

## **▼ FACULTY ABSTRACTS**

## F - 16: A CROSS SECTIONAL STUDY TO DETERMINE THE ASSOCIATION BETWEEN METABOLIC SYNDROME AND HYPOTHYROIDISM AMONG WOMEN POPULATION

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Aim & Objectives: To assess the thyroid status in women with metabolic syndrome and To find the association between the thyroid levels and the metabolic syndrome

Introduction: Metabolic syndrome is a global health problem characterized by abdominal obesity and insulin resistance. Thyroid dysfunction is one of the most common endocrine diseases associated with the increasing levels of TSH with obesity. Hypothyroidism is common in obese women. There is an increased incidence of hypothyroidism especially in females with higher TSH concentration in metabolic syndrome patients. The concurrent existence of both metabolic syndrome and thyroid dysfunction will substantially increase the risk of atherosclerotic cardiovascular disease. The aim of the current study is to find out the association of metabolic syndrome and hypothyroidism among women population.

Methodology: We have taken 50 cases (metabolic syndrome patients) & 50 healthy controls and the

following parameters like fasting plasma glucose, waist circumference, blood pressure, triglycerides & HDL, FT4 &TSH are assessed. Statistical analysis is done by using SPSS (version 21) software.

**Result:** The difference in mean T4 levels was insignificant in both the groups  $0.88 \pm 0.25 \, \mu g/dl$  in metabolic syndrome and  $0.93 \pm 0.18 \mu g/dl$  in controls (P < 0.3000). Mean TSH levels in group I ( $5.61 \pm 13.14 \, \mu IU/ml$ ) subjects was higher as compared to group II ( $1.80 \pm 0.74 \, \mu IU/ml$ ) and the rise was statistically significant(P < 0.046).

Conclusion: The study may be concluded by saying that the assessment of thyroid status and early diagnosis of metabolic syndrome especially in obese women may help to prevent the complications of metabolic syndrome.

**Keywords**: hypothyroidism, metabolic syndrome, obesity

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