

# What Killed Leah Miller: Abuse or Natural Causes?

by

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The bruises were large and ugly, and 4-month-old Leah Miller was covered with them. The worst of the 15 bruises were on her head and chest. Dr. Laura Stephens raised her eyebrows at the emergency room nurse; the nurse grimaced. “The parents said she’s been fussy and vomiting for three days. This morning, the mother found her unconscious in her crib. Should I call social services?”

Dr. Stephens paused. “Yes, I think we should get social services involved, especially if the CT shows bleeding in her brain. Brain injury and the bruises are two major signs of possible abuse. I’ll talk to the parents to see what they say about the bruising.”

A few minutes later, the radiologist called. Leah had a subdural hematoma as well as diffuse brain swelling, and she needed emergency surgery to relieve the increasing pressure.

While Leah was in surgery, Dr. Stephens found her parents, Ezra and Rachel Miller, in the waiting area. She could tell by their dress that they belonged to the small Amish community recently established here in rural north-central Ohio. They were obviously frightened for their daughter and uncomfortable in the bustling hospital.

Dr. Stephens introduced herself and gently asked about the bruises. Ezra was blunt in his answer. “*Jah*, she’s had them awhile. I don’t know how she got them.” Rachel twisted her hands in her lap and quickly shook her head when Dr. Stephens asked about recent injuries or accidents.

“Unfortunately, sometimes bruising and brain injuries like Leah’s can be the result of abuse. The law requires me to report any case in which the symptoms are consistent with possible abuse. A representative from Children and Youth Services (CYS) will be here shortly.” Rachel’s eyes widened and she looked at Ezra. Ezra’s face darkened. “Do as you must,” was all he said.

Despite surgery to relieve the pressure on her brain, Leah died three days before Christmas. An autopsy was performed and, in addition to the bruises in various stages of healing, the coroner found multiple hemorrhages in Leah’s brain and right eye. He also noted scratches on Leah’s face that Ezra and Rachel could not explain. Leah’s death was ruled a homicide.

That evening, Rachel wept as their seven sons were ushered out the door by CYS staff and taken to non-Amish foster homes. “Ezra, they can’t go to English homes! They will be exposed to worldly things like TV and... and all that is *verboten!* They are too young to be away from the faith...” Ezra tried to console her, but he too was worried about his sons being in an environment so different from their Amish home.

A state police officer explained that the district attorney had opened an investigation into Leah’s death. “Removing the children is for their own safety until we know exactly what happened. You haven’t been

charged with anything as of right now, but you may want to retain the services of an attorney.” Rachel trembled and looked at the floor as Ezra stoically gave a brief nod.

A widespread public uproar ensued. As a detective assigned to the case, you find yourself right in the middle of it. After numerous interviews with neighbors and doctors and experts, your notebook is full of conflicting information.

- *Stan Harrell*, district attorney: “The autopsy found multiple signs consistent with child abuse—the severe bruising, the brain injury, the bleeding behind the eye. The brain hemorrhage in combination with the retinal bleeding is highly suggestive of shaken baby syndrome, also known as abusive head trauma. In fact, there are studies that show retinal bleeding is rare in cases of non-abusive head injury. We will certainly investigate other possible causes, but the evidence right now is pretty strong.”
- *Dr. Laura Stephens*, ER doctor: “As an ER physician, I see cases of child abuse more often than I would expect. Individually, the bruises and brain injury each have many possible causes, but when they occur together, it’s suspicious and I always report it. Head trauma caused by abuse can be fatal 30% of the time, so I wanted to err on the side of caution. Plus, this type of abuse most commonly occurs between 3 and 8 months of age; Leah was 4 months old.”
- *Amanda and Peter Evans*, neighbors of the Millers: “Leah was everything to them—they wanted a girl so bad after having seven boys. Rachel wouldn’t abuse her kids, I know it!” said Amanda. Peter agreed, “Rachel is a great mom. I don’t know how she handles eight rambunctious kids, but she does it.”
- *Willa Arnold*, owner of a local farm supply store: “Ezra’s real quiet. He don’t say much at all, but I remember him saying he was so happy when their little girl was born. Can’t picture him wanting to hurt her.”
- *Dr. Ron Draybill*, professor and expert on Amish culture: “The Amish are quiet and peaceful; they place great value on family and church, and are taught to respect authority. Crime in this community is very rare, and it is highly unlikely that the Millers abused their daughter.”
- *Dr. Micah Holmes*, physician and expert on Amish medical issues: “There are many medical practices and disorders that are unique to the Amish culture, things that your typical county coroner wouldn’t be familiar with. It’s likely that Leah was born at home. I suspect the midwife who delivered her didn’t administer an injection of vitamin K.”
- *Lt. Harris Olson*, state police officer: “Bruises were observed on one of the other boys when he was a toddler, but the parents said they thought it was because he was a very active boy. He kind of outgrew it and they thought Leah would, too.”
- *Dr. Alan Naswani*, professor of pediatrics at Harvard: “Lots of things could explain the bruising and bleeding in the brain besides child abuse, like maybe some type of liver disease. There are some genetic liver diseases that are more common among the Amish. Also, some of my colleagues are now skeptical that bleeding and swelling of the brain accompanied by retinal hemorrhage always means the baby was shaken.”
- *Dr. Terri Fischer*, forensic pathologist at Ohio State: “Abusive head trauma often results in subdural hematomas like Leah had, but the other areas of bleeding were deep in the brain, which is unlikely to be caused by abuse. However, retinal bleeding is a very common sign when a baby is shaken, so I’d have to say abuse is a reasonable possibility.”

These statements raise a few more questions in your mind. Answering them should enable you to wrap up the case, which would please your supervisor and put an end to the phone calls from the local state representative. Public pressure is growing, and the Millers are distraught over the accusations and the placement of their sons in non-Amish foster homes. Time is of the essence.

### Questions

1. Are Leah's symptoms and the autopsy findings consistent with shaken baby syndrome? Explain your answer.
2. Describe the nature of a subdural hematoma, specifically:
  - a. Where is a subdural hematoma found?
  - b. How can shaking a baby lead to a subdural hematoma?
  - c. How can a subdural hematoma lead to brain injury or death?
3. What could account for the scratches on Leah's face?
4. Describe the three mechanisms or phases of hemostasis, with particular emphasis on coagulation. What are some of the biological components essential for coagulation?
5. Why does Dr. Naswani think genetic liver disease could have contributed to Leah's death?
6. Explain Dr. Holmes' theory that Leah's injuries may have resulted from not receiving an injection of vitamin K.
7. It's time to write up your report and make a recommendation. Do you conclude that the Millers should be charged with homicide, or did Leah die of natural causes? Explain your answer.

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