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Médecine et maladies infectieuses 42 (2012) 460–487

Recommendations

SYSTEMIC ANTIBIOTHERAPY IN ROUTINE PRACTICE FOR UPPER RESPIRATORY TRACT INFECTIONS IN ADULTS AND CHILDREN

This antibiotic stewardship is a stringent synthesis of the state of the art and scientific data at a given time. It should not prevent the healthcare professional from using his common sense and experience to manage the patient in what he believes is the most appropriate manner, according to his own observations.

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0399-077X/$ – see front matter
doi: 10.1016/j.medmal.2012.02.004

1. English version

Summary

The SPILF recommends the use of antibiotherapy for upper respiratory tract infections as follows.
Antibiotics MUST NOT BE PRESCRIBED (because of their individual and collective impact) in the following cases:

- **Rhinopharyngitis,** even in case of nasal purulent or mucopurulent discharge
- **Pharyngitis with negative RDT** or if RDT was not used
- **Congestive otitis in children**
- **Seromucosal otitis in children**

Cases in which **IT IS RECOMMENDED** to prescribe an antibiotic:

- **Acute purulent otitis media:**
  - **in children under 2 years of age,**
  - **in children 2 years of age or more**: after re-evaluation at 48-72 hours if initial symptoms were mild, or initial antibiotic therapy in case of pyrexia, intense otalgia, or difficulty to understand tasks,
  - **in adults**

- **Acute adult sinusitis,** in the following cases:
  - frontal, ethmoid, or sphenoid sinusitis
  - acute maxillary sinusitis, or failure of initial symptomatic treatment , or complications
  - unilateral maxillary sinusitis associated to superior homolateral dental infection

- **Acute sinusitis in children**, presenting as:
  - severe acute maxillary or frontal sinusitis
  - symptoms of rhinopharyngitis present for more than 10 days without any sign of improvement, or worsening secondarily

- **Group A streptococcal pharyngitis**: with a positive RDT in children 3 years of age or more.

Amoxicillin is recommended as first line antibiotic for upper respiratory tract infections
The benefit/risk of other antibiotics is less favorable. They may be prescribed in specific cases.

Keywords: upper respiratory tract infections, Rhinopharyngitis, Pharyngitis, otitis, sinusitis

2. INTRODUCTION

The evolution of bacterial resistance and a better understanding of ENT infections have led the Afssaps to update its recommendations published in 2004.

Antibiotics should be prescribed only when their effectiveness has been demonstrated so as to limit the occurrence of adverse effects as well as the emergence and the spreading of new bacterial resistance. Antibiotic treatment should not be initiated according to symptoms, but only when justified by an accurate diagnosis (group A streptococcal pharyngitis, purulent acute otitis media, acute sinusitis).

The evolution of bacterial resistance to antibiotics remains variable. The resistance has significantly decreased for some pathogens (pneumococci resistant to betalactams, betalactamase producing *Haemophilus influenzae*, Group A streptococci resistant to macrolides), but for others there is serious concern, especially for the emergence and spreading of extended spectrum betalactamases (ESBL) *Escherichia coli.*

E. coli is not implicated in ENT infections; nevertheless the evolution of its resistance is commonly attributed to over-consumption of antibiotics prescribed for upper and lower respiratory tract infections, especially cephalosporins. Indeed, the prescription of cephalosporins is a well-documented factor promoting the emergence of ESBL producing enterobacteria. **Sparing these agents is crucial** because of their impact on the ecosystem. Cephalosporins must from now on be used only when they are truly absolutely necessary. Furthermore, given the decrease of beta-lactamase producing *H. influenzae* strains, and the increase of pneumococci strains with intermediate susceptibility to penicillin, using cephalosporins may be discussed. Indeed, amoxicillin remains very active for pneumococci strains with intermediate susceptibility to penicillin, and that is not the case for oral cephalosporins, including cefpodoxime and cefuroxime.