



## SUMMARY

Three hundreds and forty school children participated in this study from April 2011 to July 2012. Two hundred and twenty were from schools from rural area, and 120 were from schools from urban areas. The schools are primary and preparatory schools.

The age of the children ranged from 5 years to 16 years (mean+SD=10.23  $\pm$  2.45 years ).All children had no symptoms suggestive of tonsillopharyngitis (fever, sore throat, difficulty in swallowing, cough, nasal secretions ,sneezing ,or swelling of cervical lymph nodes).

Full medical history, clinical examination ,and throat swab for culture and sensitivity were done for each child participating in the study .

The results of the study can be summerized as follow :

Out of 340 children participated in the study, 25(7.35%) were proved to be GABHS pharyngeal carriage.

Regarding the age of the examined school children in our study, children were classified into 2 groups. Group(1): children in primary schools, their age ranged from 5-11 years, and their number was 200 children. Group(2): children in the preparatory school, their age ranged from 12 to 16 years, and their number was 140. Out of the 200 children in the primary school 20(10%) were GAS carriers while in preparatory school, out of 140 children 5(3.57%) were GAS carriers.

Regarding the effect of sex on GAS carrier rate, we examined 214 male children and 126 female children . The carrier rate among male



children was 7.94% (17 out of 214) compared to rate of 6.35% (8 out of 126) in female children, a difference which was statistically insignificant ( $P \geq 0.05$ ).

Regarding the residence, 220 of our school children were from schools in rural areas, and 120 were from schools in urban areas. The carrier rate of children in rural areas in our study was 8.18% (18 out of 220) compared to 5.83% (7 out of 120) in urban areas, a difference which is statistically insignificant .

To study the effect of the season of the year on GAS carriage rate, we examined 100 school children in winter, spring and autumn and 40 school children in summer. The carriage rate in our study varied according to the season of the year. It was 14% in winter, 7% in autumn, 3% in spring and 2.5% in summer. The difference was statistically significant.

Regarding the sensitivity of the isolated strains to the commonly used antibiotics, our study showed that all isolated strains are sensitive to penicillin and amoxicillin. The resistance to erythromycin was 16% (4 cases out of 25), and to azithromycin was 8% (2 cases out of 25 cases only). Also the resistance to clindamycin in our study was 12% (3 cases out of 25).