



▼ POST GRADUATES ABSTRACTS

PG - 48 : EFFECT OF ANITUBERCULOSIS TREATMENT ON THYROID PROFILE IN NEWLY DETECTED SMEAR POSITIVE PULMONARY TUBERCULOSIS CASES

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Background: Tuberculosis being a systemic disease and has a capacity for wide spread dissemination, it can affect various endocrinological organs like adrenals, pituitary, thyroid, pancreas and gonads. Among which thyroid dysfunction among new smear positives pulmonary tuberculosis was least studied.

Aim: This study aims to identify the effects of antituberculous treatment on thyroid profile in new detected smear positive pulmonary tuberculosis cases.

Study and design: This study was a prospective study done in a tertiary care hospital in Pondicherry.

Materials and methods: This study was conducted among 60 new smear positive pulmonary tuberculosis cases attending pulmonary medicine OPD from May 2015 to April 2017. Thyroid function test in the form of free T₃, free T₄ and TSH was measured before initiating Anti tuberculosis treatment (ATT), at 3 months and at the end of treatment. **Results:** Out of 60 patients enrolled in our study, majority were males with male : female ratio of 3.2:1 and mean age was found to be 49 years. Diabetes mellitus was found to be the major co morbidity in 50% of patients. During the study all patients was initially euthyroid before

initiating ATT. Sick euthyroid was found in 75% of patients at the end of 3 months. Hypothyroidism was found to be increasing during the study from 16% at the end of 3 months and 63% at the end of 6 months. Among the thyroid function test, free T₃ and T₄ was found to have decreasing trend however TSH was found to have increasing trend during the study.

Conclusion: New smear positive pulmonary tuberculosis cause thyroid dysfunction leading to hypothyroidism and sick euthyroid syndrome at various stages of treatment with highest incidence of sick euthyroid syndrome at 3 months and hypothyroidism at the end of 6 months. Sick euthyroid syndrome was found to be a temporary reversible condition which disappeared 6 weeks after stoppage of treatment. We recommend thyroid function test to be done in all cases of smear positive pulmonary tuberculosis before initiating treatment, during the course of treatment and 6 weeks after the stoppage of treatment to avoid unnecessary treatment of thyroid dysfunction. We also recommend that all these patient should be reassessed after 6 weeks of stopping treatment with thyroid function test to confirm the need of thyroid supplements and for further work up which is beyond the scope of this study.