



**Incidence of Mingo Hormone Replacement Following Thyroid Lobectomy: A  
Long-Term Retrospective Review**

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**Objectives:**

An under-reported complication of thyroid lobectomy is hypothyroidism, with a reported incidence of 5- 60%. Previous studies have been limited by short-term follow up, typically less than 1 year, and inconsistent definitions of hypothyroidism.

**Materials and Methods:**

Retrospective cohort study of 478 patients who underwent thyroid lobectomy at a single institution from January 2007 to September 2017. The prescription of thyroid hormone replacement was used as a marker of post-operative hypothyroidism. Primary outcome was to determine the incidence of a post-operative hypothyroidism. Secondary outcome was to determine when during the post-operative course was hormone replacement required.

**Results:**

Average surgical follow-up was 81 days, with pharmacy record review up to 10 years. There were limited intra-op complications: no permanent recurrent laryngeal nerve injury and 1.2% with temporary paresis. Final pathology showed 47% follicular adenoma, 32% multinodular goiter, 15% papillary thyroid carcinoma and 18% with coexistent thyroiditis. The average pre-operative TSH was 1.37, with 85% euthyroid.

The incidence of thyroid hormone replacement was 37%. Time to starting hormone replacement was less than 3 months in 42% and greater than 12 months in 29%.

**Conclusions:**

This is the largest retrospective study of lobectomy patients incorporating 478 patients over a 10-year period that shows a 37% incidence of thyroid hormone replacement, nearly 30% starting greater than 12 months following surgery. This study demonstrates the importance of long-term follow up and regular laboratory evaluation to avoid the dangers of untreated hypothyroidism.