Pediatric Inflammatory Adenopathy

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KEYWORDS

- Pediatric lymphadenopathy • Cervical lymphadenopathy
- Chronic granulomatous disease • Chédiak-Higashi syndrome • Cat-scratch disease

KEY POINTS

- The differential diagnosis in pediatric lymphadenopathy includes bacterial, viral, fungal, and idiopathic causes.
- A systematic approach to patient evaluation must be used because the differential diagnosis, presentation, and work up must consider infectious, immunologic, neoplastic, and idiopathic disorders.
- A thorough history and physical are vital to determining the diagnosis and ruling out a malignant process.

INTRODUCTION

Pediatric cervical adenopathy is a frequently encountered clinical concern that often presents to an otolaryngologist. A systematic approach to the evaluation of these patients must be used because the differential diagnosis, presentation, and work up must consider infectious, immunologic, neoplastic, and idiopathic disorders (Fig. 1). The assessment and diagnosis hinge on a thorough physical examination, the decision for laboratory data, and necessary imaging. A complete history, including recent travel, ethnicity, and other social dynamics, may influence exposure to different pathogens. A detailed history, physical examination, laboratory assessment, and appropriate radiologic examinations can often identify the disease process before the need for surgical intervention.

BACTERIAL

Bacterial Cervical Lymphadenitis

Recent reports have identified an increased incidence of pediatric deep neck infections. The increase in methicillin-resistant *Staphylococcus aureus* (MRSA) has played

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Abbreviations	
CGD	Chronic granulomatous disease
CHS	Chédiak-Higashi syndrome
CSD	Cat-scratch disease
CXR	Chest radiograph
EBV	Epstein-Barr virus
FNA	Fine-needle aspiration
HAART	Highly active antiretroviral therapy
IM	Infectious mononucleosis
MRSA	Methicillin-resistant *Staphylococcus aureus*
NTM	Nontuberculous mycobacteria
PCR	Polymerase chain reaction
PPD	Purified protein derivative
US	Ultrasound

a role in the increasing prevalence of this disease. *S aureus* is cultured from pediatric neck abscesses in up to 60% of the cases; 22% to 29% are MRSA.[1–4] Although reactive lymphadenopathy is commonly in response to upper respiratory illnesses, the duration and severity of these infections is usually short lived.

Clinical presentation

Presentation typically involves neck mass, fever, cervical lymphadenopathy, poor oral intake, and neck stiffness.[5] Coticchia and colleagues[5] found that children younger than 4 years with bacterial cervical lymphadenitis had a higher incidence of agitation, cough, drooling, lethargy, palatal or pharyngeal swelling, respiratory distress, retractions, rhinorrhea, and stridor than children older than 4 years.

Diagnosis

Diagnosis can be made clinically, although is usually supported by imaging that includes ultrasound (US) or CT. Imaging modalities may aid in revealing characteristics

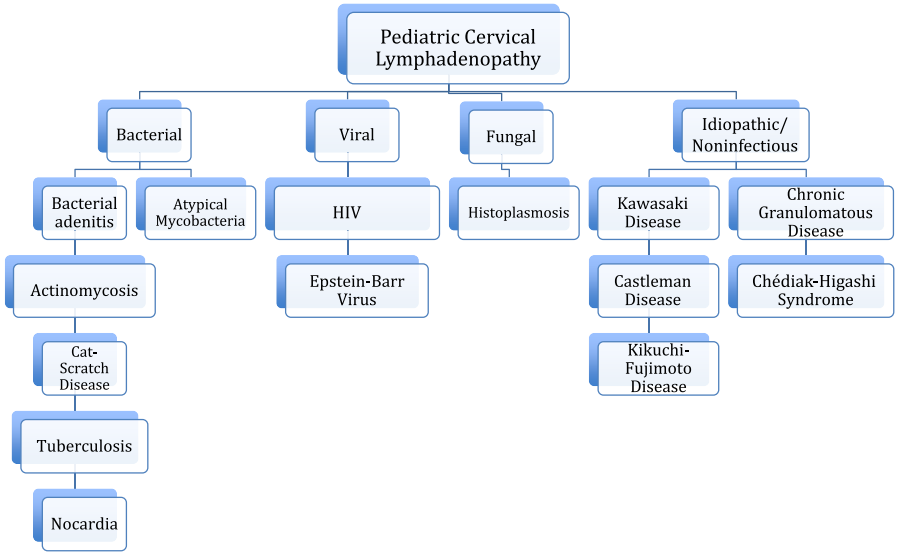

Fig. 1. Pediatric cervical lymphadenopathy.