

CASE REPORT

Changing trend of Epiglottitis: A Disease of adults

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ABSTRACT

Background

Current epidemiological data indicate that the incidence of diseases caused by H.influenzae type b (Hib), including epiglottitis and meningitis, has been declined. The current ratio of adult to children for epiglottitis is 1:0.4; once making this a disease of adults. The epidemiology, microbial organisms and natural history of epiglottitis have changed in the post- Hib vaccine era. The current change in trend of epiglottitis mandates alert on the part of the general practitioners and emergency physicians.

Case presentation

A case of adult epiglottitis treated in the Emergency Department is presented and discussed. A 53 year-old woman presented with severe sore throat, stridor, drooling and pyrexia. She was sat up, looked unwell and anxious. The SaO₂ (arterial oxygen saturation) value was 94% on 15 litres of oxygen per minute. Adrenaline nebuliser did not make any improvement in her symptoms. With the help of direct laryngoscopy, epiglottitis was clinically diagnosed. Blood cultures failed to reveal any organism. As empirical treatment, cefotaxime and hydrocortisone were administered. The patient recovered without any sequelae.

Discussion

Epiglottitis in adults has different clinical manifestations as compared to children. Stridor, dyspnea and laryngeal symptoms and signs are generally predominant in children, whereas sore throat and odynophagia are the initial symptoms in adults. Airway management of adult epiglottitis remains an era of controversy.

Conclusion

Epiglottitis of adults is a medical emergency that may result in death if not treated quickly. Emergency physicians are prepared to diagnose it only in children due to heterogenous and old fashioned education programs, and due to the variable presentation of epiglottitis in adults. Mortality, morbidity and medical education are strongly related factors in this kind of emergency.

Keywords: Epiglottitis, trends, Haemophilus influenzae type b, adult

INTRODUCTION

Although recent epidemiology suggests that epiglottitis is mostly a disease that occurs in adults, the Emergency societies, resuscitation courses, and relevant textbooks, almost ignore it. In general practice of Emergency Departments, physicians (who are a heterogeneous group consisting of internists, surgeons, pediatricists, general doctors, with great distance in their education programs) have not been prepared to see epiglottitis in adults. This may cause a delay in diagnosis, a delay in clinical decision and start of therapeutic interventions.

Though epiglottitis has historically been a pediatric disease, and a typical threat for children of 2-7 years old, the ratio of incidence in adults to children has reversed from 1:2.6 in 1980 to 0.4:1 after the Hib vaccination era.¹ Males are more commonly affected than females (1.8:1).² The mortality rate for adults ranges from 1.2% to 7.1%, while less than 1% is the reported mortality in children.³ The average age for epiglottitis occurrence among adult population is 45-55 years.^{1,3} Several countries have reported 2 to 5 fold rise in incidence in the adult population since the introduction of Haemophilus influenzae vaccine in 1985.^{4,7} Epiglottitis is not a reportable disease; however there is abundance of data from developed countries of North America and Europe but data from Asia and Africa remain scarce.

Epiglottitis, was first described as "angina epiglottidea" by Theisen in 1900.⁸ George Washington died from acute epiglottitis during an epidemic of influenza in the winter of 1799.⁸ Epiglottitis is an acute inflammation of the epiglottis and the structures surrounding it including the aryepiglottic folds and the arytenoid soft tissue (Figure 1).

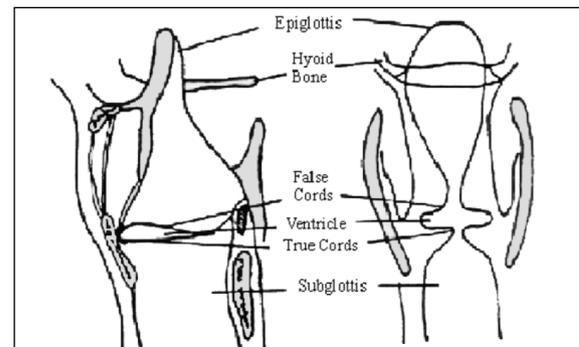


Figure 1: Anatomy of larynx showing epiglottis

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