

# Adult Acute Epiglottitis

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## Summary

Acute epiglottitis is a disease of rapid onset and progression of symptoms and has been well described in children. The importance of being aware of this diagnosis is to prevent an acute upper airway obstruction that can be potentially fatal. Here we describe two cases of adult acute epiglottitis where the patients had severe symptoms of sorethroat but a normal looking oropharynx.

**Key Words:** Adult epiglottitis, Rapid onset, Clinical diagnosis

## Introduction

This article highlights the occurrence of acute epiglottitis in the adult population with increasing incidence<sup>1,2</sup> and the need for awareness of this condition due to the rapid onset and progression of symptoms, especially odynophagia to upper airway obstruction. Between January 1998 and July 2001 there have been 5 cases of adult epiglottitis admitted to the ENT ward of UMMC, all of which presented with odynophagia as the initial symptom.

## Case 1

A 70 year old Chinese male was admitted to casualty with a one day history of sore throat with odynophagia and subsequent noisy breathing which was progressive. On examination he was febrile at 37.5° C and tachypnoeic with expiratory stridor. Examination of the oral cavity and

oropharynx was normal but a fibreoptic laryngoscopy performed revealed an oedematous epiglottis and arytenoids with a narrow laryngeal inlet. Plain lateral radiograph of the neck revealed a swollen epiglottis or "thumb sign" (Figure 1). The patient was given a dose of intravenous steroids, taken to operating theatre and successfully intubated with provisions for an emergency tracheostomy available. He was started on intravenous antibiotics and ventilated.

After 48 hours he underwent a direct laryngoscopy in which the findings revealed a normal looking epiglottitis and the patient was extubated uneventfully. Blood count analysis revealed leucocytosis. However, blood culture was negative and throat culture was reported as normal respiratory flora.

## Case 2

A 41 year old male presented to the clinic with

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**Fig 1. Plain lateral neck radiograph of Case 1 demonstrating "thumb sign"**

two days history of sore throat, fever and dysphagia to solid food. On examination he was febrile at 38° C. Examination of the oral cavity and oropharynx was normal. However, an indirect laryngoscopy revealed an oedematous epiglottis. He was admitted for intravenous antibiotics and improved after 24 hours. Investigations performed showed leucocytosis and the throat culture was negative.

## Discussion

Acute epiglottitis is the acute inflammation of the epiglottis from an infective cause. Infective organisms include *Haemophilus influenzae* most commonly, followed by *Streptococcus pneumoniae*, *Staphylococcus Aureus* and *Klebsiella*<sup>2</sup>. Other infective organisms include *Candida*, Human immunodeficiency virus and *Mycoplasma*<sup>2</sup>. Physical injury such as caustic burns and thermal injuries, which include hot liquids and crack cocaine can also cause acute epiglottitis<sup>3</sup>. Differential diagnosis includes angioneurotic oedema and retropharyngeal abscess. The diagnosis of acute epiglottitis is a clinical one based on laryngoscopic findings and sometimes plain lateral radiographs of the neck in the absence of an upper airway obstruction. Treatment is empirical intravenous antibiotic therapy, usually cefuroxime or ampicillin sulbactam with steroids in those with upper airway compromise. Throat swabs and blood cultures have a poor yield and in the five cases that were admitted to our ward none of them had a positive culture. This condition responds well to antibiotic therapy and the hospital stay is around 48 hours. In view of the rapid onset and progression of this condition and the potential of a fatal airway obstruction, it is important for this condition to be recognized early. Patients with severe symptoms of sorethroat with minimal findings in the oropharynx should not be sent home without having their larynx examined either by indirect laryngoscopy or flexible nasopharyngoscopy.

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