

COMPARISON BETWEEN EFFECT OF FENUGREEK EXTRACT AND SOME ANTIBACTERIAL AGAINST *Staphylococcus aureus* ISOLATED FROM PATIENTS WITH PERIODONTITIS

Zainab H. Al-Azawi

*Biology Dept. - Al-Razi College of education- Diyala Univ.

ABSTRACT

This study was conducted to detect the effect of hot aqueous Fenugreek seed extract against *Staphylococcus aureus* isolated from patients with periodontitis and compared with the effect of certain antibacterial. A total of 50 specimens was collected from patients attended Specialized Densitary Center in Diyala province during the period from 1/2 /2009 to 1/6 2009 . Identification of *S. aureus* based on cultural characteristics , microscopically examination , growth on selective media and standard biochemical tests .The disc diffusion method was used to determine antibacterial sensitivity and inhibition potency for different concentrations of extract (20% , 30% , 40% , 50%). Fifteen (30%) isolate of *S. aureus* was recovered, 4 isolates from males (8%) and 11 from females (22%) with significant different. There was insignificant association between the rate of infection with isolates and age of patients, gum bleeding when there was significant association between the rate of infection and smoking at ($p < 0.05$) .

It was revealed that 50% of Fenugreek extract more effective than other concentrations with inhibition zone of (9.3)mm with significant difference at ($p < 0.05$), Furthermore there was a significant difference in antibacterial activity at 50% concentration Fenugreek extract and Methicillin, Fusidic acid, Azithromycin, Carbencillin, and Vancomycin .

Conclusion High concentration of hot aqueous fenugreek seed extract was more affective on *S. aureus* isolated from patients with periodontitis compared with certain antibacterial .