Brief Report

Choosing Wisely: The Top-5 Recommendations from the Italian Panel of the National Guidelines for the Management of Acute Pharyngitis in Children

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ABSTRACT

Purpose: With the aim to reduce waste in the health care system and avoid risks associated with unnecessary treatment, the Italian Panel of the National Guidelines for the Management of Acute Pharyngitis in Children joined the Choosing Wisely initiative.

Methods: An ad hoc Choosing Wisely task force was selected to develop a candidate list of items for the top-5 list on pharyngitis medicine. Through a process of literature review and consensus, the final list of 5 items was chosen. Drafted recommendations were formulated and then reviewed by the task force members until a final consensus was reached.

Findings: The 5 recommendations approved are: blood exams should not be performed; antibiotics should not be administrated unless microbiologic confirmation of streptococcal infection has been carried out; if a throat culture is performed, susceptibility tests on isolates should not be executed; antibiotic course should not be shortened; because penicillin V is not available in Italy, amoxicillin (50 mg/kg/d in 2–3 doses orally) for 10 days is the first choice treatment; and steroids should not be administered for the risk of masking possible underlying severe condition.

Implications: This top-5 list can be a novel tool to spread the key messages of guidelines and to avoid unnecessary diagnostic procedures, and to promote a rational use of antibiotics in children. (*Clin Ther.* 2017;39:646–649)

Key words: antibiotics, children, choosing wisely, pharyngitis, streptococcal infections.

INTRODUCTION

Some estimates suggest that as much as 30% of health care spending is wasted because of physician decisions driven by not-up-to-date medical knowledge or by an inclination to satisfy patient requests.[1] Choosing Wisely is a project originally developed in Canada during 2012 that aims to reduce prescription of unnecessary tests and treatments that not only waste health care resources, but also place patients at risk of harm.[2] Subsequently, several Choosing Wisely campaigns have been conducted by different medical

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societies or government organizations worldwide, developing numerous top-5 lists of recommendations on various themes. These projects promote conversation between physicians and patients to transmit transparent and credible information to patients, the message that doing more does not always mean doing better, and in some cases unnecessary diagnostic procedures and therapies can be harmful for patients.[2]

During February 2013, the American Academy of Pediatrics issued a top-10 list of recommendations to be adopted in pediatric care.[3] These statements dealt with various pediatric fields such as traumatology and allergology other than infectious diseases. Notably, the first recommendation of the American Academy of Pediatrics discourages the use of antibiotics in cases of apparent viral respiratory infections (ie, most cases of pharyngitis, and almost all cases of bronchitis and bronchiolitis).[3] In a recent review,[4] it was observed that 628 recommendations from 113 medical societies have been published.[4] Fifty-one (8%) of the recommendations deal with infectious diseases. The unnecessary use of antibiotics in upper respiratory tract infections and in asymptomatic bacteriuria was the most frequent recommendation of several societies from different countries.[4] On the other hand, to date no specific Choosing Wisely campaign regarding the management of acute pharyngitis has been issued.

The Italian Panel of the National Guidelines for the Management of Acute Pharyngitis in Children decided to contribute to the Italian Choosing Wisely campaign by developing a top-5 list regarding the management of acute pharyngitis with the aim to spread the recommendation of the previous national guideline issued by the Italian Health Institute.[5,6]

METHODS

The director of the Italian Panel on the Management of Pharyngitis in Children selected an ad hoc task force to identify, through a review of literature and consensus, the 5 items for the list of recommendations. Once consent was obtained on the final list of 5 items, the statements were formulated. Drafted recommendations were formulated and then reviewed and discussed among the task force members until final consensus was reached. Following the American Board of Internal Medicine (ABIM) guideline recommendations, each item is presented as a single, action-oriented sentence no more than 15 words long. Evidentiary statements of fewer than 75 words follow each recommendation to give a brief overview of the evidence behind the recommendation.[1]

RESULTS

The top-5 list is shown in Table I. In particular, attention has been paid to discourage the use of unnecessary diagnostic tests (eg, antistreptolysin O titer, anti-deoxyribonuclease (anti-DNA-se) antibodies, other blood tests, and antibiotic susceptibility tests on isolates from throat cultures).[6] The only necessary diagnostic investigation to carry out in accordance with the guidelines recommendations is a microbiology test (eg, rapid antigen diagnostic test [RADT] or throat culture).[6] This allows for the diagnosis of an eventual streptococcal pharyngitis and the selection of the minority of children who actually need antibiotic treatment. In particular, the Italian guideline suggests the use of RADT rather than throat culture.[6] Indeed, throat culture represents the gold standard for the diagnosis of streptococcal pharyngitis, but has some disadvantages such as high cost, outcome not immediately available, and the need to send the swab to a laboratory. Moreover, the current RADTs have satisfactory sensitivity and specificity. For these reasons, backup culture in children with a negative RADT result is not recommended.[6] It should be remembered that RADT should be performed by trained personnel and the child should present with a history and signs or symptoms suggestive of streptococcal pharyngitis. RADT is not recommended in children with a McIsaac score of 0 or 1 with ≥ 2 signs or symptoms suggestive of viral infection to avoid treatment in healthy carriers. The first-line recommended therapy is amoxicillin (50 mg/kg/d in 2-3 doses orally) for 10 days because penicillin V is not available in Italy.[5,6] According to literature reports, only 10-day therapy is associated with an effective reduction in the risk of rheumatic disease; therefore, it is not prudent to shorten the duration of treatment. Alternatively, only in noncompliant patients, intramuscular benzathine penicillin may be administered (recommended dose: 600,000 IU in children weighing <30 kg or 1,200,000 IU in children weighing ≥ 30 kg). It is important not to administer steroids, which can mask possible underlying severe conditions.[7]

DISCUSSION

Choosing Wisely campaigns have been demonstrated to be an effective method to disseminate key guideline messages in a direct and easily understandable way.[8]