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PARAPLEGIA AND SPINAL CORD SIGNS FOLLOWING A BREECH EXTRACTION

Jane was born at term on May 23, 2006, by means of an emergent Caesarean breech extraction complicated by the development of nuchal arms. In the delivery room Jane was observed to have normal movements and normal muscle tone of her upper and lower extremities. There was no evidence of any abdominal distension or protuberance. Additionally, in the delivery room, Jane was observed front to back and head to toe, revealing no visible evidence of any focal trauma.

However, at almost 2 hours of age, a nurse on admission to the regular nursery noted that Jane had hypotonia and abdominal distension. Additionally the same nurse noted facial asymmetry, bruising of the right upper arm and midback and petechiae of the groin area. At about 4 hours of age the attending pediatrician, Dr. Smith, noted that Jane had abdominal and lower extremity hypotonia but her upper extremities had normal movement and tone. Additionally there was overriding of the cranial sutures.

Dr. Smith perceived the hypotonia as mild.

The next morning on May 24, 2006 (day number 2 of life), Dr. Jones, who was the covering attending pediatrician that day, also noted hypotonia and therefore requested a consult with a pediatric neurologist.

The attending pediatric neurologist, Dr. Green, therefore saw Jane on the morning of May 24, 2006 (day of life number 2) and documented that Jane had a significant truncal and lower extremity hypotonia. Dr. Green recommended that the pediatricians consider spinal MRI for Jane if there would be no improvement of her hypotonia. Though not documented in the record, Dr. Green stated that the intent was to observe Jane for improvement over the next day or two.

The plan on May 24, 2006 (day number 2 of life) was to obtain ultrasound imaging of Jane's hips (there was some mild hip laxity) and ultrasound imaging of Jane's abdomen. The hip and abdominal ultrasound images were obtained the next day on May 25, 2006 (day number 3 of life). There was no discussion for obtaining a spinal ultrasound.

On May 25, 2006, (day number 3 of life) the abdominal ultrasound revealed no intraabdominal abnormality to account for a distended abdomen but did reveal a mild left hydronephrosis.

On May 25, 2006, Dr. Smith again was the covering pediatrician. An exam that day noted the hypotonia was mild (4 out of a scale of 5) but persisted.

On the morning of May 26, 2006 (day number 4 of life) Jane was seen in follow-up consultation by Dr. Blue who was also an attending pediatric neurologist. Dr. Blue documented that Jane had mild hypotonia and that after discharge from the hospital Jane should be followed by the pediatric neurologists (Dr. Green and Dr. Blue) for her hypotonia.

The pediatricians (Dr. Smith and Dr. Jones) and the pediatric neurologists (Dr. Green and Dr. Blue) acknowledged that a breech extraction can produce trauma prototypically to the low cervical-upper thoracic spinal cord (sparing the arms and producing deficit in the form of hypotonia to the abdomen and legs). They further acknowledged that the initial spinal cord injury can be reversible and treatable with steroids (for swelling), drainage of any hematoma compressing the spinal cord, and immobilization and limiting movements and handling to prevent additive insults and injury.

Additionally, each of the pediatricians and pediatric neurologists acknowledged an awareness that a spinal cord injury can cause a neurogenic bladder which can cause a hydronephrosis.

Jane was discharged from the hospital on May 26, 2006 (day number 4) by Dr. Jones who was the attending pediatrician that day. The discharge diagnosis was hypotonia and hydronephrosis. There is no documentation in the record of any differential diagnosis for the underlying cause of the hypotonia or hydronephrosis. There is no documentation in the record on May 26, 2006 that spinal MRI was to be considered and no plan for follow-up spinal MRI and no documentation of any plan to diagnose the cause of the hypotonia.

None of the pediatricians or pediatric neurologists spoke to one another or spoke to Jane's mother about trying to make a diagnosis for the hypotonia with spinal ultrasound and/or spinal MRI.

Following discharge, testing confirmed that the hydronephrosis (now bilateral) was caused by a neurogenic bladder. Jane came under the care of Dr. Randall, a pediatric urologist, who treated the hydronephrosis. Dr. Randall erroneously believed that a spinal ultrasound had previously been done and was normal. Dr. Randall believed the cause of the neurogenic bladder was unknown. The urologist and pediatric neurologists never spoke to one another.

The pediatric neurologists (Dr. Green and Dr. Blue) referred Jane to Early Intervention for therapies to treat her hypotonia. The diagnosis for Early Intervention therapies was hypotonia.

Jane's mother became concerned that Jane was not improving as a result of the therapies but rather seemed worse. By one year of age Jane would not move her legs and on sitting up there was severe truncal "caving". Therefore when that concern was expressed to Dr. Blue, a spinal MRI was performed at 13 months-of-age. That spinal MRI revealed spinal cord atrophy between C7 and T4. That spinal cord atrophy correlated at that point in time to what had been a significant functional worsening of Jane's deficits. Initially there was a mild hypotonia that developed within a few hours following the birth and by 13 months-of-age there was a severe functional motor deficit.