ELISA for screening and diagnosis of infected and non-infected people by epidemic and non-epidemic *Vibrio cholera*.

Abdulelah A. Almayah

Department of pharmacology, College of Pharmacy, Basraih University, Iraq.

Abstract

Infected patient's sera by epidemic and non-epidemic cholera Ogawa, Inaba, and NAGs and other from healthy persons were used to determine the optimum antigen concentrations and different dilutions of conjugate and serum under study. The optimum concentration of Ogawa antigen was 5 µg/ml with serum and conjugate dilution was 1: 50 and 1:100 respectively, for Inaba antigen was 10 µg/ml with serum and conjugate dilution 1:50 and 1:100 respectively, while for NAGs, the optimum antigen concentration was 10 µg/ml with serum and conjugate dilution was 1:50 and 1:100 respectively. The highest antibodies concentration were recorded in person infected by Ogawa then Inaba and NAGs infection had less antibody concentration 1.97, 172 and 1.55 respectively (value estimated by optical density (492 nm). The results of healthy person non infected by epidemic Ogawa, Inaba nor non epidemic NAGs which reached about 0.4, 0.39 and 0.36 respectively. The present study show high sensitivity and specificity rate were 95% and 90% respectively. Hence the present study recommends depending ELISA test for diagnose and screening infected and non-infected population by epidemic Ogawa, Inaba or non-agglutinable (NAGs).