

May 19, 2023

Outbreak of Suspected Fungal Meningitis in U.S. Patients who Underwent Surgical Procedures under Epidural Anesthesia in Matamoros, Mexico

Summary

The Delaware Public Health District (DPHD) is issuing this Health Alert Network Health Advisory about an outbreak of suspected fungal meningitis among U.S. patients hospitalized in Texas after undergoing cosmetic procedures under epidural anesthesia in the city of Matamoros, state of Tamaulipas, Mexico. It is currently unknown which organism(s) is causing the outbreak. A fungal etiology is suspected. As of May 12, 2023, five patients have been diagnosed with suspected fungal meningitis; all have been hospitalized, and one has died. All these patients received epidural anesthesia and underwent cosmetic procedures. Affected patients underwent procedures in at least two clinics in Matamoros, Mexico, including River Side Surgical Center and Clinica K-3. Other facilities might be identified through further investigation by the Centers for Disease Control and Prevention (CDC).

Healthcare providers and the public should be aware that patients who underwent medical or surgical procedures under epidural anesthesia in Matamoros, Mexico, and who have developed signs or symptoms of possible meningitis (e.g., fever, headache, stiff neck, nausea, vomiting, photophobia, altered mental status) should promptly seek evaluation by a healthcare provider and convey that medical history.

Background

On May 8, 2023, CDC, the Texas Department of State Health Services, and the Cameron County Health Department were notified through the Emerging Infections Network of two female patients hospitalized in Texas with symptoms consistent with meningitis (e.g., headache, fever, photophobia, stiff neck) that began approximately 2–4 weeks after receiving cosmetic procedures under epidural anesthesia at River Side Surgical Center in the city of Matamoros, state of Tamaulipas, Mexico. Two additional female patients hospitalized in Texas developed suspected fungal meningitis 1–8 weeks after undergoing cosmetic procedures under epidural anesthesia at Clinica K-3 in Matamoros, Mexico.

CDC, the Texas Department of State Health Services, and the Cameron County Health Department are investigating additional cases that may be associated with this outbreak.

Presenting symptoms included fever and new or worsening headache. Some patients initially had mild symptoms. The causative organism(s) is currently unknown for this outbreak. Multiple pathogens can cause healthcare-associated fungal meningitis, and infections may involve multiple pathogens at once. Initial cultures of CSF and blood from the affected patients have been negative for fungi and other pathogens; however, CSF values were notable for significantly elevated white blood cell counts.

Common symptoms of Fungal Meningitis include:

- Fever
- Headache
- Stiff Neck
- Nausea
- Vomiting
- Photophobia
- Altered Mental Status

Healthcare providers should report suspected fungal meningitis cases, including those possibly related to this outbreak, to Delaware Public Health District immediately at **740-815-6518**.

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Recommendations for Healthcare Providers

- For patients who underwent a medical or surgical procedure under epidural anesthesia in Matamoros, Mexico, after January 1, 2023, and who have developed symptoms consistent with fungal meningitis, healthcare providers should perform brain imaging (i.e., computerized tomography [CT] or magnetic resonance imaging [MRI] and a diagnostic lumbar puncture (LP) unless contraindicated. Because some patients with fungal meningitis may initially present with mild or non-specific symptoms, healthcare providers should have a low threshold for performing brain imaging and LP.

Although vaccines are available to prevent certain types of bacterial and viral meningitis, no vaccine is available to prevent fungal meningitis.

- Healthcare providers can consider ordering bacterial and fungal cultures of CSF fluid.
- If fungal meningitis is suspected, treatment should be initiated as soon as possible after obtaining CSF; treatment should not be withheld because of negative fungal culture. *Consultation with an infectious disease specialist is recommended.*
- Treatment should involve broad-spectrum antifungal medications that have adequate central nervous system penetration. Dual agent antifungal therapy can be considered and has been used in previous fungal meningitis outbreaks.

References

This Health Alert adapted and modified for DPHD jurisdiction from the CDC Health Alert Network Health Alert 491. Please visit <https://emergency.cdc.gov/han/2023/han00491.asp> for more information from the CDC and to view the CDC HAN.