ABSTRACT

Title: A study of prevalence and association of hypothyroidism and serum lipid profile in diagnosed gall stone disease at tertiary care hospital.

Introduction: Thyroid disorders are one of the most common endocrinology disorders in the world. Recently, it has been found that hypothyroidism causes low bile flow and sphincter of Oddi dysfunction leading to gallstone diseases. Also it has been found that patients who are hypothyroid show cholesterol metabolism disturbances. Therefore this study is being done to substantiate need of thyroid function tests in gall stone disease patients and to further evaluate their risk of developing cardiovascular diseases by testing their lipid profile.

Aims: to estimate the prevalence of hypothyroidism in diagnosed case of gall stone diseases. Also to estimate serum lipid profile in gall stone diseased patients who are hypothyroid.

Materials and Method: this is an observational prospective study. Method of sampling was purposive. 100 patients with gall stone disease were evaluated and thyroid function and lipid profile tests were performed after taking written informed consent.

Results: In our study of 100 cases, age of selected patients were between 24-75 years. Out of this 64% were females and rest 36% were males. Thyroid function tests were performed and 25% showed high TSH and rest 75% showed normal TSH levels. 98% patients presented with pain in right hypochondrium and histopathology showed 90%
cases having gallstones. There was also a positive correlation between HDL and TSH, Total cholesterol and TSH.

**Conclusion:** Evaluation of thyroid functions and lipid profile should be done for patients who are diagnosed with gall stone diseases.

**Keywords** – Hypothyroidism, Cholelithiasis, Gallbladder, HDL