LETTERS TO THE EDITOR

Comments on "Incidental versus non-incidental thyroid carcinoma: Clinical presentation, surgical management and prognosis"*

Sir,

We would like to comment upon the interesting article published by González-Sánchez-Migallón et al., reporting 1415 thyroid surgery patients in which 264 neoplasms were identified, including 170 incidental tumors. These incidental carcinomas were in their early stages and required less aggressive surgery. Although the mortality and relapse rates were clearly higher in the non-incidental tumor group (4.4% versus 0% and 13.2% versus 4.8%, respectively), there were no differences in surgical complications between the two groups. There were no differences either in terms of complications, mortality or relapse following surgery between carcinomas related to Graves' disease and all other incidental tumors. This led the authors to state that "these findings suggest the importance of the early diagnosis of thyroid cancer". Although the relapse and mortality rates would justify more radical surgery for clinically manifest tumors and cases with regional adenopathies at diagnosis, we think that there is evidence in the recent literature against the implementation of campaigns for the early detection of thyroid cancer.

Firstly, it is generally accepted that the great majority of incidental thyroid cancers are papillary microcarcinomas (1 cm or less in maximum diameter), with an excellent clinical behavior in the absence of increased markers of aggressiveness, even in patients without treatment or in those undergoing partial thyroidectomy. In fact, due to the poor clinical relevance of these tumors, and in order to avoid the risk of overtreatment, minimize patient anxiety caused by the diagnosis of cancer, and maintain the patient's options for life insurance, some experts have proposed the term "papillary microtumor" for papillary microcarcinomas with lesser clinical risk. These papillary microtumors are incidental, single papillary microcarcinomas diagnosed in patients over 19 years of age, and which do not exhibit histological risk features such as thyroid capsule infiltration, vascular invasion and/or an aggressive histological subtype, i.e., tall cell variant, columnar cell variant or hobnail variant. The value of this so-called "Porto proposal" has been confirmed in other series.

A study by our group of 1628 patients who underwent thyroid surgery from January 2000 to June 2008 at the Santiago de Compostela University Hospital Complex (Spain) revealed 418 thyroid cancers (25.67%), of which 306 were papillary carcinomas (73.2%) and 191 were papillary microcarcinomas (45.7%). A comparison of patients with papillary microcarcinomas with the subgroup meeting the criteria of the Porto proposal found nodal metastases in 14/191 (7.32%) patients with papillary microcarcinomas, distant metastases spread in 2/191 (1.04%), and death from thyroid carcinoma in 2/190 patients (1.05%). By contrast, the subgroup of 103 papillary microtumors of the same series showed no recurrences, metastases, or thyroid cancer-related deaths after 48–146 months of follow-up (mean 83.6 months, median 78 months). Our data warrant a conservative approach to thyroid papillary microcarcinoma in the absence of risk elements, and confirm the validity of the Porto proposal.

Due to the lack of mortality associated with intrathyroidal papillary microcarcinoma when diagnosed in the absence of nodal and distant metastases, recent studies suggest active follow-up instead of surgery for selected cases. Thus, the current clinical practice guidelines for the management of differentiated thyroid cancer tend to endorse more conservative approaches, and even suggest thyroid lobectomy as a valid alternative for tumors less than 4 cm in diameter and without risk factors (the abovementioned histological variants or clinical evidence of extrathyroidal involvement or neck adenopathies). This procedure is considered the treatment of choice for most papillary microcarcinomas. Furthermore, since thyroid cancer screening detects papillary carcinomas that are not associated with mortality, the result would be to convert hundreds of asymptomatic subjects into cancer patients requiring careful follow-up with no evident advantages. Recently, in South Korea, the early detection of thyroid cancer caused the thyroid cancer

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diagnosis rate to increase 15-fold, but despite this dramatic increase in incidence, the mortality figures remained stable. An additional consequence was that approximately two-thirds of the patients underwent total thyroidectomy and one third subtotal thyroidectomy, with a resulting 11% incidence of hypoparathyroidism and a 2% incidence of vocal cord paralysis. The experience in South Korea therefore provides clear evidence advising against the early detection of thyroid cancer.

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References