Incidental Thyroid Carcinoma in Patients Presumably Operated for Benign Thyroid Diseases

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Objective: To evaluate the prevalence and histological features of incidental thyroid carcinoma (ITC) in patients operated for benign thyroid diseases.

Design: A Retrospective Study.

Setting: Salmaniya Medical Complex, Bahrain.

Method: All thyroidectomy operations in patients older than 13 performed from 1 January 2017 to 31 December 2019 were reviewed. The following were documented: patient sex, age, operating theatre entries, clinical presentation, thyroid function test, serum calcitonin, laryngoscopy, fine needle aspiration cytology (FNAC), ultrasonography, and histopathology. The operations included total thyroidectomy, subtotal thyroidectomy and lobectomy. A chest and neck X-rays were performed in all patients either affected by respiratory diseases or with mediastinal goiter or compression effect. A swallow X-ray was reserved for patients with dysphagia and dyspnea due to compression.

Result: One hundred forty-four patients were included in the study; 73 (50.7%) had FNAC and revealed benign disease without suspicion of malignancy. Seven (9.6%) patients had incidental carcinomas in patients diagnosed as a benign disease with FNAC, P-value=0.192. Papillary carcinoma was the most common ITC.

Conclusion: The risk of undetected malignancy in patients who underwent evaluation of thyroid gland nodules for benign diseases was 9.6%. The most common histological subtype was papillary carcinoma (microcarcinomas). FNAC needs to be performed under ultrasound guidance, taking into consideration that multiple aspirations may be required. Treatment of benign thyroid disorders with total thyroidectomy when indicated may lead to detection and definitive cure of ITC.

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