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THYROID DYSFUNCTION AMONG SUBFERTILE WOMEN A RETROSPECTIVE STUDY

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Subfertility is defined as the inability to conceive following twelve or more months of unprotected intercourse. Among numerous factors causing subfertility in women, thyroid dysfunction has also been noted as a major contributor. There were only a few studies carried out in Sri Lanka about subfertility in women and those studies date back to the mid 1980s. The purpose of this study was to find the overall incidence of thyroid dysfunction among subfertile women who presented themselves to the subfertility clinic.

The subjects included in the study were subfertile women referred to the Nuclear Medicine Unit for hormone assay. Based on day 21-25 progesterone values they were classified into four groups; anovulatory (Progesterone levels < 2ng/mL; 15 subjects), weak ovulation (2-15ng/mL; 55 subjects), strong ovulation (15-30ng/mL; 16 subjects) and ovulation induced (> 30.0ng/mL; 33 subjects). In the residual serum samples of those selected patients, TSH was estimated. Women with a history of thyroid dysfunction, clinical symptoms and under treatment were excluded from the study.

One hundred and nineteen patients whose mean age was 31 years, were included in the study. The percentages of subjects below 35 years and above 35 years of age were 74% and 25% respectively. It was observed that a majority of subfertile women were euthyroid (TSH, 0.25-4 μ IU/mL) and 20% (24/119; TSH <0.25 μ IU/mL) were hypothyroid while only one was a hyperthyroid (TSH > 5 μ IU/mL) patient. Among anovulatory subjects the prevalence of hypothyroidism was 19%, in which the percentage of hypothyroidism among women older than 35 years of age was 17% and 22% among women below 35 years of age. Among women who had weak ovulation, 23% had hypo functioning thyroid and the extent of hypothyroidism was 29% in subjects older than 35 years of age. The percentage of hypothyroid patients in strong ovulation and ovulation induction groups were 19% and 21% respectively.

Although age-related subfertility is noted in clinical settings, age had no effect on hypothyroidism related subfertility. According to results we conclude that about 20% of subfertile women are affected with hypothyroidism and it could be one of the reasons for their inability to conceive. Hypothyroidism is a treatable disease. Therefore, a thyroid function assessment has to be performed as a baseline test for subfertile women in the early stages of diagnosis.