ELISA AND ICT TECHNIQUES IN THE DETECTION OF ANTI- RUBELLA VIRUS

ANTIBODIES IN ABORTED WOMEN IN AL -NASIRIYAH CITY, THI-QAR, IRAQ

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ABSTRACT

A total of 200 serum samples were collected from Bent Al-Huda hospital in Al -Nasiriyah city, Thi- Qar province, Iraq. These samples were collected from aborted women in different ages and cases to detect of rubella virus by Enzyme Linked Immuno Sorbent Assay (ELISA) and Immuno chromatography (ICT) techniques.

It was founded from the recent study 162 (81%) of serum samples were positive by IgG ELISA, and 105 (52.5%) were positive by IgG with ICT technique. All serum samples were registered negative results to IgM anti- rubella virus by two techniques.

The results of ELISA technique were appeared the higher rate (97.95%) for anti-rubella virus antibodies was observed in second age group ((21-30)years) and a no significant differences were observed in the seropositivity concerning to age groups(P value:> 0.05).

In ICT, the higher rate (85.71%) of anti-rubella virus antibodies was observed in the second group of ages, with the presence of significant among the age groups(P value:< 0.05). According to the cases, the higher rate (96%) of anti-rubella virus antibodies was in bleeding in early pregnancy case which observed with ELISA technique, and no founded significant differences among cases groups P value:> 0.05), while 90.9% of seropositivity fetal death cases was resulted with ICT technique, and were founded highly significant differences among the rates of seropositivity against rubella virus(P value:< 0.01).

The sensitivity and specificity were registered 95% and 61% respectively with ELISA test, while the lower sensitivity and sensitivity values were with ICT test, they were 85% and 57% respectively, and the statistical analysis was appeared the existence of significant differences (P value:< 0.05) between the two tests.

KEYWORDS: Rubella, Elisa, ICT