

## INTRODUCTION

Group A beta hemolytic streptococcal (GABHS) tonsillopharyngitis is an inflammation of the mucus membrane and underlying structures of throat, caused by GABHS (*Gerber and Shulman, 2004*).

On clinical grounds, streptococcal pharyngitis is strongly suggested by modified Centor criteria. The modified Centor criteria is a clinical prediction model that directs clinicians to evaluate patients and assign points according to: the patients age, fever, tonsillar swelling or exudates, absence of cough, and presence of swollen tender cervical lymph glands. The cumulative score helps to determine the necessity of laboratory testing and empiric therapeutic management (*McIssac et al., 2004*). However these findings are no specific and diagnosis of streptococcal pharyngitis on clinical findings alone may not be sufficient in some cases (*Bisno et al., 2002 – Choby, 2009*).

The gold standard for diagnosis of acute GABHS tonsillopharyngitis is the microbiological culture of throat swab (*APP, 2006*). When properly performed, the sensitivity of throat culture in detecting GABHS is 90% to 95%, but throat culture requires 24 – 48 hours incubation, in addition to time of interpretation. Also throat culture can not be done if the patient already receives antibiotics (*Gerber, 2005*).

Rapid accurate diagnosis of streptococcal pharyngitis is necessary because prompt antibiotic therapy is associated with faster subsidence of symptoms, prevention of early and late complications, and reduced spread of the organism to others. Also it may be a useful tool to guide decision for antibiotic prescribing (*Maltezou et al., 2008*).

Commercially available rapid antigen detection test (RADT) can detect streptococcus pyogenes in throat swabs within minutes. They have sensitivity of 70% to 85% and a specificity of more than 95% using throat culture as the gold standard method. The sensitivity and specificity of RADT may differ from one community to another (*Gerber and Shulman 2004 – Gurol et al., 2010*).

Many pediatricians have a low index of suspicion of streptococcal pharyngitis in children less than 3 years of age. This clinical bias has been based on previous studies demonstrating a low rate of isolation of group A beta hemolytic streptococci from throat of such children compared to older children (*Glezen et al., 1967 – Stewart and Maghadam, 1971*).