

**EVALUATION OF DIFFERENT VARIABLES AFFECTING
THE DEVELOPMENT OF HYPOCALCEMIA AFTER
TOTAL THYROIDECTOMY**

By

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ABSTRACT

Background: Hypocalcemia persists as the most common complication after total thyroidectomy. Studies have identified risk factors and possible helpful ways to predict post-thyroidectomy hypocalcemia with the intent of ultimately limiting its incidence.

Aim of the study: The aims of this study were to determine the incidence of hypocalcemia after total thyroidectomies in our institution and to evaluate the role played by the age, sex and diagnosis in the development of this complication.

Patients and methods: Between April 2014 and August 2014, thirty patients fulfilling our eligibility criteria with formal surgical indications underwent total thyroidectomies with selective ligation of the branches of the inferior thyroid arteries by experienced surgeons. Postoperative SiCa level was measured after 24 and 48h after surgery.

Results: Our study included 30 cases with age range from 22 to 49 years old (Mean 34 ± 8.1 years). The range of postoperative hospital stay was from 2 to 5 days (Mean 2.4 ± 0.8 days). The total incidence of hypocalcemia was 36.6% (11 cases), 26.6% asymptomatic (8 cases), 10% symptomatic (3 cases), 33.3% transient (10 cases) and 3.3% permanent (one case).

Conclusion: Sex, age group from 20 to 50 years old, simple and toxic nodular diagnoses have no effect on our incidence of post-thyroidectomy hypocalcemia that was 36.6%, however their effect was clear on the severity of this developed complication.

Key words:

Total thyroidectomy, Hypocalcemia, Age, Sex, Diagnosis.