

**ChemTech****International Journal of ChemTech Research**CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555  
Vol.10 No.6, pp 974-979, 2017**Isolation of different types of bacteria from polymeric artificial eyes in Iraqi patients****Safaa A.S. Al-Qaysi<sup>1</sup>, AmelMuhson Naji<sup>2</sup>, AdnanAbd- Own<sup>2</sup>**<sup>1</sup>Department of Biology, College of Science (for women), University of Baghdad, Iraq<sup>2</sup>Department of Optical Techniques, Dijlah University College.

**Abstract :** There are several conditions which can cause discomfort and mucoid discharge during wearing polymeric artificial eyes (A.E). This study was performed to investigate the existence of bacteria growth (Gram positive and Gram negative bacteria) in the eyes of A.E wearers. Twenty seven swab samples were taken from patients wearing artificial eyes (A.E). Thirteen samples from (A.E) wearers who were symptomatic after various periods of wearing the (A.E). While other fourteen samples, were taken from artificial eye wearers who don't have symptoms. All these samples were taken through coordination with several hospitals from Iraq / Baghdad that included, Al- Shaheed Ghazi Hospital, Ibn al-Haytham Hospital, and from Hilla Hospital, in addition to Western Hamzah Hospital. It was found that in a total of twenty seven swab specimens, were divided into 13 culture-positive and 14 culture-negative specimens. From positive culture, seven of them were *Staphylococcus aureus* isolates and represented (53.84) %, two of them were *Staphylococcus epidermidis* isolates and represented (15.38) %, while four of them were *Escherichia coli* and coliform bacteria, in (15.38) %, (15.38) % isolation percentage respectively. All growth culture were characterized and identified according to the phenotype standard biochemical and physiological test. Investigation of bacterial isolates to antimicrobial agents was conducted using some, and antibiotics, the results revealed different degree of sensitivity to these antibiotics, Chloramphenicol (CH) and Tetracycline (T) showed the highest sensitivity against all bacterial isolates (92.3, 92.3) % respectively. While Streptomycin (S) and Cefoxitin (T) showed the lowest sensitivity against bacterial isolates (76.9, 76.9) respectively.

Key Words : Artificial eye, Bacteria, Antibiotics, Ocular prosthesis.