



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH

International Journal of Current Research  
Vol. 10, Issue, 12, pp.76904-76905, December, 2018

## ACUTE EPIGLOTTITIS IN ADULTS: OUR EXPERIENCE IN A TERTIARY CARE HOSPITAL

Dr. Shakil Ahmed<sup>1</sup>, Dr. Zahida Choudhary<sup>2,\*</sup>, Dr. Shokia Jehav Ul Nesa<sup>3</sup> and Dr. Rahil Muzaffer<sup>1</sup>

<sup>1</sup>Senior Resident, Department of ENT, SHKM GMC NUH, Haryana

<sup>2</sup>MBBS, GMC Jammu, J&K

<sup>3</sup>Medical Officer, Health Department, J&K

### ARTICLE INFO

#### Article History:

Received 15<sup>th</sup> September, 2018  
Received in revised form  
14<sup>th</sup> October, 2018  
Accepted 19<sup>th</sup> November, 2018  
Published online 31<sup>st</sup> December, 2018

#### Key Words:

Road traffic Accidents,  
Pattern of Cases, Health System.

### ABSTRACT

Acute epiglottitis is a life threatening disorder. There is inflammatory edema of the arytenoids, aryepiglottic folds and the epiglottis. Acute epiglottitis can occur at any age. The responsible organism used to be Hemophilus influenza type B, but infection with group A b-hemolytic streptococci has become more frequent after the widespread use of Hemophilus influenza vaccination. There were 20 patients, 12 males and 8 females. The main presenting symptoms were sore throat, odynophagia, muffled voice and fever. In the majority of cases, examination of the larynx showed an edematous, erythematous epiglottis and edematous aryepiglottic folds and false cords. Two patients required intubation and admission to the intensive care unit. Both patients were extubated successfully after 72 hours. The antibiotic regimen used in our series was intravenous cefotaxime and metronidazole.

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Citation: Dr. Shakil Ahmed, Dr. Zahida Choudhary, Dr. Shokia Jehav Ul Nesa and Dr. Rahil Muzaffer. "Acute epiglottitis in adults: our experience in a tertiary care hospital", 2018. International Journal of Current Research, 10, (12), 76904-76905.

## INTRODUCTION

Acute epiglottitis is a life threatening disorder. There is inflammatory edema of the arytenoids, aryepiglottic folds and the epiglottis, therefore, supraglottitis may be used instead or preferred to the term acute epiglottitis. Acute epiglottitis can occur at any age. The responsible organism used to be Hemophilus influenza type B, but infection with group A b-hemolytic streptococci has become more frequent after the widespread use of Hemophilus influenza vaccination. There are differences in trends, occurrences and management of acute epiglottitis between children and adults. There is also more diversity in the cause of epiglottitis in adults (Mathoera, 2008). Acute epiglottitis in adults has been reported to have a more indolent natural history than in children, with a reduced probability of serious airway compromise and need for airway intervention (Mayo-Smith, 1995).

**AIMS AND OBJECTIVES:** To study the presentation and management of acute epiglottitis in a recent series of adult patients.

## MATERIAL AND METHODS

The present study of 20 patients was conducted in SHKM GMC Nuh, Haryana, India (a tertiary care hospital) over a period of one year between Sep 2017 and Aug 2018. The diagnosis of acute epiglottitis was established in all cases by flexible fibre optic nasolaryngoscopy, which showed edema and erythema of the epiglottis or supraglottis.

## OBSERVATIONS AND RESULTS

There were 20 patients, 12 males and 8 females. The mean age was 46.6 years. (range 22-72 years). The main presenting symptoms were sore throat, odynophagia, muffled voice and fever. (Table 1) In the majority of cases, examination of the larynx showed a swollen, erythematous epiglottis and swollen, aryepiglottic folds and false cords. (Table 2) Leucocytosis was

\*Corresponding author: Dr. Zahida Choudhary, MBBS, GMC Jammu, J&K.

present in 17 of the 20 patients. Two patients required intubation and admission to the intensive care unit. Both patients were extubated successfully after 72 hours. The antibiotic regimen used in our series was intravenous cefotaxime and metronidazole. Intravenous steroids were used in all patients. There were no casualties seen in our study.

**Table 1. Main Presentations**

| Presentation  | Patients No.(%) |
|---------------|-----------------|
| Sore throat   | 18 (90%)        |
| Odynophagia   | 18 (90%)        |
| Muffled voice | 16 (80%)        |
| Fever         | 14 (70%)        |

**Table 2. Main Findings On Throat Examination**

| Findings                         | Patients No.(%) |
|----------------------------------|-----------------|
| Swollen, Erythematous Epiglottis | 18 (90%)        |
| Swollen AE folds and false cords | 18 (90%)        |
| Erythematous vocal cords         | 4 (20%)         |

## DISCUSSION

Historically, acute epiglottitis has been a disease of childhood.<sup>3</sup> However, while the incidence of childhood epiglottitis declined after the introduction of the HiB vaccine in 1985, the incidence of reported cases of acute epiglottitis in adults has shown a steady rise (Frantz, 1993). The current study also showed a relatively high number of cases in a short period of time. The reasons for the apparent rise in adult acute epiglottitis are unclear. Most adults are not vaccinated against Hemophilus influenzae type B, as was the case in all of our patients. In adults, other bacteria besides H. influenzae type B may cause epiglottitis, including streptococcus pneumoniae, streptococcus pyogenes, staphylococcus aureus. Mayo-Smith et al. (1998) hypothesized that these other pathogens can cause a type of acute epiglottitis, more common in adults, which is characterized by a slower onset, the absence of bacteraemia and negative blood cultures. Two patients in this study required airway intervention. Our management of these cases was consistent with current practice in most other otolaryngology centres. There is a general agreement in the literature that patients with signs of severe airway obstruction require immediate establishment of the airway either by intubation or tracheostomy (Hebert, 1998).

Patients with milder symptoms require admission to an otolaryngology ward for close airway monitoring and commencement of intravenous antibiotics and steroids. In adults, it is possible that acute epiglottitis is caused by other micro organisms besides H. influenzae. Thus, broad spectrum antibiotics are widely used, alone or in combination with metronidazole. We used combination of cefotaxime and metronidazole in all our patients, and the therapeutic efficacy of this combination has been very satisfactory. Corticosteroids are widely used in an effort to reduce epiglottic swelling. We used intravenous dexamethasone in all our patients, consistent with the rate of usage in other studies (Frantz, 1994).

## REFERENCES

- Frantz TD, Rasgon BM, Quesenberry CP Jr. 1994. Acute epiglottitis in adults. Analysis of 129 cases. *JAMA.*, 272:1358–60
- Frantz TD, Rasgon BM. 1993. Acute epiglottitis: changing epidemiologic patterns. *Otolaryngol Head Neck Surg.*, 109:457–60
- Hebert PC, Ducic Y, Boisvert D, Lamothe A. 1998. Adult epiglottitis in a Canadian setting. *Laryngoscope.*, 108: 64–9
- Keyser JS, Derkay CS. 1994. Haemophilus influenzae type B epiglottitis after immunization with HbOC conjugate vaccine. *Am J Otolaryngol.*, 15:436–43
- Mathoera RB, Wever PC, van Dorsten FR, Balter SG, de Jager CP. 2008. Epiglottitis in the adult patient. *Neth J Med.*, 66:373-7.
- Mayo-Smith MF, Spinale JW, Donskey CJ, Yukawa M, Li RH, Schiffman FJ. 1995. Acute epiglottitis. An 18-year experience in Rhode Island. *Chest.*, 108:1640–7
- McCaig LF, Hughes JM. 1995. Trends in antimicrobial drug prescribing among office-based physicians in the United States. *JAMA.*, 273:214–19
- Murrage KJ, Janzen VD, Ruby RR. 1988. Epiglottitis: adult and pediatric comparisons. *J Otolaryngol.*, 17:194–8
- Shah RK, Roberson DW, Jones DT. 2004. Epiglottitis in the Hemophilus influenzae type B vaccine era: changing trends. *Laryngoscope.*, 114:557–60
- Wurtele P. 1990. Acute epiglottitis in children and adults: a large-scale incidence study. *Otolaryngol Head Neck Surg.*, 103:902–8

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