

## Nonrecurrent Laryngeal Nerve: A Nerve that needs Careful Dissection

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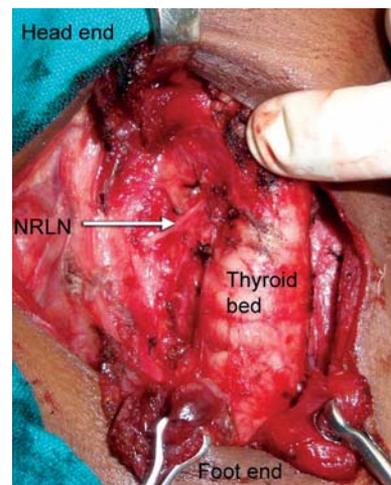
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Recurrent laryngeal nerve (RLN) was described by Galen in the second century AD. Many surgeons including Billroth and Kocher dissected away from this nerve during thyroidectomy. However, over the years, it was realized that identification and tracing the nerve was the best way to preserve it.<sup>1</sup> RLN arises from the vagus nerve and has a recurrent course from the chest to the neck. It loops around the subclavian artery on the right and ligamentum arteriosum on the left. Injury to the RLN has been reported between 0.25 and 2.6% during the first surgery and >8% in reoperations.<sup>2</sup> Anatomical variations are more likely to predispose to RLN injury. Extralaryngeal branching is considered as an increased risk for nerve injury.<sup>2</sup> Nonrecurrent laryngeal nerve (NRLN) is another anatomical variation which should be carefully looked for if the RLN is absent at its normal anatomical location (Fig. 1). IRB approval was obtained for publication of the image.

The transverse course of the NRLN makes it close to the posterior branches of the superior thyroid vessels and to the occasional transversely placed unnamed veins from the IJV crossing over to the thyroid. Ligating these structures by presuming them to be vessels can damage NRLN. This is likely when the superior pole is approached first.

The RLN identification is attempted during the inferior approach to thyroidectomy. The lack of RLN in its normal location during the inferior approach raises the suspicion of NRLN. The transverse course of the NRLN close to the superior pole as depicted in our patient outlines the importance of nerve identification in each and every thyroidectomy and careful dissection in the region medial to the carotid artery even at the superior pole especially if the RLN is absent in its normal anatomical location.



**Fig. 1:** Depicts the NRLN. The nerve can be seen exiting from the posterior aspect of the common carotid artery in the upper neck and reaching the cricothyroid junction wherein it enters the larynx

### REFERENCES

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