

## Thyroid Surgery—The Tan Tock Seng Hospital Otolaryngology Experience

J C Y Lee, \**MBBS, FRCS*, J K Siow, \*\**FAMS, MBBS, FRCS*

### Abstract

**Introduction:** Central to the management of a patient with a thyroid nodule is the evaluation of the risk of malignancy. Postoperative morbidity, though rare, remains a concern because of its impact on the quality of the life of the patient. **Materials and Methods:** A retrospective audit of 91 consecutive patients who underwent thyroid surgery for thyroid nodules, at the Department of Otolaryngology, Tan Tock Seng Hospital, between January 1995 and December 2000. **Results:** The sensitivity and specificity of fine-needle aspiration cytology (FNAC) were 60% and 100%, respectively. The sensitivity and specificity of intraoperative frozen section examination was 82% and 100%, respectively. Sixty-four patients experienced no postoperative morbidity. Of the 27 patients with postoperative morbidity, only 1 was permanent. The incidence of transient and permanent biochemical hypocalcaemia was 44% and 0%, respectively. Nodal dissection performed together with total thyroidectomy increased the incidence of postoperative hypocalcaemia ( $P < 0.05$ ). The number of parathyroid glands preserved in situ did not predict for postoperative hypocalcaemia. The incidence of transient and permanent recurrent laryngeal nerve (RLN) palsy was 10.3% and 1.1% (8.2% and 0.9% of nerves at risk), respectively. Tracheo-oesophageal groove clearance performed together with thyroid lobectomy did not increase the incidence of postoperative RLN palsy ( $P > 0.05$ ). The median hospital stay was 3 days for benign thyroid disease, 4.5 and 16 days for malignant disease with tracheo-oesophageal groove clearance only and with neck dissection, respectively. **Conclusion:** The combination of clinical examination and FNAC remains the mainstay in selecting patients for surgery. Frozen section examination is an important intraoperative diagnostic adjunct to decide the extent of surgery. With proper surgical training and experience, thyroid surgery for malignancy can be undertaken with minimum postoperative morbidity and a short hospital stay.

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**Key words:** Fine-needle aspiration cytology, Hypocalcaemia, Intraoperative frozen section analysis, Postoperative morbidity, Recurrent laryngeal nerve palsy

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\* Registrar

\*\* Senior Consultant and Head  
Department of Otolaryngology  
Tan Tock Seng Hospital

Address for Reprints: Dr Julian C Y Lee, Department of Otolaryngology, Tan Tock Seng Hospital, 11 Jalan Tan Tock Seng, Singapore 308433.

E-mail: julian\_lee@notes.ttsh.gov.sg