

ENDOSCOPIC THYROIDECTOMY WITH INTRAOPERATIVE RECURRENT LARYNGEAL NERVE MONITORING VIA ANTERIOR CHEST APPROACH

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Background/Purpose: Our goal is to study the feasibility of using intraoperative neuromonitoring (IONM) in endoscopic thyroidectomy via anterior chest approach.

Methods: Consecutive series of 93 patients with 100 recurrent laryngeal nerves at risk undergoing endoscopic thyroidectomy via anterior chest approach and IONM were enrolled in this prospective study. All operations were performed by the same surgeon. All patients underwent vocal cord evaluation postoperatively. Demographics and intraoperative and postoperative complications following surgery were collected.

Results: 100 RLNs, there was two transient RLN paresis (2%), there was no one permanent unilateral RLN injury. There were no instances of equipment malfunction or interference.

Discussion & Conclusion: The technical feasibility of IONM seems acceptable and may serve as a meaningful adjunct to the visual identification of nerves. Neuromonitoring during is effective in providing identification of laryngeal nerves and enables surgeons to feel more comfortable with endoscopic thyroidectomy via anterior chest approach. Comparative series are needed for further evaluation.