



CLINICAL PROFILE AND LIPID ABNORMALITIES IN SUBCLINICAL HYPOTHYROIDISM PATIENTS IN GOVERNMENT GENERAL HOSPITAL, KAKINADA

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KEYWORDS :

INTRODUCTION

Subclinical hypothyroidism is defined as an elevated serum TSH level associated with normal total or free T4 and T3 values.

The overall prevalence has been reported to range from 6 – 8% in women and 3% in men (up to 10% in women more than 60 years). Because of the frequency with which this condition is encountered, important concerns have been raised regarding its clinical relevance and appropriate management.

METHODOLOGY

Source of the data This was a hospital-based cross-sectional study conducted in Government General Hospital, Kakinada.

All adult patients who fitted the biochemical criteria for subclinical hypothyroidism was included in the study.

Newly diagnosed cases of subclinical hypothyroidism patients who fulfilled the inclusion and exclusion criteria were included in the study.

INCLUSION CRITERIA

All newly diagnosed cases of subclinical hypothyroidism (normal T3, T4 & fT4 with TSH more than 4.5 uIU/mL) 58

EXCLUSION CRITERIA

1. Patients aged twelve or less.
2. Patients already on thyroxine
3. Chronic renal failure, Chronic liver disease
4. Severe non-thyroidal illness.
5. Patients who are on drugs like beta blockers, diuretics, steroids, ocp (causes dyslipidemia) and hypolipidemic drugs.

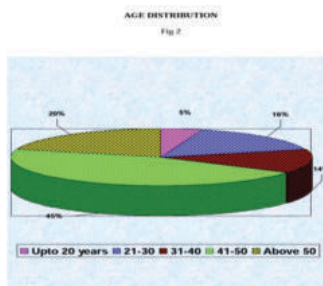
6. Known cases of diabetes mellitus were excluded while comparing lipid profiles.

RESULTS

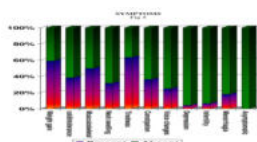
SEX DISTRIBUTION

SEX	STUDY CASES -no	percentage
Male	3	6.8%
Female	41	93.2%

AGE DISTRIBUTION



CLINICAL FEATURES



The Most common symptom in our study was excessive tiredness, which was present in 28 cases (63.6%). Next to tiredness most common a complaint was a recent gain in weight, present in 26 cases (59.1%). Musculoskeletal complaints like myalgia and arthralgia were seen in 22 cases (50%).

Other symptoms were neck swelling, cold intolerance, constipation, hoarse voice, and menorrhagia. We had 3 cases referred from Obstetrics and Gynaecology for evaluation of infertility and 2 cases from Psychiatry with a clinical diagnosis of depression. None of our patients were entirely asymptomatic.

A Most common sign was the presence of goiter, which was seen in 24 cases (54.5%). Other signs were dry skin and puffiness of the face and eyes present in 18 (40.9%) and 9 (20.5%) cases respectively. A delayed relaxation of ankle jerk was present only in 6 (13.6%) cases. None had bradycardia.

SERUM CHOLESTEROL

Hypercholesterolemia was present in 60% of subclinical hypothyroidism patients. The mean total cholesterol was 213.3 mg/dl.

LDL was elevated in 52.5% of the subclinical hypothyroid group. 47.5% of cases had LDL of more than 160 mg/dl. The mean LDL in study cases was 138.6 mg/dl.

SERUM TRIGLYCERIDES

72.5% of the study cases were having triglycerides less than 150 mg.

SERUM HDL

The Majority of the study cases (67.5%) and control (75%) had HDL within normal range. The mean HDL was 46.08 mg/dl in the study group and 49.93 mg/dl in the control group.

DISCUSSION

Subclinical hypothyroidism is defined as an elevated serum TSH with normal free T4. It is a more common condition than overt hypothyroidism.

The Most common symptom was excessive tiredness (63.6%) followed by weight gain (59.1%) and musculoskeletal symptoms like myalgia and arthralgia (50%). Other symptoms noticed were neck swelling, constipation, cold intolerance, voice changes, depression, infertility, and menorrhagia.

A Most common sign in our study was the presence of goiter. Other signs were dry skin, puffiness of eyes, and delayed relaxation of ankle jerk.

CONCLUSION

1. Incidence of subclinical hypothyroidism is more in females as expected.
2. Being a hospital-based study almost all of our patients are symptomatic. We tend to miss those who are entirely asymptomatic. Screening programs in high-risk population may help to detect those cases.
3. Most common symptom is excessive tiredness and the most common a sign is a goiter.
4. Majority of our patients are at high risk for progressing to overt hypothyroidism (TSH > 10 uIU/mL & TPO positivity).
5. 75% of patients have TSH between 10 and 20 uIU/mL.

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