Chirurgia (Bucur). 2014;109(2):191-197

Occult Thyroid Carcinoma in Our Experience - Should We Reconsider Total Thyroidectomy for Benign Thyroid Pathology?

L. Alecu[1], M. Bărbulescu[1], B. Ursuț[1], O. Enciu[2], I. Slavu[2], V. Braga[2]
[1]General Surgery Department, "Prof. Dr. Agrippa Ionescu" Clinical Emergency Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Abstract

Background: The reported incidence rate of occult thyroid carcinoma in patients operated for benign thyroid pathology has been much higher than expected in the last years, especially for multinodular goitre, which raises the question about which should the proper surgical management for these cases be.

Aim: To assess the incidence rate of OTC in a single medium volume surgical center and to establish the correct indication for initial surgical management, as well as to identify the benign thyroid pathology most frequently associated with OTC. We also reviewed the relevant scientific literature on this topic.

Material and Method: We conducted a retrospective study in the General Surgery Clinic of "Prof. dr. Agrippa Ionescu" Clinical Emergency Hospital, Bucharest, on a series of 145 patients who underwent surgical interventions for preoperatively diagnosed benign thyroid pathology over a ten year period, between 1st January 2002 – 31st December 2012. All cases of known thyroid cancer were excluded.

Results: Incidence rate of occult thyroid carcinoma in our series was 6.9 % (10 out of 145 patients), 80 % of them being diagnosed with multinodular goitre and two cases (20 %) with Hashimoto's lymphocytic thyroiditis. 6.8 % of all patients with multinodular goitre were found to present occult carcinoma, but this association was without statistical significance ($p>0.05$). Incidence rate of occult cancer among patients with Hashimoto thyroiditis was proved to be as high as 28.6%, statistically significant ($p=0.020$). The mean size of postoperatively diagnosed occult microcarcinoma was 7 mm, ranging between 3 mm and 14 mm, 90% of them being smaller than 1 cm. Histologically, papillary microcarcinoma was found in all cases. The mean age of the patients diagnosed with occult microcarcinoma was 47.8 years with majority of the female gender. The most frequent operation performed was total thyroidectomy (70.8%). Overall morbidity in our series was 6.9% with a 0.7 % mortality rate (1 case).

Conclusions: In our opinion, primary total thyroidectomy should be performed as the procedure of choice for the most part of preoperatively diagnosed benign thyroid pathology and particularly for multinodular goitre and Hashimoto thyroiditis, in order to radically resect all possible foci of aggressive thyroid microcarcinomas

Abbreviations and Acronyms: OTC (Occult Thyroid Carcinoma), PTMC (Papillary Thyroid Microcarcinoma); TT (Total Thyroidectomy), MNG (Multinodular Goitre), GD (Graves' disease), TNG (Toxic Nodular Goitre), FNAB (fine-needle aspiration biopsy).

Key words: occult thyroid carcinoma, total thyroidectomy, papillary microcarcinoma

Corresponding author: Lucian Alecu, MD, PhD
"Prof. dr. Agrippa Ionescu" Clinical Emergency Hospital
General Surgery Clinic
Arh. Ion Mincu no. 7 Street, Sector 1, Bucharest, Romania
E-mail: lucianalecu@yahoo.com