

To: Family Physicians Caring for Adults with Differentiated Thyroid Cancer



Adults with differentiated thyroid cancer typically have a very good clinical outcome, but there is a risk of late recurrence and death which mandates lifelong follow up. Since thyroid cancer is typically an indolent tumour, recurrences may not manifest for many years (or even decades) after initial diagnosis and treatment. Your patient is felt to be at relatively low risk for future problems related to thyroid cancer and is now being discharged back to your care for continued management and follow up.

The following is generally considered a typical follow up plan:

1. Careful re-examination of the neck at least once per year.

Rationale: Lymphadenopathy may herald a local/regional recurrence, and is the most common site for recurrence (followed by lung).

2. Annual reassessment of serum TSH for adjustment of thyroid hormone replacement. Serum TSH should be below the normal range.

Rationale: TSH suppression is believed to reduce the risk of recurrence. The L-thyroxine dose should be adjusted to keep the serum TSH below the normal range and a target TSH of about 0.1 mU/L is appropriate for most low risk adults.

There may be a slight increase in the risk of cardiac dysrhythmias (esp. atrial fibrillation) and osteoporosis in older adults. Free T4 is not helpful in assessing thyroid hormone replacement. Serum TSH should be re-checked 3 months after a change in L-thyroxine dose.

3. Annual measurement of serum thyroglobulin.

Rationale: Serum thyroglobulin (*not to be confused with thyroglobulin antibody*) is a highly specific biochemical marker for differentiated thyroid cancer. This test is only run at the St. Boniface General Hospital and may require special arrangement with your clinic laboratory. In patients without tumour recurrence who have undergone previous thyroid surgery and ablation of thyroid remnant the serum thyroglobulin measurement should be virtually undetectable (always less than 5 µg/L and usually less than 0.8 µg/L). Increasing values are a harbinger of recurrence and require re-evaluation, especially if the simultaneous TSH shows adequate suppression (see 2 above).

4. Routine imaging is usually unnecessary.

Rationale: Serum thyroglobulin is virtually always elevated when there is gross tumour recurrence detectable with imaging. The serum thyroglobulin is less sensitive for isolated neck recurrence when patients are on suppressive thyroid hormone, and this underscores the importance of the neck examination.

If these investigations suggest possible recurrence, or if you have any other concerns, then do not hesitate to refer your patient back to CancerCare Manitoba for reassessment.