Acute Epiglottitis in Adults: A Case Report

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Abstract

For a long period of time, acute epiglottitis has remained a specific pathology in little children. The introduction and globalization of the Haemophilus influenzae type B vaccine has seen a drastic diminishing of its pediatric forms. Its occurrence in adults. On the other hand, its occurrence in adult is increasing with a clinical form and evolution which is noticeably different from child epiglottitis. It is a mainly male pathology which occurs most of the time between 40 to 50 years old. Its symptomatology is less typical and less noisy than that in children, which makes the evolution of the diagnosis, sometimes, difficult. The latter may be confirmed with nasofibroscopy by checking the epiglottis and the adjacent supraglottic structures. A non-invasive treatment is most of the time possible, with a close monitoring in intensive care. In its severe cases, the therapeutic challenge is to keep upper airways free, if needed, after an intubation or tracheotomy. Morality is not much taken into account though a fatal evolution may occur through unpredictable hypoxic cardiac arrest, in case of upper airways' obstruction.

Keywords: Adult epiglottitis; Upper airways; Laryngeal dyspnea

Introduction

Acute epiglottitis is an inflammation of the epiglottis which occurs suddenly. It is a rare urgent respiratory infection which can challenge the vital prognosis with the obstruction of the upper airways. Its occurrence in adults is extremely rare.

We are reporting here the case of a severe acute epiglottitis in adults, a patient who has been being treated at the ENT Department of St. Louis Regional Hospital.

Case Presentation

The patient is 49 years old, a driver living in the suburb of St-Louis, a non-insulin-dependent diabetic. He had been referred to us by a colleague from the reception and emergency department for a laryngeal dyspnea treatment associated with 4 days evolving dysphonia, odynophagia, and fever.

The admission test concretely showed a laryngeal dyspnea with supra sternal and intercostal indrawing without stridor, a room air desaturation, SRIS, stinky secretions and an epiglottis lump filling the supra-glottic area when taking nasofibroscopy (Figure 1). The rest of the clinical tests showed no particular sign.

The biological test showed a non-specific biological inflammatory syndrome with a hyperleukocytosis and a neutrophils predominance. The check-up of the area allowed establishing diabetes. The cervicothoracic CT showed a calm epiglottis almost filling the total supra-glottis, the glottis and the sub-glottis were free (Figure 2).

The patient had initially been treated in an adapted condition, firstly, at the emergency department then at the hospitalization department. The medication had showed a favorable evolution (Figure 3).

Discussion

The most classical and probably the most known description of an infectious acute epiglottitis is the one which killed the first president of the United States of America in 1799, namely:
The epidemiology of acute epiglottitis has varied over time. It has firstly been described essentially in children. In the 13th century [2], George Washington, "On a 14th December 1799 morning, George Washington woke up with a great pain at the pharynx. It quickly showed a fast-evolving stridor associated with a dysphonia. Being unable to lie down, he was treated standing though, in those days, the treatment consisted of a bleeding of more than 2 liters, on the night of that day, he died at 11:30 p.m." [1]. However, the first descriptions of acute epiglottitis in adult seem older. Roland de Palma might have classified at stage II in that classification.

The clinical signs in adults are evoking enough but less brutal in children; associating a choked-up voice, an increasing swallowing difficulty with heavy drooling, all evolving in an infectious context (fever and hyperleukocytosis).

The clinical signs in adults on the other hand, by a severe general pharyngeal pain which is a common sign. The other symptoms vary from one patient to another. Frequently noted symptoms are the following: Odynophagia with sometimes a reflexive otalgia, fever, an inconstant dyspnea more or less severe which disappears more often during the admission of the patient, an anterior cervical pain, a dysphonia with covered voice, a difficulty to swallow saliva with salivary stasis. Sometimes, the patient suffers from respiratory distress

The cervical CT scan can only be taken in stable patients, for whom the sitting position doesn’t present any risk of obstructing upper airways. It allows to confirm the diagnosis and check for complications [13-15]. The cervicothoracic CT showed an epiglottic appeasement filling almost all the supra-glottis. The use of an intravenous systemic corticosteroid therapy is largely described in the literature [10,16]. The retrospective data are conflicting, but many authors find no significant difference as to the duration of hospitalization or invasive ventilation between patients who received or not a corticosteroid therapy [10,17].

The treatment, of the patient under study, was on an associated systemic antibiotic therapy, a corticosteroid therapy and a close monitoring of the respiration. Our therapeutic protocol was an antibiotic therapy, a corticosteroid therapy and a close monitoring of the respiration. The check-up after two month was normal (image). The use of an intravenous systemic corticosteroid therapy is largely described in the literature [10,16]. The retrospective data are conflicting, but many authors find no significant difference as to the duration of hospitalization or invasive ventilation between patients who received or not a corticosteroid therapy [10,17].

**Conclusion**

Considered, for a long time, as a pathology occurring in children, acute epiglottitis is a severe ENT pathology, which rarely adults suffer from. A diagnosis and an early treatment come to a total remission of the sickness.
References