Thyroid Function Test Alteration In Infertile Females

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Abstract

Background: The aetiology of infertility is multi factorial with thyroid disorders as the most common presenting factor, hypothyroidism in particular. Infertility in women can lead to emotional and psychological stress. Hypothyroidism and hyperthyroidism can result in menstrual irregularities and anovulatory cycles, thus affecting the fertility. Thus, present study is carried out to observe the levels of free Tri-iodothyronine (fT3), free Thyroxine (fT4) and Thyroid stimulating hormone (TSH) in women with infertility. Aims and Objectives: The present study was conducted to observe importance of thyroid function test in female patients with infertility. Material and Methods: Current cross sectional study was conducted among 50 infertile female patients selected on an OPD basis in . Laboratory investigations included. Serum TSH, FT3, FT4 was done by kit based Chemiluminescent Micro particle Immunoassay. Results: Elevated serum TSH levels were observed in46% of patients with infertility. Significant association was observed between raised serum TSH with infertility. Conclusion: Present study showed 53% prevalence of thyroid dysfunction in infertile patients. High level of TSH and low FT4 showed strong correlation among infertile women, clinically reported with abnormal menstrual symptoms. Long duration of undiagnosed and untreated hypothyroidism can lead to infertility and therefore, infertile women should be assessed for thyroid hormones.

Keywords: Hypothyroidism, Infertility.