

ABSTRACT

Background: Thyroid autoimmunity and subclinical hypothyroidism can be considered as risk marker for recurrent spontaneous miscarriage. Euthyroid women in early stage of pregnancy with TPO antibody positive has been associated with various adverse pregnancy outcomes such as recurrent miscarriage, preeclampsia and preterm labour.

Aim of the study was to find out association between anti-TPO and recurrent miscarriage and to evaluate obstetric complications such as preeclampsia and preterm labour.

Methods: This case control observational study was carried out on 100 pregnant mothers out which 50 with history of recurrent miscarriages were cases and 50 without such history were control.

Results: The prevalence of anti-TPO positivity in the study population was 28% (14 out of 50) among cases and it showed significance ($p < 0.006$) compared with control. Preeclampsia was noted among 12% of the cases, preterm labour in 6% of the cases and Preterm rupture of membranes in 2% of the cases. (p value 0.011) which is significant. 4 out of 5 patients with preeclampsia, 2 out of 3 preterm labour and 1 PROM was anti-TPO positive.

Conclusions: The prevalence of thyroid autoimmunity was higher in patients with history recurrent miscarriage history than the control population. Even in women with biochemically normal thyroid function there was relationship between recurrent miscarriage and thyroid autoimmunity. Thus anti-TPO antibody could be risk marker for recurrent spontaneous miscarriages. Screening for subclinical hypothyroidism and anti-TPO can be suggested as these identify women with increased risk of miscarriage.

Keywords: Anti-TPO, Hypothyroidism, Pregnancy, Preeclampsia, Preterm Labour, Recurrent Miscarriage, TSH