

## Estimation of T3, T4, TSH and Prolactin Hormones in Patients with Toxoplasmosis

Ahmed H. Hameed, Prof. Abdul rasol Kh. Saeed, Dr. Abdul Razzaq N. Zgair

European Journal of Molecular & Clinical Medicine, 2020, Volume 7, Issue 11, Pages 5397-5404

### Abstract

In this study, a total of 115 pregnant women were enrolled, 65 infected with toxoplasmosis and 50 without toxoplasmosis as a control group who attended Baghdad teaching hospital during the period from 1<sup>st</sup> February 2019 to 1<sup>st</sup> March 2020. The results showed no significant differences between the mean age of the study group ( $25.54 \pm 4.161$ ) years and the control group ( $26.28 \pm 4.224$ ) years, and the mean of the total ( $25.86 \pm 4.186$ ) between them approximates the two means for each group. The mean T3 hormone in the study group was ( $3.17 \pm 1.41$ ) compared to the control group ( $1.27 \pm 0.64$ ) with a highly significant difference  $P < 0.01$ , while the mean T4 hormone in the study group was ( $3.63 \pm 1.00$ ) compared to the control group ( $3.86 \pm 1.72$ ) with no significant difference  $P > 0.05$ , whereas the mean TSH in the study group was ( $2.62 \pm 1.07$ ) compared to the control group was ( $1.11 \pm 0.94$ ) with a highly significant difference  $P$ . No significant difference was found between Toxoplasma IgG positive and mean T3 hormone levels 56 ( $3.10 \pm 1.48$ )  $P > 0.05$ , and also no significant difference was found between Toxoplasma IgG positive and T4 hormone levels 56 ( $3.66 \pm 0.84$ ),  $P > 0.05$ . The results of the Toxoplasma IgG positive with mean TSH levels 56 ( $2.95 \pm 0.73$ ) showed a highly significant difference  $P < 0.01$ , and the Testosterone the mean was in 56 Toxoplasma positive ( $4.34 \pm 1.24$ ), was a highly significant  $P < 0.01$  (HS), and the results of mean T3 hormone showed abnormalities in patients with Toxoplasmosis 24(20.9%) in comparison with the control group 34(29.6%) with a highly significant difference  $P = .001$ . The abnormalities in T4 levels were 15(13.0%), compared to the control group 29(25.2%) with no significant difference  $P = .363$ , and no change occurred in the levels of TSH among patients, while the levels of Testosterone showed high abnormalities 56(48.7%) in comparison with the control group 5(4.3%) with a highly significant difference  $P = .001$ .

**Keywords:**