Acute Sore Throat? Think Retropharyngeal Abscess

BY HEIDI SPLETE
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Consider a retropharyngeal abscess when faced with a drooling child who has a severe sore throat, according to Dr. Marisol Figueira of Boston University.

Retropharyngeal abscess is a common pathology secondary to acute throat infection, Dr. Figueira said in an interview. "It is a result of suppuration of the retropharyngeal lymph nodes, secondary to infection in the adenoid, nasopharynx, posterior pharyngeal wall, sinuses, and tonsils."

A high index of suspicion is needed to diagnose retropharyngeal abscess, and the diagnosis is made based on clinical manifestations and radiologic studies. Prompt diagnosis is important, because delays could lead to life-threatening complications such as a blocked airway, jugular vein thrombosis, or mediastinitis, Dr. Figueira said in a presentation at a conference on infectious diseases held in Cambridge, Mass.

The retropharyngeal space extends from the base of the skull to the level of the T1 or T2 vertebra and includes the space behind the muscles of the pharynx but in front of the prevertebral fascia.

An infection in the retropharyngeal space is most common in young children. Data from a 35-year review of cases at a California hospital showed that 50% of patients with such abscesses were younger than 3 years and 71% were younger than 6 years.

The abscess may follow an upper respiratory infection, group A β-hemolytic streptococcal pharyngitis (GABHS), or even trauma. The predominant bacterial species are *Streptococcus pyogenes*, *Staphylococcus aureus*, and respiratory anaerobes (including *Fusobacteria*, *Prevotella*, and *Veillonella* species). *Haemophilus* species also are occasionally found.

The clinical presentation can involve a spectrum of common symptoms including fever, severe sore throat, dysphagia, drool-

ing, respiratory distress, and a muffled voice. The classic symptoms of neck stiffness and bulging of the posterior pharyngeal wall are present in fewer than 50% of patients.

On physical examination, the child can present with anterolateral neck swelling, hyperextension of the neck, or an enlarged cervical lymph node, she explained at the meeting, which was sponsored by the university.

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Imaging is needed to confirm a diagnosis of a retropharyngeal abscess. A lateral x-ray of the neck area may show soft tissue swelling, and a CT scan of the neck can be helpful if the x-ray findings are uncertain and the clinical suspicion is high.

Immediate treatment includes airway maintenance, pain management, and hydration before admitting the child to the hospital. Consult an ear, nose, and throat specialist when the diagnosis is confirmed or if the child has an obstructed airway. The abscess treatment plan includes incising and draining the abscess, and treating the child with parenteral antibiotics, such as clindamycin or a combination of sulbactam and ampicillan.

"Prompt diagnosis and treatment of pharyngitis or upper respiratory infections will generally prevent retropharyngeal abscess," said Dr. Figueira. This condition can [also] lead to laryngeal edema with possible airway obstruction, mediastinitis, and aspiration pneumonia, but with prompt treatment a patient can make a full recovery." ■

Risk Behaviors Drive Up HIV In Adolescents

BY NANCY WALSH
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BOSTON — The adolescent HIV-1 epidemic as reflected in a multisite cohort of U.S. youth is changing from one of vertically transmitted infection to one where infection is acquired through risk behaviors, posing new challenges for providers and the health care system, said Dr. Allison L. Agwu in a poster session at the 15th Conference on Retroviruses and Opportunistic Infections.

The HIV Research Network, a consortium of 21 clinical sites providing primary HIV care, includes 684 patients aged 12-24 years. Vertical transmission was the source of infection in 227 patients and risk behaviors accounted for 457 cases, said Dr. Agwu of Johns Hopkins University, Baltimore.

Analysis of data from this cohort showed patients infected through risk behaviors are older, with a median age of 22 years, compared with a median age of 15 years in vertical-transmission patients. They are also more likely to be male. Of the risk-behavior patients, 292 (64%) are male, as are 108 (48%) of the vertical-transmission patients.

Risk behaviors comprised men having sex with men (51%), unprotected heterosexual activity (45%), and IV drug use (4%).

The median CD4 count in the risk-behavior group was 492 cells/mm^3, whereas that in the vertical-transmission group was 660 cells/mm^3. The median HIV RNA level in the risk-behavior group was 6,700 copies/mL, compared with 400 copies/mL in the vertical-transmission group.

Despite this worse immune suppression and higher levels of viremia in the risk-behavior patients, they were less likely to be on highly active antiretroviral therapy (HAART) (43% vs. 88%). Those infected through risk behaviors also had significantly fewer outpatient visits, averaging five visits a year, whereas vertical-transmission patients averaged seven visits.

Rates of hospitalization did not differ, at 19/100 patient-years in the risk-behavior group and 17/100 patient-years in the vertical-transmission group, Dr. Agwu reported at the meeting, sponsored by the Foundation for Retrovirology and Human Health and the Centers for Disease Control and Prevention. Other aspects of treatment also did not differ significantly between the two groups. For example, 89% of those meeting the criteria for prophylaxis against *Pneumocystis carinii* pneumonia in the risk-behavior group received prophylaxis, as did 80% of vertical-transmission patients.

Differences in psychosocial risk factors between the two groups might account for the varying rates of HAART use, Dr. Agwu said in an interview. "[We'll] focus on deciphering patient and provider barriers to HAART initiation in the risk-behavior group to institute appropriate interventions." She added that the number of risk behavior patients in need of treatment is likely to grow as the Centers for Disease Control and Prevention's recommendation of universal opt-out testing is implemented. ■