

Evaluation of Age, Sex and Diagnosis as Predictors of Hypocalcemia after Total Thyroidectomy.

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Abstract

Hypocalcemia is 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. 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 the preoperative diagnosis in the development of this complication. Between February 2013 and August 2014, 120 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. Our study included 120 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% (44 cases), 26.6% asymptomatic (32 cases), 10% symptomatic (12 cases), 33.3% transient (40 cases) and 3.3% permanent (four cases). 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.