

August 6 2014

Attorney Michael Cronkright

Re: Burns case

Dear Mr Cronkright

I was pleased to discuss this case with you.

I reviewed medical records in this case, including records of birth, pediatric visits, ER visits, and hospitalizations. I reviewed brain images including US and MR scans.

As I mentioned, I am a board certified pediatrician and child neurologist in practice at Children's Hospitals and University Hospitals for 25 years. I have also completed fellowship training in epidemiology and neuroimaging. I have diagnosed and treated infants, children, and teens for a great variety of brain, spinal cord, neuromuscular, and developmental conditions. I have worked extensively with head injured children and with children who have suffered strokes and intracranial hemorrhage. I was trained to read and interpret brain CT and MR scans, and I have done so while evaluating thousands of children referred to me for suspected neurological problems.

The following are the relevant facts of the case:

- Naomi was a full term baby born 1/7/14 via emergency c/section. At birth she was noted to have a caput (skull swelling). Her head circumference was 36cm.
- On 1/22 Naomi's head circumference was 36cm. On 3/7 her head circumference was 40cm.
- On 3/16 and 3/17 Naomi was seen in the ER for vomiting. Her platelet count was 707 thousand (elevated).
- On 3/18 Naomi was taken to the ER by EMS for apnea and altered mental status. There was no external evidence of trauma. An MR scan of the head revealed a chronic subdural effusion. A small amount of acute subdural hemorrhage was seen as well. Her platelet count was 601 thousand.
- On 3/19 a spinal tap revealed blood tinged fluid.
- On 3/20 and 3/21 Naomi exhibited seizure activity. Her platelet count was 781 thousand.
- On 3/24 after treatment and recovery, she was discharged. Later that day Naomi was again brought to the ER for vomiting and lethargy. There was no evidence of external trauma. Her platelet count was 725 thousand.
- On 3/26 an eye exam revealed bilateral retinal hemorrhage. A spinal tap was again blood tinged. Her platelet count was 785 thousand.
- On 3/27 a repeat head MR scan again demonstrated chronic subdural fluid collections as well as a small amount of subdural blood. A skeletal Xray was normal.
- On 3/28 her platelet count was 909 thousand. Her Ddimer level was 0.86 (normally <0.6)
- On 4/1 Naomi's head circumference was measured at 41cm. She was discharged that day.

The following are my opinions, to a reasonable degree of medical certainty:

- Naomi had one definite intracranial condition, and one possible additional condition. The first was chronic subdural fluid collections. It is not clear when these originally developed, but she was born via an emergent c/section and she was noted to have a 'caput' (scalp swelling from birth trauma) as a neonate. Chronic subdural fluid collections are not evidence of significant or abusive trauma and can develop in otherwise normal infants.
- Naomi's subdural fluid collections are apparent on her MR scan of 3/18, and these collections were responsible for her head circumference increasing at a greater than expected rate between 1/22 and 3/7. Children with this condition can develop small acute subdural and subarachnoid hemorrhages as a result of minimal or minor head trauma. According to the history in the record, Naomi did suffer a minor bump on the head on 3/15.
- Naomi suffered possible seizures on 3/18, and definite seizures on 3/20 and 3/21. There was no evidence of meningitis or encephalitis, and no evidence of a metabolic abnormality. The diffusion MR and the T1 and T2 weighted MR images demonstrated no evidence of brain parenchymal abnormality. The seizures were caused by

subarachnoid hemorrhage.

-Naomi may have also had seizures triggered by a venous blood clot in her brain. These clots can be triggered by elevated platelet counts, and Naomi's counts were indeed elevated between 3/17 and 3/28. These clots are difficult to see on routine MR scanning and often require venography for diagnosis. This test was not done in Naomi's case. Naomi did have an abnormal Ddimer blood test. An abnormal level arouses suspicion for venous blood clots.

-Naomi was found to have retinal hemorrhages on 3/26. These are not specific for abusive hemorrhage, and can happen in the setting of subarachnoid hemorrhage (as Naomi had) and with increased intracranial pressure (as Naomi had due to her subdural fluid collections) and with repeated vomiting (as Naomi had on 3/16, 3/17, 3/18 and during her hospitalizations).

-Naomi did not have evidence of external injury or broken bones-these findings plus the lack of injury to the brain substance make abusive head injury very unlikely.

To summarize then, Naomi, to a reasonable degree of medical certainty, was not a victim of abuse. She suffered seizures in March of 2014 as a result of a medical condition.

If I can be of further assistance please let me know.

Sincerely

Joseph Scheller, MD