</sup>lt;sup>29</sup> Exhibit 51, p.136, lines 2-3.

<sup>&</sup>lt;sup>30</sup> Trial Transcript, p. 719, lines 1-5.

Dr. Robert K. Silverman, a practitioner with Dr. Aubry at the Perinatal Center, also testified. Dr. Silverman performed the ultrasound examinations upon Mrs. DuPont on August 18, October 8, November 19, and December 17, 1992, and the four CWD studies. Dr. Silverman also performed the emergency caesarean section on Mrs. DuPont on January 14, 1993, after the placental abruption. He is currently an Associate Professor in the Department of Obstetrics and Gynecology and the Director of Maternal Fetal Medicine in the High Risk Obstetrics and Gynecology Divisions at University Hospital and Crouse Irving Memorial Hospital.

Dr. Silverman reviewed the ultrasound reports and testified at trial that the ultrasound of October 8, 1992, showed early signs of IUGR, but the report fails to indicate any concern at that time. By the November 19 ultrasound, signs of IUGR were present and noted in his report, and in the December 17 report he states, "symmetrical IUGR must be considered." On cross-examination, Dr. Silverman agreed that looking at the growth rate of the fetus over the course of the four sonograms, the head circumference and fetal weight grew at a proportionate rate, but the abdominal circumference and femoral length did not.

The S/D ratio which showed an elevated left uterine artery reading in each Doppler study did not concern Dr. Silverman, as he testified that he would expect a different ratio in the horn in which the fetus was growing compared to the other side. He felt that the left uterine artery reading was not relevant to this case, and he emphasized that the umbilical artery reading is normal which reflects that the fetus is able to get nutrients and oxygen. Dr. Silverman indicated that this was the significant measure to assess placental sufficiency or insufficiency. He testified that if there was placental insufficiency there would be markedly abnormal readings - in the 97.5

percentile. Umbilical artery readings would be in the range of 10 to 12. Here, the umbilical artery readings for the CWD studies performed never went above 2.86, although the ratios for the left uterine artery went off of the diagram chart on November 19 and December 17.<sup>31</sup> Normal Doppler studies, according to Dr. Silverman, rule out placental insufficiency, but on cross-examination, Dr. Silverman acknowledged that there are types of placental insufficiency that can occur despite normal Doppler readings.

Dr. Curtis L. Cetrulo, was called as claimants' expert. He, too, is Board Certified in Obstetrics and Gynecology and Maternal Fetal Medicine and is licensed in Massachusetts. In 1992, he was a full professor at Tufts University School of Medicine and had a practice specializing in high risk patients in the field of Maternal Fetal Medicine. He was actively treating patients with bicornuate uteri and complications such as IUGR in 1992 and 1993. He was the Director of the Regional Perinatal Program at New England Medical Center in 1992. Although Dr. Cetrulo is not licensed in New York State and has not practiced in the Syracuse area, the Court finds him a competent expert and knowledgeable of the standard of care in this locality as an educator of doctors practicing in this area in the speciality of Obstetrics and Gynecology and Fellows in Maternal Fetal Medicine.

Dr. Cetrulo testified that the risks with a pregnancy with a bicornuate uterus are IUGR, a placental abruption because of blood flow problems for the uterus and placenta, habitual abortions, and pre-term labor because the uterus gets to a point and then can't grow anymore because of its abnormality. He said that IUGR means that the baby has not received enough

<sup>&</sup>lt;sup>31</sup> Exhibit 2, p. 050.

nutrients to grow and develop normally. If there are blood flow problems through the placenta, such as placental insufficiency, then the nutritive function of the placenta is not working optimally. According to Dr. Cetrulo, it was generally accepted in 1992 and 1993 that a bicornuate uterus places the woman at risk of having a pregnancy complicated by IUGR. This is often caused by a placenta that is attached or implanted partially on the septum, where the blood supply isn't as good as it would be along a normal uterine wall. So, with a bicornuate uterus with poor placental attachment, there is a chronically reduced ability of the placenta to supply adequate nutrients and oxygen to the baby. This opinion was shared by all of the doctors.

Dr. Cetrulo went on to testify that in a woman with a bicornuate uterus, the baby is always at risk of IUGR regardless of where the placental attachment is because, in his opinion, you never really know where the placental attachment is in reference to the incompletely perfused septum. A fetus with IUGR is at a 10 percent higher risk of death compared to a typical nongrowth restricted fetus. In 1992, it was also generally recognized and Dr. Aubry agreed, that patients with a bicornuate uterus were at increased risk of a placental abruption, according to Dr. Cetrulo. Both Drs. Aubry and Cetrulo testified that with a diagnosis of IUGR, there is a presumption of placental insufficiency.

Dr. Cetrulo then reviewed some of Mrs. DuPont's individual prenatal appointments and testing with Dr. Aubry at the Prenatal Center. It was Dr. Cetrulo's opinion, consistent with the other medical professionals, that the ultrasound conducted on July 28, 1992, showed the fetus to be appropriately sized for the gestational age. Thereafter, on November 19, a 3 week lag in growth is found, which, based upon the prior ultrasound depicting appropriate gestational growth, suggests, according to Dr. Cetrulo, early IUGR. Almost 4 weeks later, on December 17,

the ultrasound reveals less than 4 weeks worth of growth, with now a 4-week discrepancy between gestational age and ultrasound measurements.

At the December 21 office visit, Dr. Cetrulo agreed with Dr. Aubry's office note that the sonogram of December 17 showed IUGR, probably secondary to uterine anomaly. Dr. Cetrulo felt Dr. Aubry's note of December 21, reflected the standard of care when you have a diagnosis of placental insufficiency and a 36-week intrauterine growth restricted fetus: do twice weekly nonstress tests and induce at term if labor doesn't begin within 10-14 days. Dr. Cetrulo testified that this is because after 38 weeks, the risks to the baby in utero exceed the risks of delivery. Dr. Cetrulo described the uterus, at that point, as a hostile environment where the baby isn't getting enough nutrients, isn't growing, and may not be getting enough oxygen. In the setting of a bicornuate uterus with the increased risks of a placental abruption, among other devastating risks, delivery at 38 weeks outweighs any risks of induction.

It is Dr. Aubry's care of Mrs. DuPont on December 28, 1992, until the date of delivery that Dr. Cetrulo testifies falls below the standard of care. Dr. Cetrulo notes that when, on December 28, Mrs. DuPont reports decreased fetal movement coupled with all of the other diagnosed concerns, the minimum standard of care required a nonstress test and a biophysical profile be performed. A biophysical profile is an ultrasound examination which measures the amount of amniotic fluid, fetal movement, and fetal breathing movement. Dr. Cetrulo testified that none of those tests were performed that day, which, according to Dr. Cetrulo, fell below the standard of care. No biophysical profile was performed at any time during Mrs. DuPont's pregnancy. However, a nonstress was performed that day which was reactive and, on cross-

examination, Dr. Cetrulo agreed that this met the standard of care.<sup>32</sup> All of the medical professionals agreed that in light of a complaint of decreased fetal movement, the standard of care required a nonstress test which was performed that day.

Dr. Cetrulo noted that only one nonstress test was performed within the 16 days preceding January 14, which, given this high risk pregnancy, he felt fell below the standard of care and deviated from the plan of care Dr. Aubry noted for his office visits of December 21 and 24. Dr. Cetrulo felt that the January 7, 1993, office visit should not have even been scheduled; since it was his opinion, to a reasonable degree of medical certainty, that Mrs. DuPont's baby should have been delivered at 38 weeks gestation given the diagnosis of IUGR, placental insufficiency, and bicornuate uterus.

Dr. Cetrulo testified that the S/D ratio obtained by the four CWD studies show an elevated reading in the left uterine artery which he opined is significant because it shows an abnormal blood flow through one of the mother's uterine arteries, arteries which supply the oxygen and nutrients to the placenta and then to the baby through the umbilical artery. Dr. Cetrulo testified that it is not known what role each artery plays in supplying the uterus with blood as both arteries are involved, and there is no way to quantify whether one artery is supplying more blood to the uterus; therefore, an elevated reading in either artery is still a parameter that warrants consideration. Dr. Cetrulo did agree that the critical reading for determining perfusion to the fetus is the umbilical artery. <sup>33</sup>

<sup>&</sup>lt;sup>32</sup> Trial Transcript, p. 236, lines 2-15.

It was Dr. Cetrulo's opinion that the umbilical vein actually takes nutrients to the fetus and the umbilical arteries (there are usually two) carry blood from the fetus back to the placenta, so the umbilical artery Doppler actually measures resistance in the placenta (Trial Transcript, p. 204, lines 10-19; also p. 892, lines 3-19).

On cross-examination, Dr. Cetrulo acknowledged that a nonstress test was the best way to assess fetal health, and that on December 17, 21, 24, and 28, the nonstress tests performed indicated good fetal health. He also agreed that from December 28, 1992, through January 7, 1993, there was no indication of anything that compromised the fetus, and the nonstress test performed on January 7, indicated good fetal health. However, due to the high risks involved with this pregnancy, he still felt Dr. Aubry failed to meet the standard of care by not delivering Claimant at 38 weeks. Dr. Cetrulo also did agree, based upon the measurements of the biparietal diameter, femur length, abdominal circumference, head circumference, and estimated fetal weight from the ultrasounds between 18.3 weeks and 35.6 weeks that there was continuous growth. However, as clarified on redirect, there was a growth lag that developed during the third trimester of Mrs. DuPont's pregnancy. This, according to Dr. Cetrulo, is inconsistent with defendant's position that this was a constitutionally small fetus, or a growth lag caused by a chromosome abnormality or an infection. If that were the case, the discrepancy with the fetus's growth to gestational age would have been evident from the first sonogram.

Since there was no evidence on January 7, 1993, that the fetus had grown during the prior four weeks, in light of the stagnant fundal height measurements, Dr. Cetrulo felt, at a minimum, another ultrasound should have been performed on January 7. Dr. Cetrulo also testified on redirect that, even in light of reactive nonstress tests, given the bicornuate uterus, IUGR, and risk of placental insufficiency, at 38 weeks it was reasonable to deliver this baby rather than to wait for something to go wrong.

It was undisputed that a term pregnancy is considered 38 to 41 weeks of gestation. A term pregnancy means the baby is delivered at a time when most babies can be born and not

suffer any consequences. The most noted risk to a baby delivered at 38 weeks is lung immaturity. Dr. Cetrulo could not testify, to a reasonable degree of medical certainty, that at the time this fetus reached 38 weeks, her lungs had reached maturity. There were, however, tests that could be performed to assess for lung maturity, specifically, an amniocentesis to test for a lecithin sphingomyelin ratio (LS ratio). If the ratio is above a 2, that indicates fetal pulmonary maturity. Dr. Cetrulo testified that at 34 weeks gestation, approximately 50 percent of fetuses have a mature LS ratio, and at 38 weeks, fetal lung maturity can be presumed. Dr. Aubry disputed this, testifying that only 70 percent of fetuses at 38 weeks would have a mature LS ratio. All of the medical professionals agreed that fetuses with IUGR tend to develop lung maturity at a faster pace than non-IUGR fetuses. Although an amniocentesis in the third trimester has a risk of membrane rupture, onset of labor, and fetal distress, the complication rate is less than one percent while the risk of placental abruption can be as high as four percent. Lung maturity, according to Dr. Cetrulo, was not a contraindication for delivery of Mrs. DuPont at 38 weeks given the other concerns with her pregnancy.

Defendant's expert witness, Dr. Eva K. Pressman, is Board Certified in Obstetrics and Gynecology and Maternal Fetal Medicine. She was certified in both specialties *after* the infant claimant's birth. She was in her first year of a Maternal Fetal Medicine Fellowship at the time of Mrs. DuPont's pregnancy and the infant claimant's birth. She was Board Certified in Obstetrics and Gynecology in 1995 and Maternal Fetal Medicine in 1997. She is currently a practicing doctor at the University of Rochester and holds a faculty position at the medical school. She is a member of the Regional Perinatal Center. She has published many abstracts, papers, and chapters, some of which deal with evaluation of IUGR. She testified that she has treated

hundreds of pregnancies with IUGR diagnosis, and only six or eight pregnancies with bicornuate uteri. The Court found her qualified as an expert; however, her expertise as to the standard of care at the time of Mrs. DuPont's pregnancy in 1992 and early 1993, was given less weight because she was not certified in Obstetrics and Gynecology at that time. The number of high risk pregnancies that were under her care at that time was not established, and she was still in the first year of her Fellowship in Maternal Fetal Medicine.

Dr. Pressman identified only three risks of a bicornuate uterus: miscarriage, cervical incompetence, and pre-term labor. Miscarriage, she defined as loss of a pregnancy before the fetus is 24 weeks. Cervical incompetence is a cervix that dilates without uterine contractions. Pre-term delivery, consistent with the other medical professionals, is delivery prior to 37 weeks gestation. Dr. Pressman, like the other medical professionals, opined that the risk for a placental abruption, a risk in any pregnancy, is a described risk with bicornuate uteruses mostly in relation to the placenta being implanted on the uterine septum. In Mrs. DuPont's case, where the placenta was attached to the posterior wall of the uterus, the risk for placental abruption, in Dr. Pressman's opinion, approximates a normal uterus. Dr. Pressman, on cross-examination, indicated that the risk of a placental abruption in anyone with a bicornuate uterus is three to four percent; yet, the incidence in a pregnancy with a normal uterus is about one percent. Yet, Dr. Aubry acknowledged that regardless of where the placenta is attached to the uterus, there is an increased risk of a placental abruption to a patient with a bicornuate uterus. Dr. Pressman testified there was no data to support or refute that position. Undisputedly, a placental abruption poses a fatal risk for the baby and, potentially the mother, and is a significant complication. There are no tests, according to Dr. Pressman, which can predict a placental abruption. Based

upon the results from the tests that were conducted and the evaluation of Mrs. DuPont during her office visits on December 21, 24, 28, and January 7, 1993, Dr. Pressman testified there was nothing that would suggest a placental abruption was imminent. Dr. Pressman, like Dr. Aubry, testified that symmetrical IUGR is due to an early effect upon the fetus such as chromosomal abnormalities, a viral infection, or genetics, and usually not placental insufficiency. Asymmetric growth restriction is usually seen when the placenta is not properly functioning, usually due to placental insufficiency. Dr. Pressman testified that asymmetric IUGR can become symmetric later in pregnancy and acknowledged that the IUGR, in this case, occurred during the second half of the pregnancy, as clearly evidenced by the December 17 ultrasound. She agreed, on cross-examination, that placental insufficiency will sometimes cause IUGR to emerge in the third trimester. She also indicated that at birth 10 percent of all fetuses are in less than the 10<sup>th</sup> percentile for weight and most are normal. Interestingly, and in contrast to all the other doctors, Dr. Pressman testified that in the first half of pregnancy all fetuses grow the same, whether the fetus is genetically meant to be five pounds at birth or ten pounds at birth.

To test for placental insufficiency, Dr. Pressman used nonstress tests, CWD, and checks for amniotic fluid levels, as did Dr. Aubry. She reviewed the tests performed upon Mrs. DuPont and felt that the nonstress tests failed to show placental insufficiency. She also testified that use of the uterine artery dopplers were controversial and experimental for use with bicornuate uteri. She explained that the uterine arteries provide blood to the uterus, which is then transferred to smaller blood vessels that form a vascular net. During pregnancy, the uterine arteries decrease their resistence to allow an increased blood flow to the developing fetus; in a bicornuate uterus, the blood flow increases more on the side of the uterus which contains the fetus. There is very

little data on what happens with the uterine artery on the other side of the uterus. Dr. Pressman, as did Drs. Aubry and Silverman, testified that the elevated left uterine artery readings were not related to fetal health or alarming since the key reading is the measure of flow through the umbilical artery. Looking at the umbilical artery readings for Mrs. DuPont, the results for each test were normal and did not indicate placental insufficiency. In fact, Dr. Pressman, like Dr. Silverman, testified that a normal umbilical artery S/D ratio from a Doppler study rules out placental insufficiency at that time. It does not rule out the risk of future placental insufficiency, only that it has not yet occurred. Similarly, she found the level of amniotic fluid normal, not indicative of placental insufficiency.

Dr. Pressman, in divergence to Dr. Aubry's notation, "IUGR probably secondary to a uterine anomaly" from the office visit of December 17, 1992, opined that since the placenta was posteriorly attached to the uterine wall, not the septum, and without any other signs of placental insufficiency, there was no direct correlation between Mrs. DuPont's bicornuate uterus and the size of the fetus. She did, however, agree that if a fetus is growth-restricted secondary to a bicornuate uterus, it is because of placental insufficiency. She also agreed that Dr. Aubry's note diagnosing IUGR, secondary to uterine anomaly, reflected that Dr. Aubry suspected placental insufficiency. Since it is Dr. Aubry's knowledge at the time of treatment that must be considered, Dr. Pressman's hypothesis regarding this fetus's IUGR at the time of trial is not determinative. Any problem with the blood flow to the fetus, in Dr. Pressman's opinion, would involve placental insufficiency. Even if the uterine anomaly resulted in a problem with the uterine blood flow, Dr. Pressman testified that decreased perfusion to the uterus also reflects decreased blood flow to the placenta.

It was Dr. Pressman's opinion that there wasn't anything from Mrs. DuPont's office visits on December 21, 24, or 28, that would have indicated the baby should be delivered at 38 weeks. The standard of care for the complaint of decreased fetal movement on December 28, required that a nonstress test be performed, which was done and was reactive. Nothing on January 7, 1993, indicated that Mrs. DuPont's pregnancy should be delivered either. Dr. Pressman testified that with no immediate danger to the mother or fetus, and in light of an unfavorable cervix, induction should be avoided. It was her opinion that if test results are good, the uterus is the optimal place for the fetus even at 38 or 39 weeks. She opined that, under these circumstances, it was within the standard of care to wait and allow labor to begin spontaneously. Although there were cervical ripening agents available to ready the cervix for delivery, there was only one, Prepidil, that was FDA approved at that time; yet, Dr. Pressman agreed that studies had shown prostaglandin gel was safe and effective. Alternatively, Dr. Aubry could have also used a catheter to ripen the cervix. Dr. Pressman also testified, consistent with Dr. Cetrulo and in contrast to Dr. Aubry, that at 38 weeks 95 percent of fetuses have a mature L/S ratio evidencing lung maturity, and at 39 weeks, no testing is necessary because lung maturity is presumed.

Dr. Pressman found no deviation from the standard of care when Dr. Aubry changed his plan of care from December 21, discontinuing the twice weekly nonstress tests and not conducting a CWD study on December 28. The standard of care, according to Dr. Pressman, does not require twice weekly nonstress tests when there is an unexplained elevated MSAFP. The treatment is close surveillance and serial ultrasounds every three to four weeks. Dr. Pressman acknowledged, on cross-examination, that, generally, obstetrics and maternal fetal

medicine textbooks, in the late 1980s and early 1990's, recommended serial sonograms every two to three weeks for fetuses with IUGR.

Dr. Pressman felt there was no deviation, based upon Dr. Aubry's deposition testimony, that he did not take into account where the placenta had implanted in the uterus; given the posterior implantation of the placenta, the implantation was not significant. Dr. Pressman was of the opinion that this fetus's growth restriction was not the result of placental insufficiency or the bicornuate uterus; rather, it was because this fetus was genetically disposed to be small.

#### 2. Law

In a medical malpractice case, it is the claimant's burden to show that the medical professionals involved either did not possess the requisite knowledge and skill ordinarily possessed by practitioners in the field, or neglected to use reasonable care in the application of the requisite knowledge and skill, or failed to exercise their best judgment (*Pike v Honsinger*, 155 NY 201; *Hale v State of New York*, 53 AD2d 1025, *lv denied* 40 NY2d 804). For liability to be imposed, there must be a showing that the medical provider's treatment decision was "something less than a professional medical determination." (*Darren v Safier*, 207 AD2d 473, 474; *Ibguy v State of New York*, 261 AD2d 510). A physician's duty is to provide the level of care acceptable in the professional community, he is not required to "achieve success in every case and cannot be held liable for mere errors of professional judgment" where a choice is made between medically acceptable alternatives or diagnoses (*Schrempf v State of New York*, 66 NY2d 289, 295; *Oelsner v State of New York*, 66 NY2d 636; *Nestorowich v Ricotta*, 97 NY2d 393, 399).

#### 3. Discussion

The Court has struggled with the issue of liability, as it is clear that the practice of medicine involves ongoing decision making which factors in the patient's historical circumstances, test results, changes in condition, and the experience of the doctor involved. It is not an exact science, and there is, in any circumstance, a range of acceptable practice. Mrs. DuPont came under Dr. Aubry's care which he termed a very high risk pregnancy because of Mrs. DuPont's prior pregnancy and miscarriage history and her physical anomaly of a bicornuate uterus.

Unfortunately for Mrs DuPont, her complications furthered as the pregnancy developed, including two unexplained elevated MSAFP test results, an increasing lag in fetal growth, and ultimately a diagnosis of IUGR on December 21. Dr. Aubry was an experienced, knowledgeable doctor having cared for many pregnancies complicated by a bicornuate uterus, and there is no established issue with the medical care he provided to Mrs. DuPont until she reached 38 weeks gestation. At that point, the issue turns critically to whether the standard of care required the delivery of Mrs. DuPont's fetus at that time, or in any event, before January 14, 1993. Yet, the Court has focused on those critical days before that date, as Dr. Aubry had only the facts known at that time and was left, without the ability of prescience, to evaluate the condition of Mrs. DuPont and Kayla with his expertise within the accepted level of care.

When focusing on those last days, certain factors are clear and undisputed. This woman had a bicornuate uterus. With any pregnancy with a bicornuate uterus, even one not attached to the septum, there is an increased risk of a placental abruption. Mrs. DuPont had unexplained, significantly elevated MSAFP test results twice. An unexplained elevated MSAFP test result

increases the risk for a placental abruption. Placental abruption places both the fetus and the mother at risk of death. Yet it is clear from his deposition testimony, that it never occurred to Dr. Aubry that Mrs. DuPont's bicornuate uterus placed her and her pregnancy at risk of placental abruption and the risk of placental abruption played no involvement in Dr. Aubry's decision making regarding the care of Mrs. DuPont. Yet, placental abruption and the risk of fetal death are factors Dr. Aubry acknowledged the standard of care required be considered.

The fetus was diagnosed with IUGR, having a significant growth lag measuring below the 10<sup>th</sup> percentile for her gestational age. A diagnosis of IUGR increases the risk of fetal demise. Dr. Aubry attributed the IUGR to the uterine anomaly which, by all accounts, is then usually the result of placental insufficiency. Dr. Aubry never ruled out placental insufficiency. Although he discounted placental insufficiency as the cause of the IUGR, he still attributed the cause to a uterine blood flow issue, which Dr. Pressman testified would equate to placental insufficiency.

Dr. Aubry's own plan of care, as of December 21, reflected a consideration to induce labor at 38 weeks, which was established as a term pregnancy. Mrs. DuPont's condition, as of December 21, showed, according to Dr. Aubry, "some indicators of some concern" which led him to the plan for twice weekly nonstress tests and the thought process to induce labor. Those indicators of concern were the diagnosis of IUGR, the need to watch for hypoxic effects on the fetus, and concern about placental insufficiency. As of December 21, Dr. Aubry had two nonstress tests, the four sonogram reports, and three Doppler studies. When Dr. Aubry changed his plan of care for Mrs. DuPont on December 28, the only additional information he had, at that time, were the reactive nonstress tests from December 24 and December 28. In explaining his change of plan, Dr. Aubry expressed his reliance on the reactive nonstress tests and good flow

studies to support his position that the risks associated with this pregnancy were the same or less than on December 21. It is clear from Dr. Aubry's testimony that he did not factor in the increased risk for a placental abruption because of the bicornuate uterus or the elevated MSAFP test results. Nor was there any evidence of fetal growth during this period.

Dr. Aubry, who clearly beholds himself an exceptional practitioner, stated twice, unequivocally, that with documented fetal lung maturity and a diagnosis of IUGR, the standard of care requires delivery at 38 weeks. He then held up the risks of testing for lung maturity as a shield to any negligent decision of when to deliver Mrs. DuPont's baby. Yet, looking behind the shield, it was undisputed that the risks of amniocentesis to test for lung maturity were less than one percent, and the test was described, by all who testified, as a very "low risk procedure" at that point in the pregnancy. In fact, the risks for the amniocentesis were less than the risk for a placental abruption in a woman with a bicornuate uterus with a pregnancy not attached to the septum, even before including the increased risk for a placental abruption related to the unexplained MSAFP test results. Dr. Cetrulo testified that there is no contraindication to delivery at 38 weeks given the circumstances presented here. Even defendant's expert, Dr. Pressman, testified that at 39 weeks fetal lung maturity could be presumed, and no testing was even required. All the medical providers agreed that if the testing had been done at 38 or 39 weeks, it would have more likely than not shown fetal lung maturity.

Undisputedly, at 38 weeks, the testing, nonstress tests, and CWD's showed a healthy, well-oxygenated fetus, but without any evidence, at least as of January 7, that the fetus was growing in utero. The last sonogram, from December 17, revealed an increasing growth lag and that the fundal height measurements were stagnant, except for a 2-centimeter increase on

December 28, which was lost by January 7. At his deposition, Dr. Aubry testified that on January 7, he was concerned the fetus's growth restriction had continued to worsen and ordered a sonogram for Mrs. DuPont's next appointment which she never made.

Clearly, the cervix was not ripe for delivery but, by all accounts, ripening agents and methods were available, and the risks of inducing delivery, which undoubtedly exist, would have evolved in the hospital, where emergency care, as evidenced by the exceptional treatment provided to Mrs. DuPont on the morning of January 14, could have been provided. Moreover, the Court was moved by Dr. Aubry's testimony, that within a couple days of Mrs. DuPont's next scheduled visit (January 14) he would "almost certainly [be] inducing her within days," despite those same risks of induction he touted as precluding an earlier induction. The difference in waiting that additional week, given his intent to thereafter induce, was not compelling for the Court in light of the other circumstances with this pregnancy. Moreover, the standard of care, to which Dr. Aubry testified, required delivery of an IUGR fetus at 38 weeks with documented lung maturity. He did not condition his testimony upon a ripe cervix. It is because of these factors that the Court finds Dr. Aubry's decision to continue the pregnancy of Mrs. DuPont beyond 38 weeks, and in any event beyond 39 weeks, was outside of the standard of care for a diagnosed IUGR fetus as he described. His failure to factor in the increased risks of a placental abruption for Mrs. DuPont's pregnancy despite as he acknowledged that the standard of care required this consideration, reflects a failure to exercise reasonable care in the application of his expertise, and not just a mere error in judgment. It appears that Dr. Aubry failed to heed all of the risks apparent for this pregnancy. He readily acknowledged that most maternal fetal medicine doctors dealing with an IUGR fetus, choose to deliver their patients as soon as pulmonary maturity is

assured by testing, and it would have been within the standard of care to deliver this pregnancy even as early as December 21, 1992. He indicated, however, that he didn't feel that delivery would have been best. Unfortunately, his judgment was based upon his failure to heed all of the risks known for Mrs. Dupont's complicated pregnancy; and more importantly, for purposes of this case, below what the standard of care required based upon all of the information available to him.

Accordingly, the Court finds the defendant, based upon Dr. Aubry's breach of the standard of care, 100% liable for the injuries suffered by the infant claimant, Kayla DuPont, as a result of the placental abruption that occurred on January 14, 1993.

#### B. Damages

#### 1. The Injuries

Kayla DuPont, the infant claimant, was born at 8:52 a.m. on January 14, 1993, growth-restricted, weighing 2,485 grams, which is below the 10<sup>th</sup> percentile for weight for her gestational age based upon a sea level growth chart. At the time of her birth, her Apgar score at one minute was 0, at 5 minutes her Apgar was 1, and at 10 minutes it was 4.<sup>34</sup> These Apgar scores are very low and associated with neurological problems. A more objective measure of the condition of the fetus is ph lab testing of the umbilical cord artery which provides clearer evidence of the fetal hypoxia and asphyxia. Any result below 7 is considered abnormal, and the result in this case was 6.64. This result indicates very abnormal blood gases or poor oxygenation. The normal range is 7.15 to 7.35. This intrapartum asphyxia means a lack of oxygen and a build up of carbon dioxide causing acidosis and asphyxia. The result of the

<sup>&</sup>lt;sup>34</sup> Trial Transcript, pp. 156-157.

bradycardia and lack of oxygen caused Kayla to suffer cerebral palsy. The lack of oxygen damages the brain, which results in motor deficits that appear as spastic quadriplegic cerebral palsy.

At the time of her birth, Kayla evidenced encephalopathy, which meant the baby's brain was not responding in a normal way in the immediate newborn period, because of a coma, seizures, lethargy or jitteriness. Additionally, Kayla showed signs that oxygen was not getting to the vital organs, so there was renal failure, respiratory problems, blood chemistry problems. Based upon the medical records, Dr. Cetrulo testified, to a reasonable degree of medical certainty, that the cerebral palsy from which Kayla suffers was a direct result of the placental abruption that led to the intrapartum asphyxia. There was no dispute as to the causal relationship.

Dr. Nancy Havernick, Kayla's pediatric neurologist, testified. Dr. Havernick has been the infant claimant's neurologist since she was 8 days old in the Crouse Neonatal Intensive Care Unit (NICU). Dr. Havernick was originally consulted for a second opinion, and her findings from her first examination and review of the medical records of the infant claimant reflect that she was born in full arrest, without any detectable movement, heartbeat, or breathing. She was resuscitated in the delivery room. She had seizure activity during the first few days of life which was difficult to control, requiring the administration of Phenobarbital and Dilantin in high doses. Seizure control had improved by the time Dr. Havernick saw her as did her muscle tone. The EEG showed "burst suppression pattern" of 40-50 second intervals of near electrical silence,

<sup>&</sup>lt;sup>35</sup> Trial Transcript, p. 543.

which means she had very abnormal brain activity at that time: between silence - no brain waves at all - to a pattern consistent with electrical seizure activity.

The physical examination revealed that the infant claimant's head had a circumference of 33 centimeters, had a bulging, or full "soft spot," which is normally flat, her right eye was too swollen to examine, but her left eye responded to light but not in a normal "fixing and following" way. She had a spontaneous grimace that was symmetrical. The infant claimant was intubated at the time, so some of the information was obtained from nurses and observation. She did have a gag reflex, did spontaneously yawn, and she did tongue thrust. Her tone was abnormally increased for all four limbs, and she withdrew selectively to noxious stimulation. Based upon the initial examination, Dr. Havernick assessed that the infant claimant had suffered significant birth asphyxia, the EEG indicated a poor neurological prognosis, which could be secondary to Phenobarbital levels, which sometimes cause a burst/suppression pattern in the EEG. Prognosis was guarded at best, with a plan to reduce Phenobarbital levels and repeat EEG's within the next week.

Dr. Havernick saw the infant claimant again, almost a month later, in the hospital and then at four months of age in her office. The May 7, 1993, examination revealed that her development was about two months behind. Kayla then weighed nine pounds and her head circumference was 35.5 centimeters. Examination of the cranial nerves revealed that she could track a red object horizontally and vertically, and could be fed with a bottle with chin support. Her pupils were sluggish but reactive. Deep tendon reflexes were symmetrically increased, her

<sup>&</sup>lt;sup>36</sup> Trial Transcript, p. 545, line 9.

toes were up, and her muscle tone had symmetrically increased. She could bear weight on outstretched legs. She did not slip through on vertical suspension.<sup>37</sup> The infant claimant's incurvation response was bilaterally incomplete.<sup>38</sup> Her head control was fair in a supportive sitting position. She reacted normally to tactile stimulation. She suffered from microcephalia which means the head circumference is smaller than expected for her age, and she is at risk of spastic quadriparesis. The microcephalia is caused by the failure of the brain to grow, and although the infant claimant looked like a normally formed baby in a newborn picture, her head is noticeably smaller than her body in a more recent photo. She was also at risk of infantile spasms given her continued significantly abnormal EEG. Spastic quadriparesis is stiff or spastic paralysis of all four limbs, which is the type of cerebral palsy she suffers. The infant claimant did not develop the infantile spasms.

Dr. Havernick sees the infant claimant only twice per year, and her last examination, prior to trial, was on August 8, 2006. At that visit, the infant claimant was 13½ years old and left-handed. Blood tests were ordered to determine whether botox treatments could be used to help control spasticity, because there was some concern of the infant claimant's blood and its ability to clot. Dr. Havernick noted that progress was being made with communication aids. She had suffered one bout of pneumonia since her previous appointment, which required a brief hospitalization. Seizure control was good. A review of her medication revealed that she receives

<sup>&</sup>lt;sup>37</sup> Dr. Havernick explained this as if you pick the baby up under their arms and because they are unable to stabilize their shoulders, they fall through. The infant claimant, at this point, had enough muscle tone to stabilize her shoulders so that she did not slip through (Trial Transcript, p. 553, lines 9-22).

<sup>&</sup>lt;sup>38</sup>Dr. Havernick described this as the reactive swivel of a baby's hips in the direction of a scratch on the baby's back (Trial Transcript, p. 553, lines 9-14).

Phenobarbital or Depakene elixir and Baclofen to treat the spasticity. She also receives Zanaflex, which is also an antispasticity agent. She is fed PediaSure Plus through a G-tube (a gastrostomy tube). She also gets Lactulose, Xopenex, Singulair, Zyrtec, and Pulmozyme as needed for her respiratory care. The diagnosis at that last visit was cerebral palsy and seizures, which are the result of the birth asphyxia described as hypoxic ischemic encephalopathy from birth. The infant claimant's prognosis, according to Dr. Havernick, is that she can be kept comfortable, but she is unlikely to make any progress in her ability to walk, sit, stand, or ability to perform any of her daily care independently. The injury to her brain is static and will not change. It is not progressive, and the behavioral and physical manifestations of her brain injury are also static; however, as she grows, additional problems are possible as it becomes more difficult to keep her moving orthopedically. She suffers from contractures<sup>39</sup> of all four limbs. which has been somewhat minimized by physical therapy. She will never be able to walk or sit independently; she will never be able to speak, and she will always need a G-tube to receive nourishment and medicine. She is likely to have future hospitalizations. She will never be able to work.

## 2. Life Care Plans - medical and other needs

Claimants presented the testimony of Terri Sue Patterson who prepared a Life Care
Plan.<sup>40</sup> Ms. Patterson is a Registered Nurse with a Master's Degree in Nursing, certified in
Rehabilitation Nursing and Nursing Administration, and is a Fellow with the International

<sup>&</sup>lt;sup>39</sup> Defined as a permanent shortening as of a muscle or tendon (or scar tissue) producing deformity or distortion (*Merriam-Webster Medical Desk Dictionary* [1996] p. 162).

<sup>&</sup>lt;sup>40</sup> Exhibit 49.

Academy of Life Care Planners.<sup>41</sup> She has been involved in rehabilitative nursing for approximately 23 years and has been formulating life care plans for roughly the same time frame. She is not licensed in New York State.

The Life Care Plan she prepared chronicles the extensive medical treatment and care, physical therapy, occupational therapy, and education the infant claimant has received during her life through early 2006. Based upon that information and Ms. Patterson's home visit and interviews with the parents, Ms. Patterson assessed the needs of the infant claimant and developed alternative plans for Kayla from ages 13-21 and then from 21 through life expectancy for home care with supportive services, or placement in a skilled nursing facility.

The first plan reflects pediatric home care with supportive services for the infant claimant from age 13-21. The plan sets forth the frequency, duration, and costs for meeting all of Kayla's ongoing care and needs until she reaches adulthood. Ms. Patterson utilized Kayla's medical records and history as the basis for determining what ongoing medical care she is likely to need now and in the future. She assessed an annual cost for Kayla's visits with her various doctors, such as Dr. Toro, the pediatrician; Dr. Havernick, neurology; Dr. Swenden, pulmonology; Dr. Albanese, Orthopedics; Dr. Turk, Physiatry; and she also included speciality consults for dental, gastroenterology, ophthalmology, ENT, and surgery. Additional costs were calculated for what Ms. Patterson labeled, "Therapeutic Modalities" including physical therapy, occupational therapy, and speech therapy twice per week, allotting additional frequency and costs for periodic physical therapy and occupational therapy treatment increases after surgery or injury at 12 times

<sup>41</sup> Exhibit 50.

per year, periodically until she reaches age 21. She included assistive technology consults to evaluate all of Kayla's technological needs once per week. Included also are Neuropsychology/Neurobehavioral evaluations twice until age 21, and family education. Also included is ongoing psychological counseling for the family, 24 times per year at total cost of \$10,080. Nutritional consultations are also included.

Ms. Patterson also identified a number of supplies and equipment needed for Kayla to assist with her mobility, communication, self-care, medications, bladder and bowel needs, nutrition, and respiratory needs. These categories include such items as a "Gorilla" car seat, postural wheelchair, custom orthotic-MAFOs/splints-braces, orthoplasts for head support, her pointer, support and braces for her hands, mat table for use with exercises, positioning device/tumbleforms, for when she is not in her wheelchair, Transfer Devices-Handi-move system which is a lift from the ceiling that can carry her from room-to-room, Extended to BR/Therapy Area, Activity/therapy chair that will be mobile and provide her the needed support, Prone Stander, to allow her to have some weight bearing for her joints and legs, and Positioning Aids to help with head and trunk support; communication assisted devices, switch activated toys and educational aids, augmentative communication system/visual aids, computer/communication system, a shower chair/stretcher, hand held shower, electric multiposition bed, a specialized air mattress, prescriptions for Zantac, Enulose, Depakene, Baclofen, Zanaflex, Singulair, Xopenex, Sodium Fluoride, periodic antibiotics, Pulmozyme, Atrovent, diapers and creams, PediaSure formula, PEG replacement tubes, feeding supply kits and peg tube supplies, a pump purchase and an IV pole purchase; a nebulizer machine and supplies. Some of these items are one-time costs. whereas others are annual or otherwise repeated costs.

Ms. Patterson also included laboratory costs and diagnostic tests such as X-rays because Kayla is prone to fractures, complete blood counts to monitor side effects, chemistries to measure medication levels, neurodiagnostics - such as swallowing studies, MRIs and CT scans to follow up on her brain injury, and GI studies.

Another category is Medical/Rehabilitational Management, which includes future orthopedic surgeries, prolonged illnesses, infections, seizure management, gastrointestinal, and dental procedure costs, spasticity management botox injections, Baclofen Pump, and emergency room costs. Every time that dental work must be performed, Kayla requires general anesthesia. Her teeth are coming in at various angles and her gums are overgrown. Emergency room costs are associated with the increased risk for infections, the fevers, and seizures from which she has suffered in the past.

The life care plan provides for 24-hour care utilizing a home-care nursing agency to provide a registered nurse (RN) for at least one or two of the daily shifts and a licensed practical nurse (LPN) at other times. Ms. Patterson opined that a RN is necessary to perform all of the care that Kayla requires and to allow for the implementation of a doctor's orders and discussions of medical assessment. She suggested use of an agency, instead of the family independently hiring nurses, for convenience and continuity of care. The cost allotted for this level of care was \$394,200 per year. The Court finds that by using a home-care nursing agency, an RN case manager is unnecessary.

Also included in the first alternative are modifications, which Ms. Patterson opines, are necessary to the DuPont family residence. Ms. Patterson allots \$150,000 for one-time costs to provide two means of egress from the home, modify the bathroom to permit a stretcher to be

accommodated and still have room to move around, doorways must be widened, some areas may require reinforced flooring, removal of carpeting, and reinforcement of the ceiling joists for the lift system. There is also a need for a protective covering for the van. A repeated cost, every 5 years, of \$50,000 is also provided for an accessible van, with \$1,500 for annual maintenance, and \$200 every 5 years for portable wheelchair ramps.

Ms. Patterson also allotted \$480 per year for security with a Lifeline System. An educational program and summer camp with transportation is also included. Ms. Patterson included \$35,000 per year for an educational program in the event the school district cannot meet Kayla's educational special needs. She allocated \$3,000 per year for a summer camp program.

Alternative Three reflects the frequency, duration, and costs for home care with supportive services for Kayla from age 21 through life expectancy, which the parties agree is age 30. This plan presents many of the same components for Kayla's ongoing care and needs as alternative one, such as ongoing medical care for internal medicine, and speciality consultations for Physiatry, Neurology, Pulmonology, Psychiatry, Gastroenterology, Ophthalmology, ENT, and surgery. The same therapeutic modalities are included with decreased frequency. Similar, but fewer, supplies are included to meet Kayla's adult needs. No assisted technology is provided for communication. Medications are all the same, with the addition of over-the-counter products for bowel, bladder and pain. Self-care and nutritional needs are similar. Kayla's respiratory needs will continue to require a nebulizer. For medical/rehabilitation management, no further surgeries are anticipated during this time frame, and fewer injuries, infections, and emergency room visits are planned. The same nursing care is provided, home modifications, transportation, and security. No educational program is provided. The other two alternatives Ms. Patterson

compiled address the frequency, duration, and costs associated with a pediatric skilled nursing facility for the infant claimant from age 13-21, and an adult skilled nursing placement for age 21 through life expectancy. The skilled nursing facility for Kayla's pediatric care would cost \$255,500 per year. Additional costs would be incurred for her medical care by the same providers and with the same frequency and cost as described in alternative one. The therapeutic modalities, physical therapy, occupational therapy, speech therapy, and nutritional consultation costs are all included in the daily cost for the facility. Ms. Patterson included the additional costs for periodic treatment increases for those services, as well as the costs for assistive technology consultations, neuropsychological, and neurobehavioral testing, and psychological counseling for the family. Necessary supplies included the same items that were contained in the first plan, excluding only the "Gorilla" car seat, mat tables, positioning devices, and transfer devices. The communication/assisted technology items were the same as for alternative one, as were the medications and the need for diapers. The nutritional items were also the same, minus the pump purchase and the IV pole. Additionally, for Kayla's respiratory needs, only the nebulizer would have to be purchased, not the supplies. The costs for laboratory studies and diagnostic tests, and medical and rehabilitation management were the same as set forth in alternative one. Obviously, nursing services are included in the cost of the facility, and fewer home modifications would be necessary to accommodate Kayla's needs - mostly ramping and making the bedroom and bathroom accessible. An accessible van for transport would also be necessary; however, the cost set forth does not reflect the purchase cost but only a monthly sum.

Alternative four represents the costs for placement at an adult care facility for Kayla from age 21 through to life expectancy. The annual cost at a local facility is \$109,550. Additional

costs are anticipated for her medical care and speciality consults, annual evaluations, and periodic treatment for physical therapy, occupational therapy, treatment for speech therapy, psychological counseling for the family, and nutritional consultations. Supplies and equipment include a wheelchair, gel cushion, orthotics, UE splints/orthoplasts and positioning aids, similar to alternative two. The nutritional needs and medications are the same as for the pediatric facility placement. Laboratory studies and diagnostic testing, and medical and rehabilitation management are the same as the costs associated with this age range for at-home care.

Transportation costs by ambulance are also included in this alternative.

On cross-examination, Ms. Patterson acknowledged that Kayla's parents have cared for her in their home for all of her 13 years without all of the assistance and items identified in her life care plan. The testimony established that the parents have contrived a number of devices to assist in meeting Kayla's needs. Kayla's parents testified that they would keep her home barring any unforseen eventuality.

Ms. Patterson acknowledged that the \$150,000 for home modifications was not based upon an estimate of costs to renovate their current home with a builder. The home in which they currently reside is on a hill, and Ms. Patterson felt that it would be difficult to modify. Rather, the estimate was to modify a new location, it did not represent the cost of purchasing a new home, it was the cost of modifying another home to meet Kayla's needs.

The annual cost for an educational program and summer camp of \$38,000 per year, Ms.

Patterson acknowledged, Kayla already receives, and has never been denied public education. It
was also brought out that Kayla's medical history did not reflect as many visits with the various

physicians as Ms. Patterson allotted for in the life care plan. On redirect, Mrs. Patterson noted that the State's life care plan has almost an identical follow-up schedule.

The State also provided a Life Care Plan, prepared by Peter D. Stickney. Mr. Stickney is a Vocational Rehabilitation Counselor. He testified that a rehabilitation counselor evaluates disabled people generally, and assists with returning them to productivity and community independence. Mr. Stickney has extensive experience in both vocational and rehabilitation counseling; he had some training in life care planning, has prepared many life care plans, and testified in numerous cases previously. He has no medical background. Mr. Stickney met with the DuPonts at their home. He utilized Ms. Patterson's report in assessing Kayla's medical needs, and the plan mirrors the one she prepared with various distinctions. The State's plan provides three options. Option one is care by a registered nurse 24 hours a day in the home, with periodic management by an RN case manager. Additional costs were provided for medical care, therapies and evaluations, supplies such as a wheelchair, nebulizer and supplies, tumble form positioners, exercise ball, communication board, pressure switch, reclining bath chair, "Gorilla" car seat, hand held shower, power link switches, respiration and cardiac monitor, oxygen system with supplies, air purifier, suction machine and supplies, electric hospital bed, specialized air mattress, recliners, diapers and wipes, feeding supplies and PediaSure, and disposable bibs. The cost for a wheelchair accessible van every seven years is included as well. Mr. Stickney also provided an allowance for architectural renovations, specifically, driveway paving, an elevator from the basement to the first floor or main floor of the house, and a ceiling mounted lift. The total cost for these renovations is \$22,750.

The second option is full-time care in a skilled nursing facility at an estimated cost of \$86,870 per year. Other than the costs for assistive technology, neuropsychological, physical therapy, occupational therapy, speech therapy, wheelchair and supplies and maintenance, tumble forms and exercise ball, communications board, pressure switch, power link switches, MIC-Key tube and button, medications and ongoing medical care, all other costs are subsumed in the annual cost of the nursing facility.

The third option reflects a blended alternative, when Kayla reaches 21, to include 18 hours per day at a community residence and six hours per day at a day habilitation program. A RN case manager is also provided for twenty hours at age 25. All other inclusions and exclusions are the same as option two.

On cross-examination, it was brought out that Mr. Stickney did not review Kayla's medical records in developing his life care plan; nor did a doctor review the plan to determine whether it projected appropriate medical care to meet Kayla's needs. Rather, his plan mirrored Ms. Patterson's plan, although he modified some of her projected care. He testified that he had the expertise to modify the care set forth by Ms. Patterson, giving the example that Kayla had only one assistive technology evaluation done in the past year, and he felt the standard was once per year, as opposed to once a week.

Mr. Stickney's cost for physical therapy and occupational therapy was approximately half of the cost attributed for this care by Ms. Patterson. Mr. Stickney testified he consulted three local physical therapy providers to determine that cost; however, there was miscalculation which reflected that the real average cost was actually \$96.67. Despite using a \$30 - \$40 per hour quote

from St. Camillus, with no clarification as to the time allotted,<sup>42</sup> Mr. Stickney assumed it was for an hour visit with the occupational therapist and used that quote. Yet, he agreed that an occupational therapist cannot be hired for \$30 - \$40 per hour in Central New York.

Turning to Kayla's 24-hour care, Mr. Stickney's plan was \$157,680 less than Ms.

Patterson's for 24-hour at home care. This was based upon the difference between the family hiring an RN independently or contacting a nursing service agency, which charges approximately \$18 more per hour for nursing services. The nursing agency would then provide a nurse for each shift, administer payroll, and provide malpractice insurance. Mr. Stickney testified his plan included a 15% allowance for a payroll service and a 20% additional allowance for absenteeism and vacations. In Mr. Stickney's plan, if a nurse did not arrive for any particular shift, the DuPonts would need to call in a nurse manager or have available an on-call nurse. In Ms. Patterson's plan, the agency would take care of replacing the nurse.

No provision was made for future hospitalizations or surgeries, or care for prolonged illness, seizure management, infections, GI or dental procedures; based upon Mr. Stickney's opinion, that it was too speculative. Costs for Kayla's special education needs were also not included, as Mr. Stickney indicated that she was receiving those services through the public school.

It is undisputed that Kayla requires 24-hour full-time care and will throughout her life expectancy, as stipulated, to age 30. Kayla's condition is not progressive and her needs will remain relatively consistent throughout her remaining life. From the testimony, it is clear that the

<sup>&</sup>lt;sup>42</sup> The \$30 - \$40 quote for physical therapy from the same provider was for a 15-minute session, not an hour.

DuPonts desire to keep Kayla in their home and the Court has focused on alternatives one and three of Ms. Patterson's plan and option one of Mr. Stickney's plan. In reviewing the two life care plans and listening to the testimony, Ms. Patterson presented a more thorough review of Kayla's medical needs, medications, supplies and daily care; and for the most part, Mr. Stickney relied upon Ms. Patterson's assessment. Mr. Stickney did not review all of Kayla's medical records, does not have a medical background, and did not consult with any of her medical providers, as Ms. Patterson did, in formulating her plan. Dr. Havernick also reviewed Ms. Patterson's life care plan and her projected medical needs and agreed that the plan was appropriate, based upon Kayla's medical condition. Ms. Patterson's plan, in the opinion of the Court, more completely meets Kayla's needs. Some components of her plan, however, provide for more than optimal care, as some items were not adequately supported. It would be "...unreasonable either to require that the injured party scrape by with the least that can be done for [her] to keep body and soul alive or, on the other hand, to require the wrongdoer to pay for the best and most luxurious treatment and care available, regardless of the cost." (Cesnavicius v State of New York, Ct Cl, Patti, J., February 14, 2002, UID NO 2002-013-501).

Ms. Patterson adequately supported the need for the frequency of services she set forth, and the State's plan did not deviate from the schedule she set forth for the same providers. Mr. Stickney provided no additional inclusions for future orthopedic surgery, prolonged illness, or emergency room visits, which, although somewhat speculative, are more than likely, according to Dr. Havernick, given Kayla's condition.

What seems to the Court in Ms. Patterson's report as a duplicative expense, unexplained by the testimony, was the annual \$20,000 cost for the Baclofen Pump, skilled nurse visits and

medication refills. Baclofen is listed as one of the medications included with her annual medication allotment, and a skilled nurse will be providing 24-hour care to Kayla daily. No explanation was given as to why another skilled nurse would be needed. Maintenance fees were not separated out. One of the largest discrepancies between the two plans is the cost of full-time skilled nursing care. Ms. Patterson has presented the cost for agency nursing services, while Mr. Stickney has included the costs for retaining independent nursing services. The issues with payroll, benefits, and staffing raised by the testimony persuaded the Court for the need for the agency nursing services. Mr. Stickney's explanation that a portion of the \$27 per hour for an independent nurse included the cost for a payroll service, which he did not break down, was not convincing, nor was the explanation for how the DuPonts would handle absences, sickness, and vacations. The limited time for the RN case manager in Mr. Stickney's plan does not adequately address these problems. At the same time, however, if an agency nursing service is used, the separate expenditure for an RN case manager was not adequately explained in Ms. Patterson's plan.

Ms. Patterson's inclusion for neuropsychological/neurobehavioral education for the family at a cost of \$6,960, and psychological counseling for the family at a cost of \$10,080 are not proper inclusions as damages for Kayla's personal injuries. Although certainly beneficial for the family, the Court does not find that these should be included expenses.

The cost for home modifications in Ms. Patterson's plan, to accommodate Kayla's needs and movement within the home, seemed arbitrarily determined. Ms. Patterson testified that the cost allotted was not for modifications to their current home, but for modifications to another home the DuPonts could purchase. She speculated that the cost to renovate their current home

"would be probably a lot more than \$150,000."<sup>43</sup> She did not consult with a builder or price out the cost of the modifications. Yet, Mr. Stickney included only minimal modifications at a cost of \$22,750. The cost of the elevator he proposed was based upon the cost from another case. He failed to include modifications to the bathroom, and another means of egress - not only through the garage, reinforced flooring, removal of carpeting and installation of hard surface flooring, and reinforcements for the lift. The Court finds the cost for necessary modifications, within the range presented, to be \$120,000.

The vehicle the family is currently using is not wheelchair-accessible and is 9 years old.

A wheelchair-accessible van to transport Kayla is a necessity. Ms. Patterson has allotted a cost of \$50,000 every 5 years. How Ms. Patterson arrived at the cost for the van is not explained.

Mr. Stickney has a cost of \$46,435 every 7 years with a reference supplier. The Court accepts the defendant's cost for transportation. Mr. Stickney, however, did not make any allotment for maintenance or a portable ramp, which seem to be necessary inclusions to transport Kayla to different locations and to extend the life of the van over those 7 years. The maintenance figure of \$1,500 annually and \$200 every 5 years for a ramp are accepted by the Court.

Ms. Patterson has included a cost of \$35,000 per year for an educational program for Kayla, "in the event the school system cannot meet her needs." Kayla is currently receiving special education through the school district, and there was no evidence that her educational needs are not being met. The cost for summer camp at \$3,000 per year is also an expenditure which is nice but is not necessary to meet Kayla's needs.

<sup>&</sup>lt;sup>43</sup> Trial Transcript, p. 357, lines 14-15.

<sup>44</sup> Exhibit 49, Life Care Plan, p. 52.

The balance of Ms. Patterson's Life Care Plan the Court finds necessary for Kayla's proper care at home for the remainder of her life. The costs for the balance of the plan were either adequately supported by the testimony, or were the same costs attributed by Mr. Stickney.

## 3. Loss of Earning Capacity and Economic Analysis of Costs for Medical Care and Other Needs

In order to determine the total cost for each life care plan, and to assess the amount of loss earnings Kayla will suffer, both parties presented the testimony of experts. For purposes of the life care plan, the parties stipulated to a life expectancy for Kayla of 16 years from November 29, 2006.

David L. Hopkins is a self-employed actuarial economic consultant. He applies mathematics, statistics, statistical modeling and basic financial theory to situations where it is necessary to determine how much money must be set aside today, or on a regular basis, to provide the appropriate funding for various future payments. He has been working in this field for the past 26 years. He has evaluated the economic impact of a personal injury in thousands of cases, and he has testified just over 400 times in several states, including New York. In this particular case, based upon the complete disability of Kayla, he determined a loss of earning capacity for a normal work-life period, taking into consideration the reduced life expectancy, and he calculated the projected cost of the medical care and her needs, with appropriate increasing factors for inflation over time. To project the future cost of Kayla's medical care, he included an inflationary increase the same as for the projected earning capacity of 3% per year; however, he also included an additional option which provides for a more significant increase of 6½ %, based

upon his opinion and calculations that medical costs have been increasing at a higher rate than overall inflation.

The loss of earning capacity includes a consideration for changes to the level of earnings that occur in a normal working career due to inflation, merit and productivity, and life cycle changes. Mr. Hopkins utilized statistics from the U.S. Department of Commerce, Bureau of Census, to determine average earning levels for females by educational attainment and age grouping. He applied a 3% inflationary factor based upon statistics from the Department of Labor, Department of Commerce, and the Economic Indicators Publication.

Mr. Hopkins initially determined Kayla's normal life expectancy and then her work-life expectancy, based upon educational attainment. He referenced the educational background of Kayla's parents, who both have high school diplomas, and statistics indicate that the anticipated educational level for a child is generally equal to, or better than, the parents. Mr. Hopkins, therefore, utilized a working life beginning after a high school diploma, and alternatively an Associates Degree and a Bachelor's Degree, and continuing until a normal retirement age of 65. An additional allowance of 20% was made for fringe benefits. Included in the fringe benefits was health insurance coverage, employer contributions, and other insurance, a portion of the mandatory contributions to Social Security and FICA, and pension or retirement benefits. A deduction was also made for Kayla's personal consumption expenses, that portion of her income that would be spent on food, shelter, clothing, etc., which varies upon educational attainment from 38% for a high school graduate, 34% with an Associate's Degree and 30% with a Bachelor's degree. The reduction for taxes range from 10% with a high school diploma, 12% with an Associate's Degree and 14% with a Bachelor's Degree. No deduction was made for

FICA contribution. The personal consumption deduction, Mr. Hopkins only applied to the period of time from Kayla's life expectancy through to normal retirement age, as he reasoned that during her lifetime she would be consuming or incurring those expenses.

Mr. Hopkins' report reflects that the future lost earning capacity with inflation, if Kayla entered the work force with a high school diploma would be \$3,530,416, \$4,464,920 with an Associate's Degree, and \$5,688,779 with a Bachelor's Degree. With Kayla's life expectancy reduced to roughly age 30, that earning capacity, less personal consumption and income taxes, would be \$2,684,216 for a high school diploma, \$3,438,718 for an Associate's Degree, and \$4,455,853 for a Bachelor's Degree.

On cross-examination, Mr. Hopkins acknowledged that he did not take into account that the life care plan provides for all of Kayla's medical care in calculating her personal consumption deduction or the fringe benefit calculation. Mr. Hopkins explained that he didn't take that into account because he viewed the life care plan as reflecting the additional cost of medical care as a result of the personal injury Kayla suffered and the anticipated costs may not cover all of her needs over time. In explaining why he did not consider the FICA employee contribution in his calculations, Mr. Hopkins stated it was because the contribution also has a value for the employee, which he has already included in the level of lost earning capacity. Mr. Hopkins reiterated that no personal consumption deduction should be made during Kayla's life expectancy, because she will be still incurring those expenses for her daily living.

Utilizing the life care plan prepared by Ms. Patterson, Mr. Hopkins calculated the annual costs year by year and then calculated the future costs for Kayla's care at home and in a facility.

Some of the items calculated include one-time costs and others are regular costs that reoccur

annually. Measuring the costs Ms. Patterson set forth for the duration of Kayla's life expectancy, he included an across-the-board 3% inflationary factor for each year after the first year, and alternatively a 6.5% increase. Mr. Hopkins breaks down the costs on a year-by-year basis in his report, and a larger sum is shown for the first year and again at age 21 to accommodate the one-time costs. Based on his calculations, the total future costs, to age 30, for at-home care with a 3% inflationary increase would be \$11,177,739. At a 6.5% inflationary increase, the future cost would be \$14,569,939. The total cost for facility care, with a 3% inflationary increase, is \$5,364,060 until Kayla reaches age 30, and \$6,764,847, with a 6.5% inflationary increase.

Defendant presented the testimony of Dr. Lawrence M. Spizman, a full-tenured Professor of Economics at the State University of New York at Oswego. He has worked at that university since 1977. Dr. Spizman specializes in labor economics, forensic economics and law, and economics. Forensic economics, Dr. Spizman described, as a subarea in the economics field which takes data and information and projects losses. As of December 2006, when this claim was tried, Dr. Spizman had worked on 37 cases that year, assessing personal injury and/or wrongful death or wrongful termination damages. Dr. Spizman has testified in other cases as an expert witness. Dr. Spizman compiled a report calculating the expected loss of earnings and future medical costs and then did a revised report, based upon the parties' stipulated life expectancy to age 29.87. Based upon that life expectancy Dr. Spizman calculated Kayla's lost earning capacity to that age. Dr. Spizman utilized a model which projects the probability of Kayla obtaining different educational levels, from not finishing high school, to getting a high

<sup>45</sup> Exhibit O.

school diploma, to completing some college getting a Bachelor's Degree, Master's Degree, or a Ph.D. The probabilities at either end are small, with the greatest probability (54.8%), that she would have obtained a high school diploma. He then took the probability of the various educational attainments and looked to statistics from the Census Bureau to determine potential earnings for a female in different age groups. Based upon this information, he prepared tables reflecting the various educational attainments, the age earning profiles for females at the different educational levels, and arrived at Kayla's projected earning loss, with adjustments for personal consumption, growth rates, and a "smoothing process." He also added 4.3% for fringe benefits for retirement and savings. He based this upon data for all civilian workers by major occupational and industry groups. Dr. Spizman did not provide an addition for the cost of health insurance as all of Kayla's medical care is covered by the life care plan, and he felt it would provide a double recovery for her health expenses. Personal consumption expenses were deducted for all of Kayla's work-life expectancy, which in Dr. Spizman's proposal is the same as her life expectancy, based on his reasoning that the life care plan provides, in options 2 and 3, for Kayla's residential care and, thus, she will not incur typical living expenses. He calculated selfconsumption levels for a one person, female, family-unit at 97.7 %, with the percentage decreasing as income increased utilizing the Patton-Nelson Personal Consumption Tables 2000-2001.

Dr. Spizman indicated that for each age grouping, there is a change in income which does not occur immediately on the worker's birthday, but rather would normally grow relatively smoothly over time, so increases in income reflected in the Census Bureau information were graduated over the age range of the grouping, or, in other words, smoothed.

In Table 3 of Dr. Spizman's report, he sets forth the probability of attaining various educational levels, the earnings for the various educational levels, and the adjustment for probability to calculate a total earnings capacity loss of \$95,023. This is a present-value calculation, after adding fringe benefits and deducting personal consumption.

Dr. Spizman also calculated the future cost for Kayla's care through her life expectancy, based upon the life care plan prepared by Mr. Stickney. He utilized the cost to meet Kayla's needs as set forth in Mr. Stickney's life care plan, calculating in a growth rate for each component, based upon the Consumer Price Index for medical care services and then projected that out into the future 16 years. The cost for each component of the life care plan is set forth on a year-by-year basis with the cumulative totals. Table 1 of his report is a compilation of all the cumulative calculations for each component and option of the life care plan. Tables 4 through 14 break down the cost of each component of the life care plan for the three options and includes a growth rate of 2.65% for projected future medical evaluations and therapeutic modalities, based upon the medical care component of the Consumer Price Index. A growth rate of only 1.39% was used for wheelchair needs, accessories, and maintenance. Utilizing the medical care commodities component of the medical care Consumer Price Index, Dr. Spizman used a 2.93% growth rate for aids for Kayla's independent function, home furnishings and accessories, and supply needs, and 3.66% for medication. He increased the cost for in-home care and facility care to 4.09%, again based upon the nursing home services component of the Consumer Price Index. The costs for transportation for Kayla are only increased by .82%, based upon a less than 1% growth rate, according to the Consumer Price Index. The growth rate for physicians' services is 3.53%. From Table 1, Dr. Spizman calculated the total cost for total in-home care for Kayla at

\$6,278,313. The cost for Kayla's care at a skilled nursing facility is \$2,778,725, and for Mr. Stickney's blended care in Option 3, Dr. Spizman calculated the cost to be \$6,064,523.

On cross-examination, when questioned about limiting Kayla's loss of earning potential to her reduced life expectancy, Dr. Spizman noted that in his original report<sup>47</sup> he calculated Kayla's loss of earning capacity to normal retirement age, which, for a high school graduate, he assessed at roughly 51 years or \$544,947. This calculation includes fringe benefits through life expectancy and takes the personal consumption deduction throughout her work life expectancy, assuming all Kayla's needs would be met by placement in a residential skilled nursing facility in Mr. Stickney's options 2 and 3. Instead, if Kayla receives 24-hour in-home care, no personal consumption deduction should be taken during her life expectancy and, as a result, her total loss of earnings capacity would be \$979,000. Dr. Spizman could not calculate the present value of that number at trial. He agreed that since his economic analysis is based upon the costs set forth in Mr. Stickney's report, if there were errors in that report, his economic analysis would also be incorrect.

The Court finds that Kayla's loss of work expectancy should be calculated to a normal retirement age of 65 years. Loss of earning potential would not be compensatory if calculated only to her shortened life expectancy (see Doe v State of New York, 189 AD2d 199, 206). It is very unlikely that, without the catastrophic injuries Kayla suffered, she would have only worked until age 30. The Court also finds suspect that a worker with a high school education will leave the work force at age 50.92, as calculated by Dr. Spizman, almost 17 years before being eligible

<sup>&</sup>lt;sup>47</sup> Exhibit F.

for Social Security Benefits. The Court finds that, based upon her parents' educational background, Kayla would have acquired at least a high school education. Although, as Dr. Spizman calculated this loss, the percentage likelihood that Kayla would have attained a higher degree is factored into the total work-loss expectancy.

Both experts set forth average earning levels for females in various age ranges with a high school education. Mr. Hopkins had a range of earnings beginning at the age of 18 at \$20,580 up to \$32,324 for the age range of 60 to 64 years. Dr. Spizman had a range of earnings beginning at \$18,285 up to \$26,511 for the age range of 55 through 64 years. Given these ranges of earnings, the Court has averaged the two to arrive at a range of earnings at the following ages:

18-24 years- \$19,432.50 25-34 years- \$26,435.75 35-44 years- \$28,248.75 45-54 years- \$29,781.25 55-64 years- \$29,622.50

Both experts used similar percentages of annual inflationary increases, and the Court accepts the 3% per year increase for a high school graduate. A percentage of lost earnings also requires factoring in the loss of fringe benefits. Fringe benefits include payments an employer would have made to retirement accounts, health insurance, life insurance, contributions to Social Security, and FICA taxes. Mr. Hopkins calculated in 20% for fringe benefits. Dr. Spizman calculated in 4.3%, reasoning that he excluded the cost of health insurance since most of Kayla's medical needs are being met by the life care plan. The Court takes issue with the exclusion of health insurance benefits, as at best, the life care plan only covers a small portion of Kayla's working life, and this portion of the award is to compensate her for the loss of benefits she could

have earned but for the injuries suffered at the hands of defendant. The Court finds the 20% inclusion for fringe benefits appropriate.

Deductions from projected earnings are made for personal consumption expenses and income taxes. The deduction for personal consumption should be made only for Kayla's projected work life beyond her life expectancy, or from 30 until age 65. Dr. Spizman, using the *Patton-Nelson Personal Consumption Tables 2000-2001: Updated and Revised* assessed that, on average, 97.7 % of income for lower income wage earners is spent on self-consumption. Mr. Hopkins assessed that 38% of a high school graduate's income is spent on personal consumption and 10% on income taxes. There is no indication from his testimony or his report how Mr. Hopkins came up with the 38% personal consumption expenses. However, the Court finds the 97.7 % deduction high. Instead, the Court finds that an average of the two is more appropriate and calculates that 67.85% of Kayla's projected future earnings as a high school graduate would have been spent on personal consumption and income taxes.

Based upon the foregoing, the Court finds that Kayla's loss of future earnings is \$1,582,422(R).

Each expert's economic analysis of the life care plans are problematic. Each expert utilized the life care plans as set forth in total by Ms. Patterson and Mr. Stickney. Although the Court finds Ms. Patterson's life care plan more complete and appropriate, there were certain components that need to be removed or adjusted, as described above. Mr. Hopkins takes an annual inflationary increase for all items in Ms. Patterson's Life Care plan of either 3% or 6.5%. Dr. Spizman utilized a different percentage for each component of the Life Care Plan, as each service or item has a different rate of historical inflation. This seems a more accurate approach.

Accordingly, based upon the adjustments described above to Ms. Patterson's Life Care Plan, and including the inflationary rates identified by Dr. Spizman for each component of the Plan, the Court finds the future cost for the following services/items throughout Kayla's life expectancy:

Medical Care: \$ 957,600

Therapeutic Modalities: \$ 466,575

Supplies and Equipment: \$ 311,000

Wheelchairs: \$ 31,134

Nursing Services: \$8,445,000

Home Modifications: \$ 156,435

Transportation: \$ 174,000

Security: \$ 9,645

Total Cost for the Life Care Plan for At Home Care: \$10,551,389

Total Lost Earnings: \$1,582,422(R)

The Court awards \$1,200,000 for past pain and suffering and \$1,500,000 for future pain and suffering.

Recapitulation:

Past pain and suffering: \$1,200,000

Total award for past losses: \$1,200,000

Loss of future earnings: \$1,582,422

Future Medical and Related Expenses: \$10,551,389

Future pain and suffering: \$1,500,000

Total award for future damages: \$14,833,811

TOTAL AWARD: \$16,033,811

Since the amount of future damages exceeds \$250,000, a structured judgment is required (CPLR 5031).<sup>48</sup> Let judgment be held in abeyance pending a hearing pursuant to CPLR Article

<sup>&</sup>lt;sup>48</sup> This is the future damage amount requiring a structured judgment for claims filed before the amendment to CPLR 503 became effective on July 26, 2003.

50-A and to determine collateral source issues (CPLR 4545[a]). The Court encourages the parties to agree upon an attorney fee calculation and the discount rate to be applied to formulate a structured settlement of their own (CPLR 5031[f]).<sup>49</sup> In the event that the parties cannot reach such an agreement, each party will submit a proposed judgment in writing, conforming to the requirements of CPLR 50-A, within 120 days of the date this Decision is filed with the Clerk of the Court. A hearing will thereafter be scheduled at the mutual convenience of the parties and the Court with regard to the collateral source issues and the structured judgment.

To the extent claimant has paid a filing fee, it may be recovered pursuant to Court of Claims Act §11-a(2).

All motions made at trial and not heretofore ruled upon are denied.

Syracuse, New York January 22, 2008

DIANE L FITZPATRICK
Judge of the Court of Claims

<sup>&</sup>lt;sup>49</sup> This is the CPLR 5031(f) applicable to claims filed before July 26, 2003.