

PREVALENCE OF GROUP A BETA-HEMOLYTIC STREPTOCOCCAL PHARYNGITIS IN CHILDREN WITH ACUTE SORE THROAT, NARESUAN UNIVERSITY HOSPITAL, PHITSANULOK, THAILAND (MAY 2016 - APRIL 2017)

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Abstract. Streptococcal pharyngitis is a common bacterial pharyngotonsillitis in a pediatrics outpatient department setting. A rapid antigen detection test (RADT) was used in a prospective study in diagnosing group A beta-hemolytic streptococci (GAS) in children 1-15 years of age with fever and sore throat. Throat swabs were collected for culture and RADT from children ($n = 134$, median age = 5 years) experiencing fever and sore throat within the previous seven days of symptoms onset, who were treated at the Pediatric Outpatient Department, Naresuan University Hospital, Phitsanulok, Thailand from May 2016 to April 2017. All patients received regular care from physicians and information on patients' illness, diagnoses and antibiotic prescribed were collected. Acute pharyngitis was diagnosed in 43% of the children and GAS detected in 7% of throat swab cultures, with a prevalence of GAS pharyngitis of 7% (95% confidence interval (CI): 3-12). All GAS isolates were susceptible to chloramphenicol, penicillin and vancomycin, and 70% resistant to tetracycline. RADT demonstrated a sensitivity of 90% (95% CI: 85-95) and specificity of 91% (95% CI: 86-96), with positive and negative predictive value of 45 and 99%, respectively. In conclusion, the study shows low prevalence of GAS in children with acute pharyngitis and empirical antibiotic treatment should be avoided until a definitive diagnosis of GAS infection has been made.

Keywords: children, group A streptococcal pharyngitis, rapid antigen detection test, sore throat

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