We reviewed the differences and similarities between acute otitis media (AOM) diagnosis and treatment guidelines from different developed and developing countries, in regards to diagnostic criteria and methods, treatment options, recommended 1st-, 2nd- and 3rd-line antibiotics, non-antibiotic treatment options and preventive means and measures.

- There are more unifying than diverging aspects in the approaches to AOM in developed countries.
- Lack of protocols in developing countries has already resulted in unjustified use of antibiotics for AOM and evolvement of resistant bacteria.

Introduction

In order to reduce acute otitis media (AOM) burden and limit antibiotic prescriptions, various guidelines or consensus statements have been designed and published by different medical associations, in order to assist physicians to accurately diagnose AOM and offer treatment options, reduce risk factors and encourage vaccinations.

Study Aims

Due to the increasing number of AOM guidelines in developed and developing countries, we explored the unifying and diverging points of selected guidelines from developing and developed countries, in order to locate the common elements as well as the differences.

Methods


We compared 5 guidelines from developed countries and 7 from developing countries. For these guidelines, we compared their characteristics, diagnostic criteria for AOM diagnosis, management and treatment options, and recommended preventive measures, if any. We believe that selected guidelines represent not only the geographical region in terms of demographics and access to healthcare facilities, but also regarding AOM epidemiology and disease burden.

Results

- Pediatric societies publish AOM guidelines in most developed countries; in developing countries, the Ministry of Health initiates guidelines formulation.
- Most guidelines require the same diagnostic criteria, and offer watchful waiting in mild-moderate scenarios.
- Amoxicillin is the first-line antibiotic therapy in many countries, whereas options for second- and third-line therapies vary. Duration of therapies also varies, and is usually age-dependent: 5-7 days for children <2 yrs, and 10 days for children >2 yrs in developed countries, while in developing countries durations and groups vary.
- Reduction of AOM risk factors is encouraged in developed countries, but only seldom in developing countries.

Conclusion

Guidelines from developing and developed countries are similar in many aspects, with diversities in specific recommendations, which rely on local epidemiology and healthcare accessibility.

Formulation of regional guidelines may help reducing AOM burden.

The adaptation of global agreements in the approach to pediatric AOM cases could lead to a decrease of morbidity and related mortality of this frequent disease.