

Study of Group A β -Hemolytic Streptococci Colonization and Resistance Drug of Isolates on 12-14 Year Old Healthy Students of Aras Free Zone Schools

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Background & Objectives: Group A β -Hemolytic Streptococci are the most prevalent pathogenic bacteria that can cause rheumatic fever and acute glomerulonephritis in adolescents so its correct diagnosis and treatment is very important.

Methods: This study was done with multi stage random sampling Methods between three hundred 12-14 year old healthy students in Aras Free Zone guidance schools. Sixty seven group A β -Hemolytic Streptococcus (GABHS) strains were isolated and were tested with disc diffusion Methods against sixteen antibiotics including Penicillin, Erythromycin and some second line drugs such as Amoxicillin, Ampicillin, Co-amoxiclav, Tobramycin, Gentamicin, Clindamycin, Vancomycin, Tetracycline, Cotrimoxazole, Cloxacillin, Cephalothin, Cephalaxin, Cefazolin, Cefixime.

Results: This study indicated that of 300 students, 22% were healthy carriers of GABHS. Of 67 healthy carriers, 17 cases (27%) were female students of first base class that was the highest rate, whereas 4 cases (8.5%) were female students of second base class that was the lowest rate. All of GABHS strains (100%) were sensitive to Penicillin and resistance to Cotrimoxazole and Clavulanic acid were detected up to 92% and 89% respectively.

Conclusion: Our results showed that prescription of second line drugs must be prescribed more cautiously.

Keywords: Group A β -Hemolytic Streptococci; Bacterial Resistance; Aras Free Zone