

Failure to Rule Out Bacterial Meningitis

Description

A 3-month-old baby seen in the emergency room and her primary care physician's office five times in nine days was diagnosed with bacterial meningitis, which subsequently led to seizures, developmental delays and further complications.

Clinical Sequence

A previously healthy 3-month-old (14 weeks) presented to her PCP's office for a two-day fever. She was discharged with the diagnosis of a viral illness. Two days later she was taken to the emergency department, where her mother reported continued fevers, nasal congestion (for the prior two weeks), a runny nose and a cough. Her temperature was 102.5, but she appeared, otherwise, well. No lab tests were ordered; the child was discharged home with the diagnosis of a viral illness.

Five days later, the baby was brought to her PCP's office with the primary complaint of no bowel movement and fevers up to 101 at home for the past two days. She had been eating well and had good urine output. In the office, her temperature was 104.9, she was crying (but consolable), and her tympanic membranes, oropharynx and lungs were clear. Her neck was supple, and no rashes were present. The PCP sent the baby to the ED for a fever workup.

In the ED, her temperature was 103.6; she was alert but uncomfortable. A white blood cell count was 14,290 with 46 bands, and her urinalysis showed trace protein and rare white blood cells; her urine and blood cultures were pending. The patient was observed for two hours and then discharged with Tylenol; her mother was told to call in a few days for the culture results. Post-discharge, her blood culture was found positive for streptococcus. The ED physician relayed this information to the physician covering for the PCP, who then informed both the PCP and the mother of these results.

The next day, the mother took her daughter to the PCP's office, where she was found to be febrile, irritable and sleepy. After reviewing the labs from the prior day, the PCP diagnosed bacteremia. He gave the patient 360 mg of the antibiotic Ceftriaxone intramuscularly and told the mother to increase her fluids and follow up in 24 hours or go to the ED if the symptoms became worse. At 6 p.m., the mother brought her daughter to the ED due to inconsolable crying, gasping for air, left eye swelling, decreased oral input and decreased urine output. Her temperature was 102.6, heart rate 200, and respiratory rate 60. She was crying, irritable, tachycardic and mottled, and she had a capillary refill time of five seconds. She was given IV fluid, IV Ceftriaxone, and IV Vancomycin. A lumbar puncture was positive for meningitis. The patient was admitted to the PICU and intubated. She had a seizure and severe neurological injury, leaving her blind and deaf. She has a seizure disorder and a ventricular peritoneal shunt.

Allegation

The patient's mother filed a suit against the PCP and the ED physician, claiming that a failure to administer prophylactic antibiotics and perform a lumbar puncture delayed the diagnosis of bacterial meningitis and opportunity for treatment.

Disposition

The case was settled in excess of \$1 million.

Analysis

Clinical Perspective

1. *The child's borderline age impacted the diagnostic process. For non-toxic appearing febrile children older than 3 months, the initial evaluation need not include a lumbar puncture.* Certain clinical and laboratory findings should push a clinician to pursue an atypical diagnostic path. Although this child had a normal WBC, the differential was significantly abnormal, possibly indicating an ongoing infection.
2. *There was a failure to adequately address a fever with leukocytosis and left shift.* Some explanation for the bandemia should be sought prior to (multiple) discharges.
3. *There was no documentation of neurologic exam or LP on a patient with fever and leukocytosis of unknown source and no empiric initiation of antibiotics.* With fever of unknown etiology, meningitis must be on the differential. Persistent fever without a source and a possible bacterial infection should receive empiric antibiotics until meningitis and sepsis can be ruled out.
4. *The patient was not admitted to the hospital following the bacteremia diagnosis.* Bacteremia in a 3-month-old infant requires an LP to look for a source and admission to the hospital for IV antibiotics until the positive blood culture is determined to be caused by contaminant or the bacterial sensitivities are identified.

Risk Management Perspective

1. *Abnormal lab results were not definitively addressed.* All abnormal lab results should be documented and explained in the chart.
2. *Multiple providers caused a discontinuity of care and an absence of the big picture.* Multiple visits, phone calls and evaluations by several different physicians result in various points in the case where care needs to be more aggressively managed.

Legal Defense Perspective

1. *This case had examples of poor clinical judgment on the part of providers, multiple attempts by the mother to have her child examined, and severe injury caused by delayed diagnosis.* Jurors empathize with a plaintiff who, despite her efforts, did not receive the appropriate level of care and suffered as a result.
2. *The tragic outcome of the case, coupled with the mother's diligent compliance with discharge instructions, inhibited an aggressive defense strategy.* For cases with the lack of supporting defense experts and a disastrous outcome for the patient, the defense strategy has to focus on finding a resolution that stems the negative impact on all parties and provides appropriate financial and emotional support. ★

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