Superior Laryngeal Nerve Identification and Preservation in Thyroidectomy

Content


This article reviews our experience with identification and preservation of the superior laryngeal nerve (SLN) in more than 1,000 thyroidectomies. The key point are 1) surgical technique for identification of the SLN by transecting a 5-mm segment of the sternothyroid muscle where it is attached to the thyroid cartilage; 2) use of a nerve stimulator; 3) description of three common variations of the nerve; 4) evidence that in most cases any variation of the nerve can be identified, stimulated, and preserved. The clinical significance of the SLN has been clearly overshadowed by the recurrent laryngeal nerve. The principles of head and neck surgery are based on identification and preservation as opposed to avoidance of important structures. These principles would set identification and preservation of the SLN as standard in all thyroid surgery. The nerve is clearly at risk, and injury is clearly detrimental to the patient. Despite these facts, most surgeons do not routinely identify the SLN, and some physician have presented studies to justify this apparent inconsistency in optimal surgery.