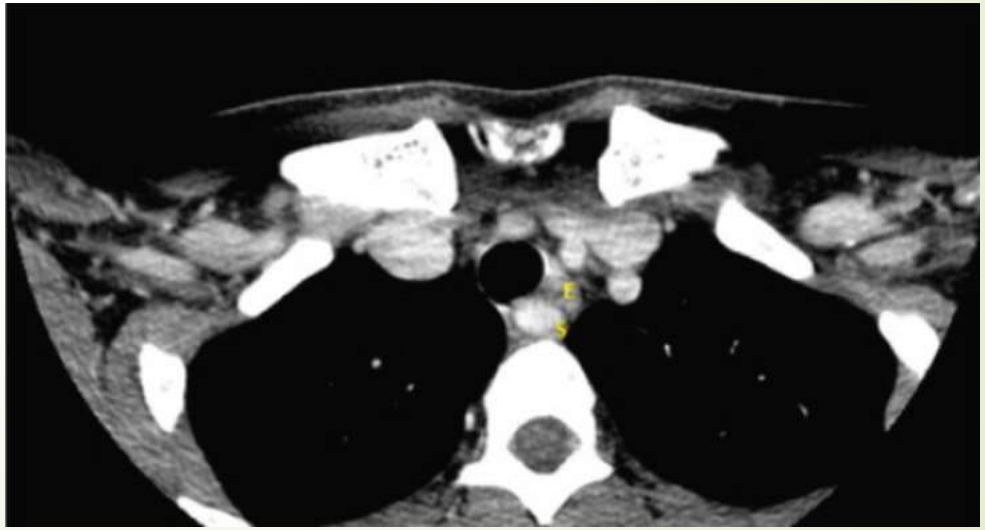
اپروچ به عصب ریکارنت لارنژیال

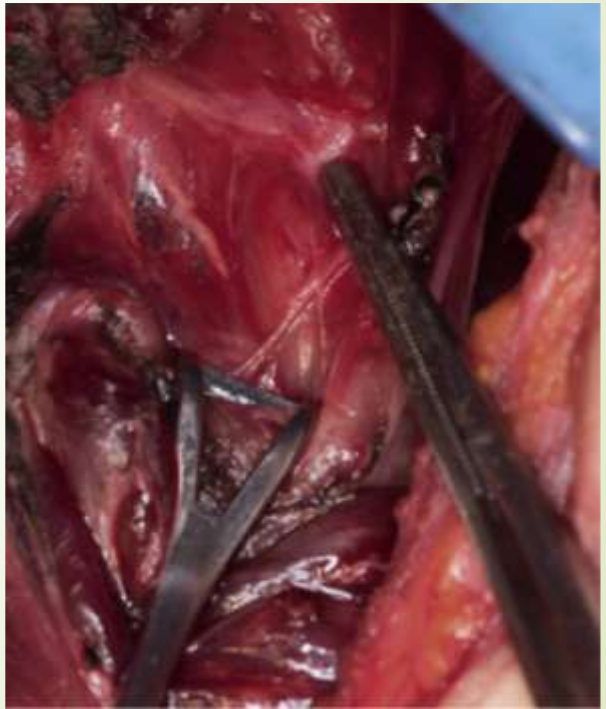
دکتر باقری حق

- The nerve enters the larynx between the arch of the cricoid cartilage and the inferior cornu of the thyroid cartilage.
- The nerve returns to the neck posterior to the carotid sheath and travels near the tracheoesophageal groove along a more medial course than the right RLN.
- The nerve crosses deep to the inferior thyroid artery approximately 70% of the time.

- A“nonrecurrent” laryngeal nerve may rarely occur on the right side and enters from a more lateral course.
- In almost all cases of a nonrecurrent laryngeal nerve, an aberrant retroesophageal subclavian artery (arteria lusoria) or other congenital malformation of the vascular rings is present.



- The SLN arises beneath the nodose ganglion of the upper vagus and descends medial to the carotid sheath.
- The nerve typically diverges from the superior thyroid vascular pedicle about 1 cm from the thyroid superior pole

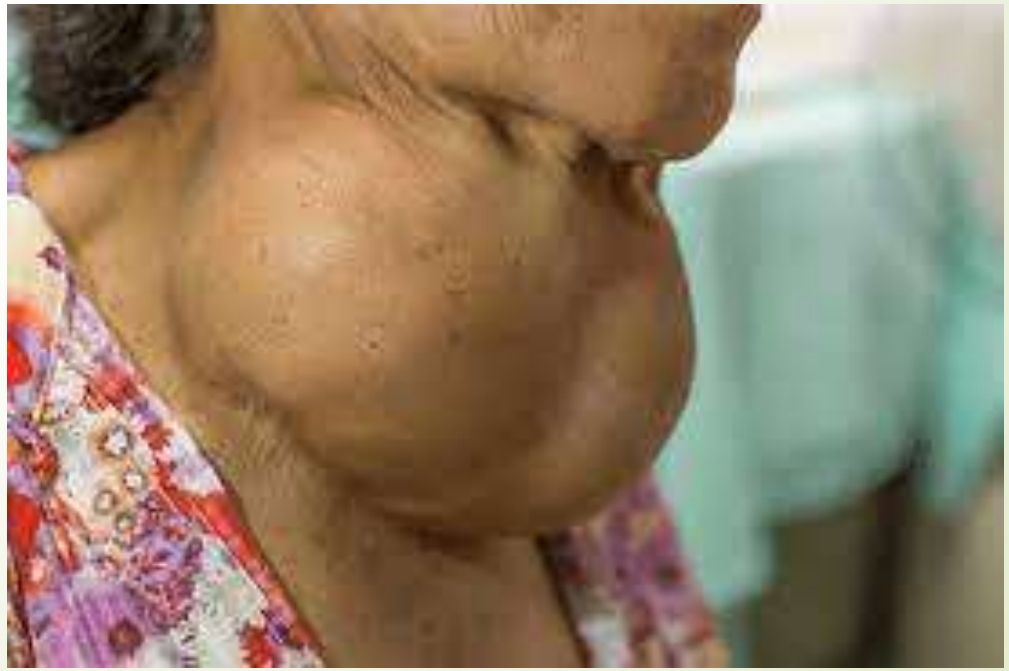


SLN

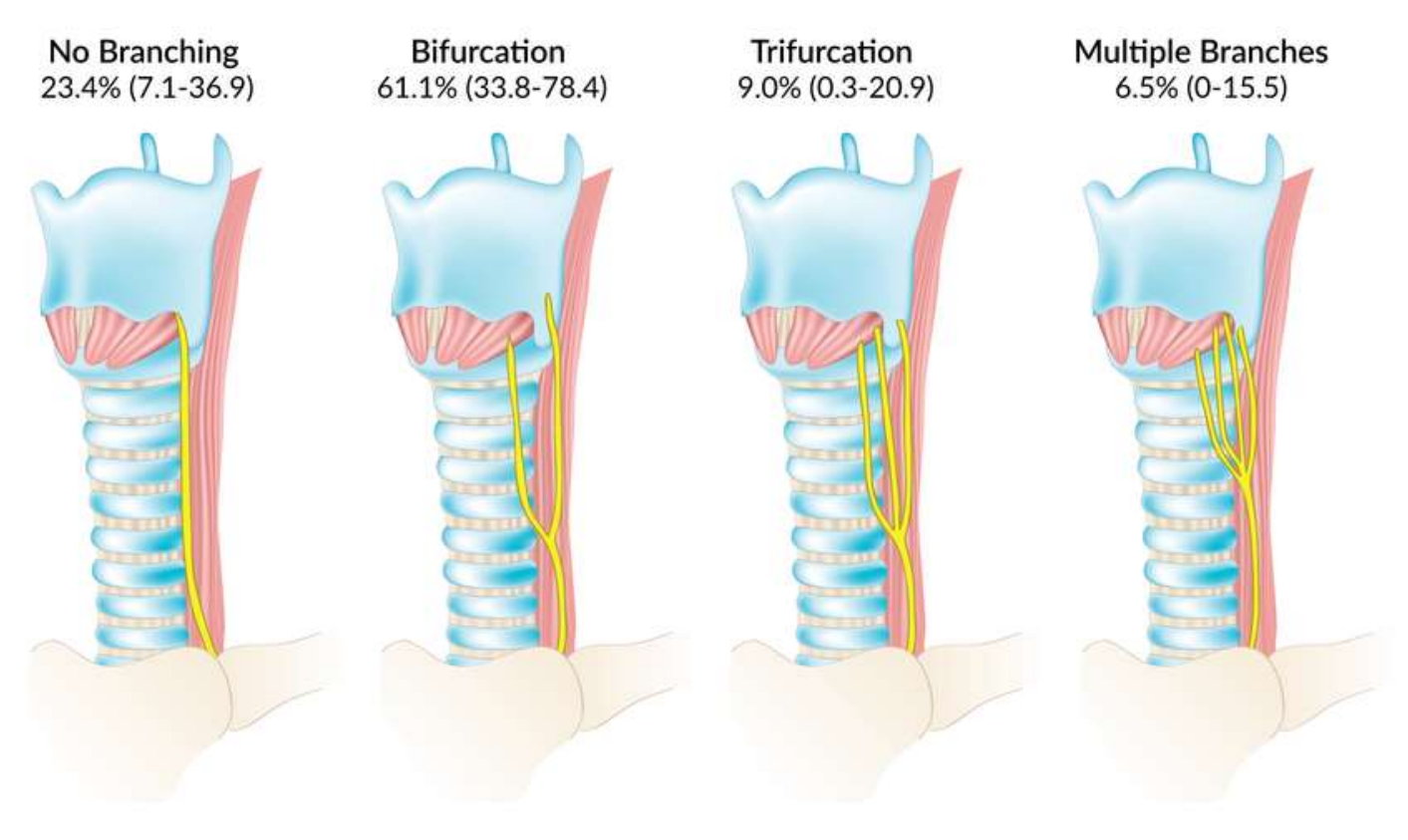
- The external branch extends medially along the inferior constrictor muscle to enter the cricothyroid muscle.
- retracting the thyroid inferomedially. This maneuver exposes **Joll's** triangle, which is bounded by the trachea, superior thyroid vessels, and the constrictor muscles of the pharynx.

- Identification of the RLN is often achieved through an inferolateral approach in a space defined by **Loré** and colleagues as the **retrolaryngeal** node triangle.
- This triangle is bounded by the trachea medially, the carotid sheath laterally, and the undersurface of the retracted inferior thyroid pole superiorly.

- large thyroid mass can potentially displace the nerve.
- Great care must be taken in these situations, and,identification of the nerve may require a **superior approach**, identifying the RLN at its entry into the larynx.



- The nerve may divide into multiple branches before entering the larynx.



RLN branching

- Extralaryngeal branching, if present, is typically within 2 cm of the inferior rim of the cricothyroid joint, with the over- whelming majority of anterior branches containing the motor fibers and posterior branches the sensory fibers.

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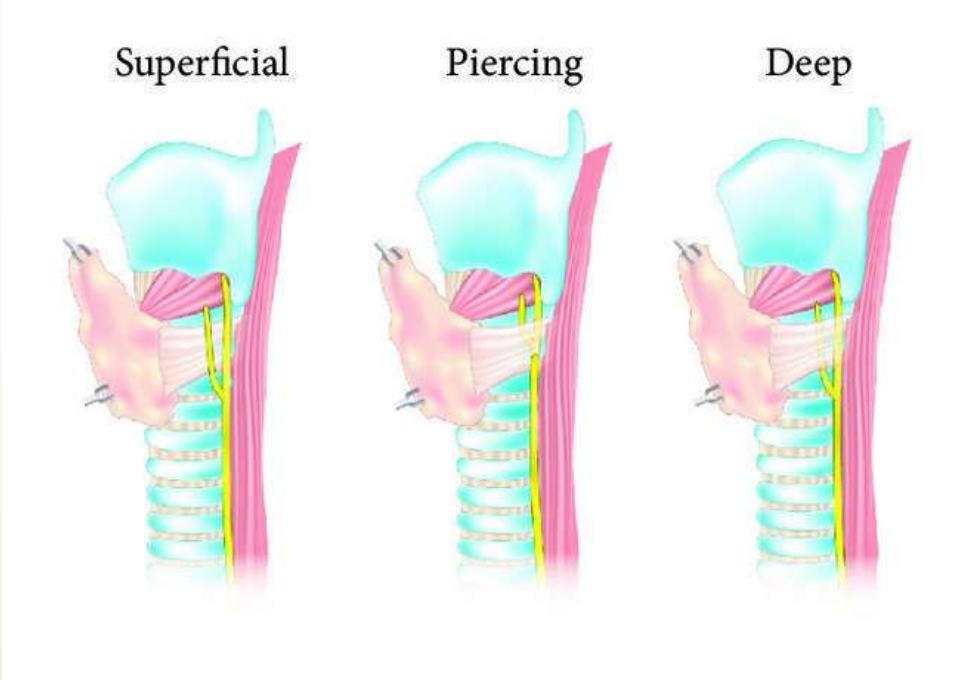
RLN and Berry lig

Review Article

The Reliability of the Tracheoesophageal Groove and the Ligament of Berry as Landmarks for Identifying the Recurrent Laryngeal Nerve: A Cadaveric Study and Meta-Analysis

- The most difficult portion of the operation is typically the dissection where the recurrent nerve passes immediately under or through Berry's ligament.



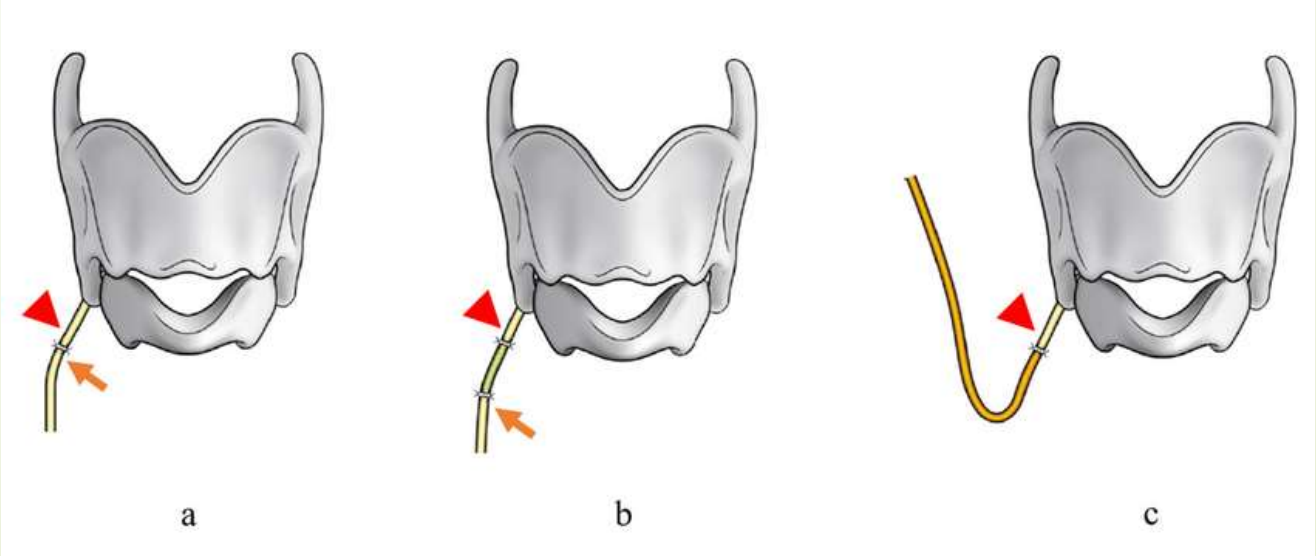
- A small portion of thyroid tissue may be embedded with the ligament and can account for a remnant of thyroid tissue left after total thyroidectomy.
- Although controversy exists regarding routine use of intraoperative RLN monitoring, most high-volume thyroid surgeons currently routinely use RLN monitoring.

- The nodes in the paratracheal region are intimately associated with the RLN, which must be clearly dissected and visualized during this procedure.
- In reoperative cases, the RLN may be more easily identified inferiorly in previously undissected areas, particularly in the low paratracheal area.

Recurrent Laryngeal Nerve Invasion

- If preoperative vocal cord paralysis is present, and carcinoma invasion is seen intraoperatively, the nerve may be sacrificed.
- More commonly, the RLN should be dissected free of gross extrathyroidal soft tissue disease, accepting the possibility of microscopic disease along the nerve.
- When the RLN is resected, immediate reinnervation should be performed if feasible either by primary repair, nerve graft, or ansa cervicalis transfer.

- Attempt should be made to re-anastomose the proximal and distal segments of the nerve, and if this not possible, the ansa cervicalis nerve can be anastomosed to the distal end of the recurrent laryngeal nerve as it enters the cricothyroid joint.



- Sacrifice of the RLN requires the exclusion of nerve infiltration by benign disease processes. Graves disease, Hashimoto thyroiditis, and Reidel thyroiditis can involve the RLN with or without vocal cord paralysis.
- Finally, lymphomas can involve the RLN, but treatment is rarely surgical and should not involve excision of the nerve.

Key points

- رویکرد محتاطانه در شوانوم واگ
- مسیر lazy S عصب ، دیسکسیون چسبیده
- گرفتاری با لیگامان بری؟
- ساب توتال های قدیم اغلب مشکل نیست
- اپروچ سه گانه به عصب؟؟؟