



**Fig. 7.2.** The plane of dissection is indicated by shaded area. (Illustration by Leon Sakuma.)

scopic coagulating shears (LCS Harmonic Scalpel, Johnson&Johnson Medical, Cincinnati, OH). The posterolateral portion of the thyroid gland is then retracted medially to dissect it from the surrounding tissue with endoscopic scissors or the ultrasonic scalpel. After this maneuver, the recurrent laryngeal nerve is usually seen crossing the inferior thyroid artery (Fig. 7.3). The perithyroid fascia is cut carefully to avoid injury to the nerve and the inferior parathyroid gland. Identification of the inferior thyroid artery and careful ligation of its branches close to the gland is an excellent means of preserving the nerve and the parathyroid glands. The recurrent laryngeal nerve is often accompanied by the inferior laryngeal artery, which gives off a small branch that crosses the nerve internally (Fig. 7.4). The recurrent laryngeal nerve may be mistaken for the inferior laryn-



**Fig. 7.3.** Identification of the inferior thyroid artery (ITA) and careful ligation of its branches close to the gland is an excellent means of preserving the recurrent laryngeal nerve (RLN) and the parathyroid glands.



**Fig. 7.4.** The recurrent laryngeal nerve (RLN) is accompanied by the inferior laryngeal artery (ILA), which is the terminal branch of the inferior thyroid artery and gives off a small branch that crosses the nerve medially. The recurrent laryngeal nerve may be mistaken for the inferior laryngeal artery.