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**Original article:**

**Correlation of thyroid hormones with infertility in reproductive age group women**

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**Abstract**

**Introduction:** The infertility problem is more common phenomenon among the women now days and has increased over past 30 years. The present study was carried out to correlate thyroid hormones with infertility in the reproductive age group of women. The aim of this research work was to correlate thyroid hormones with infertility in the reproductive age group of women.

**Material and methods:** Total 120 infertile women, and 80 normal fertile women volunteers were selected on OPD basis between age group of 19 to 45 years. Out of 120 infertile women, 80 were of primary infertility and 40 of secondary infertility. They were screened for thyroid hormone status by Chemiluminescence Immunoassay (CLIA).

**Result:** There was a higher prevalence of hypothyroidism in the infertile women as compared to the fertile ones in the study group. Prevalence of hypothyroidism was more in secondary infertility.Both hypothyroidism and hyperprolactinemia may result in menstrual disorders. Oligomenorrhoea was most common in infertile women. Hypothyroidism is commonly associated with ovulatory failure. Hence, assessment of serum TSH is mandatory in the work up of all infertile women, especially those presenting with menstrual irregularities.So the basic approach should be to identify those hypothyroid individuals who have greatest risk for the development of infertility.Long standing hypothyroidism may develop ovulatory dysfunction, and hyperprolactinemia. So identifying and treating hypothyroidism at an earlier stage before the appearance of ovulatory dysfunction and hyperprolactinemia, can have potentially great preventive value.

**Key words:** Infertility, Thyroid hormones, Chemiluminescence, Hypothyroidism