# SUMMARY

Group A beta hemolytic streptococcal (GABHS) tonsillopharyngitis is a significant public health problem. Although most cases of acute tonsillopharynigits are caused by viruses, GABHS is the most common bacterial aetiology. Approximately 15% to 30% of tonsillopharyngitis cases in children and 5% to 20% of cases in adults are attributable to GABHS.

Diagnosis of streptococcal tonsillopharyngitis in this study includes clinical diagnosis, throat swab culture and RADT to detect carbohydrate (C) antigen of GABHS

In clinical diagnosis we evaluate modified Centor score (McIssac score) in which the patient is judged on 5 criteria (fever > 38°C, tonsillar exudates, tender anterior cervical lymph glands, absence of cough and age < 15 years) with one point added for each criterion. The total score (maximum 5) dictate management of the care.

Throat swab culture is the gold standard method for diagnosis of GABHS tonsillopharyngitis. Still throat swab culture has flows. It needs longer time (2 – 3 days) to obtain the result. It can not be done if the patient is receiving antibiotics.

Strept rapid antigen detection test is a rapid test that can detect C (carbohydrate) antigen in throat swab within minutes. Rapid diagnosis and treatment of GABHS tonsillopharyngitis will shorten

the duration of symptoms, reduce the risk of spread of the disease to other people. Also it reduce the incidence of supparative and non suppurative complications.

Streptococcal tonsillopharyngitis is less common in children less than 3 years of age compared with older children.

In this study, the aim of the work was to evaluate modified Centor score and RADT as methods to diagnose GABHS tonsillopharyngitis and compare the results with that of throat swab culture. Also the study aimed to evaluate the effect of age on prevalence of GABHS tonsillopharyngitis.

This study include 200 patients with acute tonsillopharyngitis. Their aged ranged from 1.5 years to 16 years (mean ± SD = 7.605 ± 3.892 years). Also 50 healthy control children of comparable age and sex are included in the study.

The results of the study can be summarized as follow:

- Out of 200 cases suspected acute tonsillopharyngitis, 55 were due to Group A beta hemolytic streptococci which equals 27.5% compared to 4 out of 50 (8%), a difference which is statistically significant.
- Sex is not a factor in development of streptococcal pharyngitis. Out of 100 male patients 28 (28%) were due to GABHS compared to 27 (27%) out of 100 female patients, a difference which is statistically insignificant.

- The highest prevalence of GABHS pharyngitis was among children aged 6 to less than 11 years (37.18% of cases) which correspond to age of primary schools – the least was in children less than 3 years (5%).
- Group A beta hemolytic streptococcal pharyngitis peaks during winter (34.41%) followed by spring (28.57%). The least prevalence rate was in summer (6.67%).
- Regarding residence, GABHS pharyngitis are common in rural areas than urban areas, 33.1% compared to 18.99%. This difference is statistically significant.
- Out of 55 patients proved to be positive by throat culture, 49 were also positive by RADT and 6 were negative. On the other hand out of 54 patients who were positive for RADT 49 were positive by throat culture and 5 were negative. The sensitivity and specificity of RADT compared to the standard throat culture were 89.09% and 96.55% respectively.
- In this study modified Centor score (McIssac score) was used to suspect (predict) GABHS pharyngitis. As the cumulative score increases the percentage of positive culture increases. The percentage of positive throat culture was 11.86% in score 2 23.19% in score 3, 40.48% in score 4 and reach 50% in score 5.
- The most significant predictors of GABHS pharyngitis were enlarged, tender cervical lymph glands, tonsillar exudate, pharyngeal exudates follicular tonsillitis or recent contact with a tonsillopharyngitis case.