THE ROLE OF SOME CYTOKINES IN ECTOPIC PREGNANCY IN IRAQ-ThIQAR

THAMER JABER CHALI & NADHAMKADHAM MAHDI

Department of Microbiology College of Medicine, University of Basrah, Basrah, Iraq

ABSTRACT

This study aimed to investigate the effects of cytokines IL1RA, IL2, IL-6, IL8, TNFα and INFα on the ectopic pregnant women.

A case-controls study conducted in the Department of Obstetric and Gynecology/Bental Huda Hospital in IRAQ - THI-Qar governorate from April 2017 to October 2017.

Ninety individuals involved in the current study, 50 women with an ectopic pregnancy in the first trimester and 40 health pregnant women in the first trimester as controls were enrolled in this study.

Out of 50 ectopic pregnancy 23 have a risk factor. The highest percentage was showed in those with a pelvic inflammatory disease which was (43.5%), followed by the intrauterine contraceptive device (17.3%) while the smoking was lowest with the percentage of (4.3%).

The most frequency age group for ectopic pregnancy was shown in (25-34) years (42%), followed by (35-45 years) 38%. while (15-24) years showed the lowest percentage (20%).

The mean concentration level of serum interleukins IL1RA, IL2, IL6, IL8, TNFα, INFα were measured in ectopic pregnancy and controls group.

IL1RA, IL6, IL8, TNFα, INFα serum concentration was higher in ectopic pregnancy than controls group.

Mean±SD Serum concentration levels of IL1RA for ectopic pregnancy and controls group were (9.3375±3.260ng/ml), (2.1151±1.16ng/ml) respectively and this difference was highly significant (P value 0.00), while IL2 concentration Mean±SD in ectopic pregnancy was (2.2582±1.224ng/ml) and control group was (4.9923±1.59ng/ml) (P<0.05) with no statistically significance, Serum concentration level of IL6 for ectopic pregnancy was (23.2508±7.18 Pg/ml) while controls group was (9.0025±2.74 Pg/ml) with statistically significant differences (P value 0.00), IL8 level in ectopic pregnancy and controls show (76.9892±19.8 Pg/ml), (26.5498±11.85 Pg/ml) respectively and this different were statistically significant (P value 0.00).

Serum concentration levels of TNFα for ectopic pregnancy and controls group were (31.5328±10.22 Pg/ml), (9.5346±10.22 Pg/ml) respectively this different was statistic significant (P value 0.00).

Serum concentration levels of INFα for ectopic pregnancy were (24.7813±7.60 Pg/ml) while the control group were (8.2140±2.68 Pg/ml) this different was statistic significant (P value 0.00)

The mean concentration of cytokines for different age groups show IL 1RA
Were highly (Mean±SD10.91±3.08 ng/ml) in age group (35 – 45 year), IL 2 were highly (Mean±SD2.26±0.932 ng/ml) in age group (35 – 45 year). IL 6 were highly (Mean±SD27.021±7.628 Pg/ml) in the age group (15 – 24 years). IL 8 were highly (Mean±SD82.912±15.21 Pg/ml) in the age group (25 – 34 year). TNFα were highly (Mean±SD36.09±9.405 Pg/ml) in the age group (25 – 34 year) and INFα were highly (Mean±SD26.147±5.50 Pg/ml) in the age group (35 – 45 years).

**KEYWORDS:** Gynecology, Serum, Pelvic Inflammatory Disease, IL1RA, IL6, IL8, TNFα & INFα