

Revised Calgary lobectomy protocol: July 2017

Patients to consider offering lobectomy as an option to a total thyroidectomy should have all the following criteria:

1. Age below 55 years (age where new AJCC/TNM v. 8 staging changes).
2. No family history of thyroid cancer and no past radiation exposure.
3. Patient choice and ability to understand nuances, risks and benefits of a new practice. The information discussed with the patient should include a discussion about surgical complications of a total thyroidectomy (RLN injury and hypoparathyroidism).
4. The patient must be prepared for the possibility that he or she may have to undergo a completion thyroidectomy particularly when the final surgical pathology reveals features suggesting an intermediate or high risk of recurrence. The current paucity of long term surveillance data for lobectomy in PTC > 1 cm should be outlined and discussed with the patient.
5. Patient realization that lifelong post-op L-thyroxine treatment may still be needed.
6. A solitary lesion biopsy proven to show malignant cells consistent with papillary thyroid cancer (Bethesda VI).
7. Papillary thyroid cancer Size: 1-4 cm without extra-thyroidal extension or clinical evidence of lymph node metastasis.
8. Contralateral lobe is ideally free of nodules on ultrasound. If any nodules in contralateral lobe, evaluate US malignancy risk characteristics, consider FNAB or change to total thyroidectomy.

Post-lobectomy evaluation:

1. Detailed review of surgical pathology report (second opinion by thyroid pathology group prn) and intra-operative findings.
2. Patient must meet all the criteria post-op to classify as ATA Low risk of recurrence. Patients who are classified as ATA Intermediate or ATA High risk of recurrence should have a completion thyroidectomy to allow the possibility for treatment with radioactive iodine, when indicated.
3. Patients who have persistent high titer anti-Tg antibodies may merit consideration for a completion thyroidectomy only if the clinician feels that the ability to do nuclear medicine imaging or radioiodine treatment may provide better follow-up care or reassurance for the patient.

Surveillance recommendations post-lobectomy:

1. Target TSH 0.2-2.0 treating with L-thyroxine, if necessary.
2. Measure serum thyroglobulin (Tg) and anti-thyroglobulin antibodies at 6-8 weeks post-op.
3. Detailed thyroid/neck ultrasound at 6-12 months post-op.
4. TSH, Tg, anti-Tg antibodies at 6-12 months post-op.
5. At 6-12 months post-op: Apply dynamic re-staging using the response to therapy criteria.