Reviewer's report

**Title:** Differences and Associations of Metabolic and Vitamin D Status among Patients with and without Sub-clinical Hypothyroid Dysfunction

**Version:** 1  **Date:** 9 July 2013

**Reviewer:** Ravinder Goswami

**Reviewer's report:**

Aljoani et al have studied a group of patients with thyroid dysfunction and healthy controls to study relationship between subclinical hypothyroidism and abnormalities related to serum lipids and vitamin D status. From Saudi Arabia. The authors observed positive association of obesity, hypertriglyceridemia and inverse relationship between serum 25(OH)D and hypothyroidism.

Despite limited number of thyroid disorder the findings are interesting. However I would like authors to explain in details the possible reasons for low serum calcium, high serum 25(OH)D and high PTH in their cases of subclinical hypothyroidism. To me this combination is out of expected physiology.

Readers would also like to know about details of selection methods used to recruit cases and controls. Who were the controls.

Though language is by and large good, it still require more reading and corrections by the . For example page 9 , line 1 (including probably was meant as included)

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.