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Acute Epiglottitis in Immunized Adults

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INTRODUCTION

Acute epiglottitis is an inflammation of epiglottis and adjacent supraglottic structures[1]. The inflammatory edema can be life-threatening and could lead to irrevocable loss of airway. The incidence of epiglottitis in children declined after the introduction of Hib vaccination. Conversely, recent studies have showed an increase in the incidence of adult epiglottitis. Acute epiglottitis in adults is a rare phenomenon with an incident of 0.97 to 3.1 per 100,000, without a predominant causative pathogen[2]. Here we present the clinical and endoscopic findings of this unusual condition in adults.

CASE

A 46-year-old male with a history of gastroesophageal reflux disease, presented to ED with dysphagia and odynophagia for one day. The patient denied sore throat, dysphonia, fever. On examination, he was afebrile without any evidence of respiratory distress. The oropharyngeal examination was significant for hyperemic mucosa with enlarged and tender supraclavicular lymph nodes palpated on the right side. Laboratory values showed Potassium 4.3 mmol/L (3.5-5.1mmol/L), sodium 140mmol/L (135-145mmol/L), Chloride 95mmol/L (98-106mmol/L). Complete blood count showed white count14.2 g/dL, hemoglobin15.4 g/dL and a platelet count 221 10(3)/mcl. Computed tomography of the neck failed to depict foreign body in the retropharyngeal or retrotracheal soft tissues. The patient underwent esophagogastroduodenoscopy which demonstrated markedly enlarged and edematous epiglottis extending to and involving the left arytenoid without any evidence of esophageal obstruction (Figure 1). Following the procedure, the patient was admitted and was treated with antibiotic and intravenous methylprednisolone. Next day, fiberoptic examination showed resolving acute epiglottitis with near resolution of laryngeal edema, and erythema as the patient was discharged home in stable condition with Augmentin and tapering steroids.

DISCUSSION

A noticeable fall in incidence was observed following the introduction of the Hib vaccination program. However, adult acute epiglottitis is a quite distinct form of disease nearly unrelated to Hib. Causative agents can be a result of bacteria, viruses, combined viral-bacterial infections fungi, and even noninfectious causes[3]. Patients most commonly present with sore throat, dysphagia, odynophagia, fever, muffled voice, drooling, stridor or respiratory compromise. Non-surgical treatment includes the empirical administration of intravenous antibiotics as soon as bacterial blood cultures have been obtained. Corticosteroid therapy is also an acceptable treatment in patients with impending airway obstruction or very swollen supraglottis, but it is important to take note the lack of benefit of corticosteroids[4]. Further management can range from aggressive intervention with invasive airway management to more conservative approach such as respiratory monitoring. Acute epiglottitis is a serious condition as urgent intervention is a necessity to avoid fatal complication.

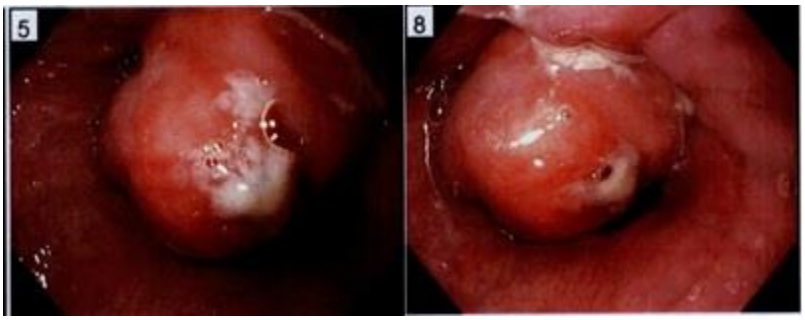

Figure 1: Esophagogastroduodenoscopy: Markedly enlarged and edematous epiglottis extending to and involving the left arytenoid with evidence of ulcer but no esophageal obstruction

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