

**IMAGES IN EMERGENCY MEDICINE**

## Infectious Disease

**Male infant with fever**Thomas Caldwell MD | Jared Cohen MD 

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Email: [tcaldwell121295@gmail.com](mailto:tcaldwell121295@gmail.com)**KEYWORDS**

bacterial meningitis, COVID-19, fontanelle, infantile sepsis

**1 | CASE PRESENTATION**

A 7-month-old, fully vaccinated male child presented to the emergency department for 1 day of fever, decreased oral intake, vomiting, and poor latching. Mom states that he is acting like himself with the exception of poor feeding. The patient was born at term and his only other illness was a COVID-19 infection 2 weeks prior. He had fever for 2 days with COVID-19 and then had an uneventful recovery. On examination, the patient was GCS15 and without distress but noted to have a bulging fontanelle.

**2 | DIAGNOSIS: *Haemophilus influenzae* CAUSING BACTERIAL MENINGITIS**

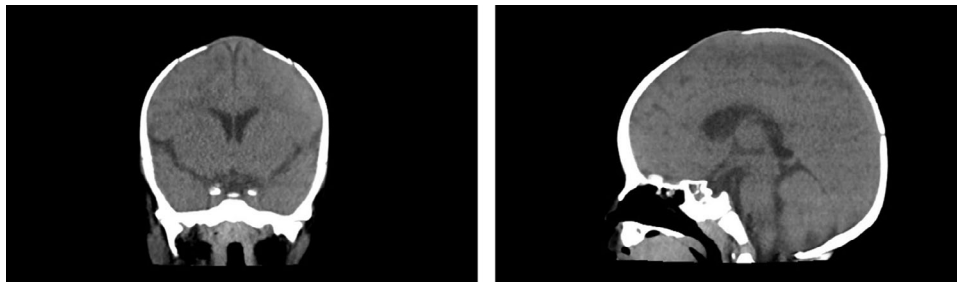
Given the patient's bulging fontanelle and fever, initial management began with a sepsis evaluation and broad-spectrum antibiotics. Considering the patient's well appearance, a computed tomography (CT)

scan of the head was obtained to assess for other causes of the bulging fontanelle. The CT returned without alternative etiologies and the patient underwent a lumbar puncture. This revealed a glucose <2, protein of 126.2, and *Haemophilus influenzae*. Subsequent serotyping confirmed *H. influenzae* type F (Figure 1).

Bacterial meningitis is classically associated with fever, neck pain, and photophobia. Infants, however, often present with non-specific symptoms, such as decreased oral intake and irritability.<sup>1</sup> Additionally, more specific physical examination findings, such as bulging fontanelles are infrequently present.<sup>2</sup> Lumbar puncture and subsequent cerebrospinal fluid studies are the gold standard for diagnosis, with testing typically revealing low cerebrospinal fluid glucose and high protein.<sup>3</sup> *Streptococcus pneumoniae*, *Group B Streptococcus*, *Neisseria meningitidis*, and *H. influenzae* are the most common bacterial pathogens.<sup>4</sup>

**CONFLICT OF INTEREST STATEMENT**

The authors declare no conflicts of interest.



**FIGURE 1** Coronal and sagittal cross-sections of the computed tomography (CT) demonstrating the bulging fontanelle.

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