

## Abstract

### **Recurrent laryngeal nerve paralysis: a complication of thyroidectomy.**

Kasemsuwan L, Nubthuenetr S. *Recurrent laryngeal nerve paralysis: a complication of thyroidectomy.* J Otolaryngol. 1997 Dec;26(6):365-7. Department of Otolaryngology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

**OBJECTIVE:** To study factors related to recurrent laryngeal nerve (RLN) paralysis, a major complication of thyroidectomy. **DESIGN:** Retrospective study of outcome of patients' medical records. **PATIENTS AND**

**METHODS:** Records of 361 patients who underwent thyroidectomy by otolaryngologists at Ramathibodi Hospital were reviewed for RLN paralysis. **Main Outcome Measures:** RLN injury was analyzed in relation to types of surgery, RLN identification, and histopathology. The analysis was based on the number of RLNs at risk.

**RESULTS:** The incidence of permanent RLN paralysis was 2.38%. Both the permanent RLN paralysis and temporary RLN paralysis were significantly related to the histopathologic findings of malignancy ( $p < .005$ ). The positive identification of RLN and the types of surgery were not found to be significant factors in either permanent RLN paralysis or temporary RLN paralysis.

**CONCLUSIONS:** There was insufficient evidence to support that the identification of RLNs during surgery would be a significant factor in reducing the likelihood of RLN paralysis. However, RLNs should be identified to avoid iatrogenic injury and subsequent paralysis. Meticulous surgical technique should be applied in patients whose results of fine-needle aspiration biopsy suggested malignancy, as there is the possibility of difficult surgery and potential iatrogenic RLN paralysis in this group of thyroid patients.