

## **Abstract**

Staphylococcus are common microorganisms which despite supply of antimicrobial agents and improved health care still remains as a pathogen in community and are one of the most important factors of hospital infections. Staphylococcus aureus and Staphylococcus epidermidis are dominant species that isolated from this type of infections. Pathogenicity of these organisms is due to the ability to produce toxins and other extracellular factors and the ability to attach and form biofilms in host surfaces. this study aims to identify enterotoxin producing genes in staphylococcus aureus separated from clinical cases was done in zabol city. Samples were collected from the clinical laboratories of Zabol. Bacteriological methods for the isolation of Staphylococcus aureus were performed on all samples and Yellow colonies positive mannitol in salt agar environment was considered as staphylococcus aureus. DNA extraction was performed by boiling method on all of isolates. To search for genes producing enterotoxin PCR experiments was done using specific primers of enterotoxin genes *a*, *b*, *d*. In this study from 100 Staphylococcus aureus strains isolated, 78 strains(%78) were containing one or more of enterotoxin gene, among positive samples, 58 strains (%74/35) had *sea* genes, 52 strains (%66/66) had *seb* genes, 32 strains (%41/02) had *sed* genes, which *Sea* gene had the highest frequency.

Key words: Staphylococcus aureus, Enterotoxin type A, Enterotoxin type B, Enterotoxin type D.



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Thesis for a master's degree in the field of molecular  
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**Determine the frequency Staphylococcus  
aureus genes enterotoxins sea, seb, sed  
isolated from different clinical samples  
in Zabol city**

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January 2014