

Is Modified Centor Score Sensitive for Diagnosis of Streptococcal Pharyngitis in Indian Children?

We read with great interest the recent article by Vasudevan, *et al.* [1] published in *Indian Pediatrics*. Some of the aspects of this study require attention as streptococcal pharyngitis is a common condition in routine clinical practice.

The modified Centor score is a validated score for streptococcal pharyngitis from 3 to 76 years of age; children below 3 years of age were neither included in original Centor nor in McIsaac modified Centor score. However, in this study authors had also included children below 3 years of age. Furthermore, in McIsaac modified Centor scoring, the score range from 0 to 3 in ≥ 45 years, 0 to 4 in age 15-44 years and 0 to 5 in children 3-14 years of age [2]. The maximum score one can get is 5; however, in this study, eight children (5 in culture positive and 3 in culture negative group) had score above 5, which need clarification.

The symptom of 'cough' had the highest sensitivity for streptococcal pharyngitis in this study; however, absence of cough is more valid clinical indicator for the diagnosis of streptococcal pharyngitis in children, and even in modified Centor score one point is being attributed to absence of cough [3,4].

Rhinorrhea is an important symptom for viral upper respiratory tract also infection and authors had also mentioned in methodology that children with such symptoms were excluded from the study. However, fifty children (16 in culture positive and 34 in culture negative group) had rhinorrhea as one of the symptom in this study. A child with current viral infection may have false positive throat culture due to chronic streptococcal colonization [4]. These factors might have been responsible for low positive predictive value for modified Centor score for the diagnosis of streptococcal pharyngitis in this study. It would have been interesting if author could have also investigated for viral etiology in this study.

The authors presented antibiotic sensitive pattern to different antimicrobial agents used in streptococcal pharyngitis, which is very helpful information for clinical practice. However, as Penicillin or first generation cephalosporin is the antimicrobial therapy of choice in streptococcal pharyngitis, it would be informative for general practitioner if author had also provided information about resistance to these antibiotics.

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AUTHOR'S REPLY

We thank you for your interest in reading and critically appraising our study [1].

1. Children below the age of 3 years were neither included in original Centor or in McIsaac modified Centor Score because acute rheumatic fever is rare in this age group, the classic presentation of streptococcal pharyngitis is uncommon. Selected children <3 years who have other risk factors such as an older sibling with Group A streptococcal infection, are recommended to be considered for testing [2]. A similar study from Belgium included children between 2-16 years [3].
2. We apologize for the inadvertent error in writing the scores as "4-5" instead of 4, and "< 5", instead of 5.
3. Cough did have a high sensitivity for streptococcal pharyngitis in this study and hence was reported as such, even though in modified Centor score one point is being attributed to absence of cough. Therefore, we questioned the utility of Centor Score as a screening tool.
4. Though we excluded children with rhinorrhoea with obvious viral etiology, we could not exclude all children with rhinorrhea. Logistics prevented us from considering investigations to detect viral etiology.

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