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Infectious Acute Epiglotite: About 1 case in the Emergency Vital Service CHU- MOHAMED VI Marrakech

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Abstract **Case Report**

Acute infectious epiglottitis in adults is a rare but serious condition. For a long time, this condition was considered an illness of children between 2 and 6 years old. It can be seen in adults but remains misdiagnosed to this day, due to its misleading and polymorphic symptomatology in adults [1]. Inspiratory dyspnea associated with stridor is key signs to guide the diagnosis. Laryngoscopy and nasofibroscopy allow us to confirm the diagnosis [10]. Acute epiglottitis is an infectious and respiratory emergency that can be life-threatening due to obstruction of the upper airways [1]. It requires rapid treatment, which may even involve a tracheal approach. Naso or oro tracheal intubation and/or tracheotomy are emergency means used in severe acute epiglotitis. Antibiotic therapy also remains a therapeutic emergency and must be started early. We will report the observation of 1 case of a 46-year-old patient, admitted for acute inspiratory dyspnea of rapidly progressive onset, admitted to the Emergency vital Service of Chu Mohamed VI Marrakech.

Keywords: Epiglottitis, Inspiratory dyspnea.

INTRODUCTION

The interest of this clinical case was to elucidate the treatment and technique in the management of the respiratory tract in the face of acute infectious obstructive epiglottitis.

OBSERVATION AND PATIENT

This was a 46-year-old male patient with a history of unreweaned smoking at 40 AP, no known allergy.

Admitted to the Emergency Service-Deportment Ar Razi for acute inspiratory dyspnea all evolving for about 10 hours before admission. Clinical picture preceded 3 days before by dysphagia associated with fever all in a context of preservation of the general state. There is no notion of drug intake, nor trauma.

On Examination: there is a speech dysphonia, Stridor strongly audible, hypersialhorée. Very anxious patient, GS=15, symmetrical and reactive pupils, Dextro=1.10. ENT: no cervical facial emphysema, hypersialhored, poor oral hygiene. Tongue lowering examination notes erythematous throat with bilateral amygdala hypertrophy, 2 bilateral infra centimetric cervical ADP. Hemodynamics: tachycardia at 140/mn TA=140/70mmhg, No signs of hypo perfusion (mottling, coldness..), febrile at 38.5. Polypnea has 22 cpm with signs of struggle (thoracoabdominal swing) + pull sus sternal, Saturation 80 a AA, 98 under 10 liters of o2, Auscultation difficult (whezzing++). Flexible abdomen, breathes well, no palpable mass, no defense or contracture. BDC well perceived, regular, no bsa nor breath, no signs of IC. Benefited from realization of a Naso fibroscopy in emergency: inflamed larynx, swollen epiglottis ++, appearance some micro abscesses. Management consisted of general resuscitation rules (airway release, oxygen therapy, ECG scope and monitoring + conditioning). Corticosteroids 120 mg of methyl prednisolone iv + Aerosol nebulization with adrenaline + Put on Tri ATB: C3G + aminoglycoside + Flagyl.

After 40 minutes of adrenaline nebulization (3 nebulizations in total) + CTC: Not favorable evolution: Worsening of dyspnea and sign of struggle + neurological distress (GS past 14). Gasometry performed: ph=7.24 pco2=63.8 pa02=90 sao2=92 hco3=27.7 (hyper capnic acidosis + hypoxia). Before the

clinical non improvement + Gazométrie testifying to a beginning of respiratory exhaustion of the patient, We decided of an orotracheal intubation in emergency, in alternative Emergency tracheotomy if failure of intubation. Initial biological assessment notes a frank infectious syndrome with GB=39.58 has predominance PNN=92.6 hb=14 ht=43.3 Pla=260 lymphocytes=1200, CRP=393 pro calcitonin=10.01. Hemoculture+: Streptococcus beta hemolytic (sensitive to C3G, hence discontinuation of gentalline and flagyl at J2). Urea=0.4 creat= 10 Na= 137 k= 3.8 ca= 87 Asat=15 Alat=20 GGT= LDH= Bilirubin = TP=98; Serologies (hepatitis, CMV, EBV, HIV, Syphilis) normal.

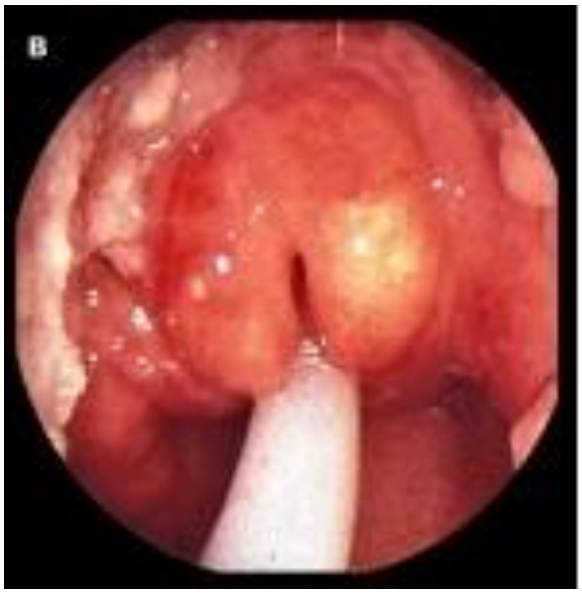

Figure 1: Image showing acute epiglottitis with significant supraglottic edema + micro abscess (hard intubation)

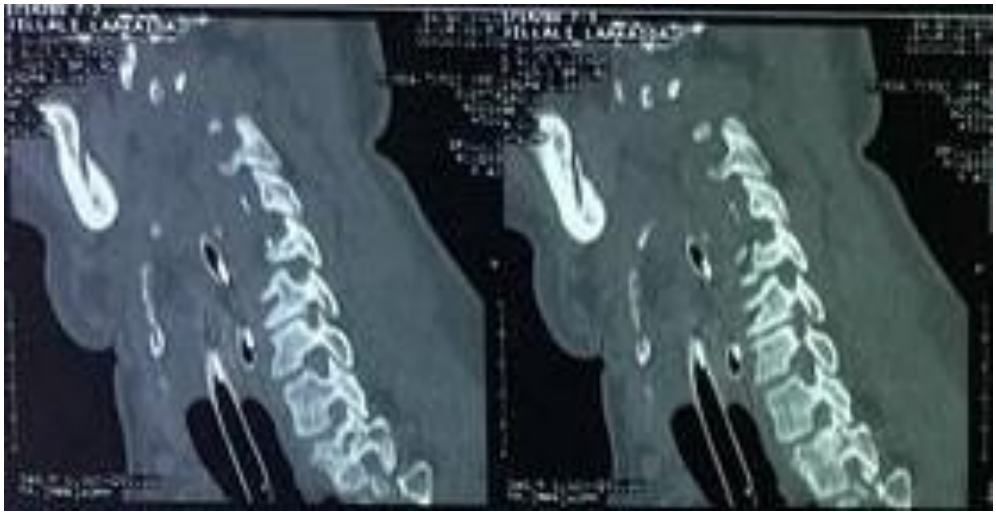

Figure 2 Cervical CT: In favor of infectious pharyngitis laryngo of infectious origin

Chest x-ray: No focus.

Clinical Evolution:

D3: Apyrexia since 48h Biology: regression of the biological infectious syndrome Pro calcitonin =1.7 crp=125 GB=11000/mm3. Naso fibroscopy control: Slight regression of glottite and laryngeal edema. Hence a withdrawal tracheotomy was performed.

J5 of hospi and j5 C3G, j2 post tracheotomy: clear consciousness, no more dyspnea, stable respiratory and hemodynamic, not fever. Nasofibroscopy: normal; Biology: pro calcitonin=0.4. Hence discharge of the patient with oral antibiotic relay.

DISCUSSION

Acute epiglottitis is a serious infection that can be life-threatening by obstruction of the upper airways. His clinical picture in adults is sometimes misleading [1]. Therefore, a rapid knowledge of the symptomatology is required to ensure adequate management of the patient.

The installation of clinical signs is often slow in adults, about 5-7 days [2,3]. Warning signs are: acute

inspiratory dyspnea associated with a stridor + hypersialhorea. While in children the evolution is faster, about 3-5 days. The mean age of onset in adults between 45-50 years of age is described, no gender predominance [3]. The bacterial form dominates the picture, but one can also find viral forms (especially herpes) and fungal forms although rare.

The bacterial agent most implicated in adults is streptococcus (50%), compared to the child where hemophilus influenzae is found in 80% cases [4,5]. Other germs are also mentioned: Staphylococcus, pneumococcal, klebsiella, acinetobacter, and anaerobic germs... The course under antibiotic is generally favorable but there is a Co morbidity correlated with associated defects (diabetes, hypertension, alcoholism, cancer…) [6].

In severe forms, invasive treatment is warranted to secure the upper airway in an emergency [7]. Emergency invasive treatment is based on the realization of a tracheal approach: nasal intubation or oro tracheal/ emergency tracheotomy. The literature does not report any method of preference between the two approaches [6,7].

Protected C3G or Amoxicillin is the antibiotic of choice [8]. Corticosteroids are often combined with antibiotics to reduce edema. Generally favorable evolution after 5 to 7 days after well-conducted antibiotic therapy.

The reported complications are epiglottic abscesses in 5 to 25% and pneumonia in 40% (9). The flattening of abscesses has not been reported in any literature [9].

Nasofibroscopy remains and remains the diagnostic examination ++: highlighting erythematous throat, glottic and supra glottic edema, sometimes abscessed [10].

The cervical scanner has a great interest in the assessment of extension and search for complications [9,10].

CONCLUSION

Epiglottitis is a rare but serious infectious cellulitis, involving the vital prognosis by obstruction of the upper airways. In severe forms, invasive treatment is justified in order to secure the upper airways. Hence the management must be done in a resuscitation environment.

Streptococci dominate the table of bacterial infectious epiglottites in 50% of cases. Early diagnosis and initiation of appropriate antibiotic therapy improves prognosis and ensures patient survival. The evolution is generally favorable if early diagnosis and adequate management. Nasofibroscopy or laryngoscopy remains and remains the diagnostic asset.

Declaration of Interest: Authors have no conflict of interest to disclose.

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