Minimally Invasive Total Thyroidectomy Video

(0:05 - 0:51)

Hello, my name is Dr. James Lee, and today I'd like to show you the basic technique for removing the thyroid. When performing a minimally invasive total thyroidectomy, we will typically make an incision that is an inch to an inch and a half long, centred over the thyroid. However, the key is to place the incision in the natural skin line in order to act like camouflage, so that the incision blends right into the natural skin fold.

Once we've made our incision, we separate the muscles overlying the thyroid gland in order to expose the thyroid itself. At this point, we identify the isthmus of the thyroid, as well as a pyramidal lobe if it's present. We also look for any Delphian lymph nodes that may be in this area in order to remove them.

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We then separate the attachments above the thyroid and below the thyroid, including the inferior thyroid veins. Next, we divide the isthmus of the thyroid in order to roll the thyroid up and out of the neck. This allows us to use a much smaller incision than we might otherwise make.

The next step is to separate the muscles overlying the thyroid gland in order to expose the superior thyroid artery and vein, and these vessels are the major blood supply to the thyroid. We then free up the remaining attachments of the upper pole of the thyroid in order to safely divide the superior thyroid artery and vein. We then identify the middle thyroid vein, which is the major venous drainage of the thyroid gland, and divide it.

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This allows us to roll the thyroid up and out of the neck to expose the tubercle and the inferior thyroid artery. We then identify the inferior and superior parathyroid glands and preserve them. We then identify the recurrent laryngeal nerve, and this allows us to divide the inferior thyroid artery safely.

We then separate the remaining attachments of the thyroid, being careful to preserve the recurrent laryngeal nerve. We then repeat these steps on the other side to remove the other thyroid lobe. We then bring all the muscles back together using absorbable sutures that will disappear on their own, and then we close the skin incision with a stitch that will remove one to two hours after the operation, and this provides us the best cosmetic result possible.

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Please check back with us throughout the month for more information on the diagnosis and treatment of thyroid cancer. Thank you for joining us today.