017

Pre-op TSH and thyroiditis are not risk factors for hypothyroidism following hemithyroidectomy in an Asian cohort with high incidence of thyroiditis

<u>Dr Ng Peng</u>¹, Dr Cheryl Ho Wei Zhi¹, A. Prof Rajeev Parameswaran¹, A. Prof Ngiam Kee Yuan¹

**National University Hospital, Singapore, Singapore

Free Paper 4, November 10, 2017, 2:15 PM - 3:15 PM

Studies have shown that higher pre-op TSH values and presence of thyroiditis as predictive factors for hypothyroidism. The aim was to assess the incidence of hypothyroidism and predictive factors for hypothyroidism following hemithyroidectomy in an area of high incidence of thyroiditis. METHODS

Retrospective analysis of patients who underwent hemithyroidectomy from January 2000 to December 2013 at a tertiary institution. Patients were divided into two groups, into postop hypothyroid (n = 123) and euthyroid groups (n = 799). Factors analysed: age, gender, race, biochemical data (pre- and post-op TSH levels at 3, 6, 12, 24, 36, 60 and 120 months), histology and duration of follow-up. Multivariate analysis was performed to identify multiple risk factors of development of hypothyroidism.

RESULTS:

Incidence of hypothyroidism in the cohort was 15%, with presence of thyroiditis in 27%. Mean age of cohort was 49.66 (±16.17) with female: male ratio of 3:1. 89% of patients were symptomatic and required thyroxine replacement. There was no difference in pre-op TSH and the presence of thyroiditis in patients who were hypothyroid versus non-hypothyroid (TSH:2.20 vs 2.21; P=NS) and (thyroiditis:15% vs 18%; p=NS). There was no relationship between age, gender, race, histology and the subsequent risk of hypothyroidism. Mean follow-up was for 84 months and mean time to develop hypothyroidism was 18.2 +/- 10.9 months CONCLUSIONS:

Incidence of hypothyroidism following hemithyroidectomy was 15%. Pre-op TSH and presence of thyroiditis did not confer any risk towards the development of hypothyroidism. Therefore, routine evaluation of thyroid antibodies is unnecessary in patients undergoing hemithyroidectomy.