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Can we really consider tumor size and surgical extent as predictive factors for recurrence in clinically early-stage papillary thyroid carcinoma patients?

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Dear Editor-in-chief

I read with a high interest the article written by Kim and colleagues entitled "Recurrence in patients with clinically early-stage papillary thyroid carcinoma according to tumor size and surgical extent" which was recently published in your valuable journal (1). The authors concluded that a tumor size of 4 cm or less in patients with PTC is a predictive factor for post treatment recurrence and that lobectomy may be feasible in clinically early-stage PTC because it has no undesired effects on survival. They have conducted a valuable study with a large sample volume which has addressed a challenging issue in thyroid cancer treatment. However, I would like to make a few points about their job. First of all, authors did not point the advantage of lobectomy in PTC patients and its superiority upon total thyroidectomy. Is it really costbeneficial for these patients? Furthermore, authors mentioned that they have measured tumor sizes from surgical specimens; while this may not be an appropriate source because not all the specimens represent the main tumor size and there may be some margins remained. It seems that imaging report would have been a better scale for tumor size. In addition, the authors reported that some patients underwent central lymph node dissection (CLND) and others did not when the tumor was lesser than 5mm or cytology results were not determined; provided that cytology does not have a100% sensitivity and specificity. The results should be confirmed by pathology as the gold standard and be matched with ultrasound characteristics of nodules to see whether malignancy is present or not (2). So some cases may not be PTC patients which have impacts on the recurrence and survival rates in the present study. On the other hand it has been shown that prophylactic (CLND) upstages at least one third of the patients with PTC; so assessment of the extracted lymph nodes may have resulted in exclusion of more patients for Kim et al. study (3). In the results authors have reported 21 out of 25 patients with recurrence to have central or lateral nodal recurrences which are surely among those without CLND; thus there is no possibility for evaluating the CLND effect on the recurrence rate in the present study. Finally there is an important diversity and difference in study population in terms of tumor size and treatment options which is due to retrospective nature of the study. These differences make the conclusion ungeneralizable and it needs to be confirmed by prospective studies with more concise eligibility criteria. In conclusion I appreciate the valuable effort of the authors, however I am wondering if I can kindly ask them to interpret better my concerns.

Keywords: Papillary thyroid carcinoma; Surgery; Recurrence; Tumor size

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Reference:

- 1. Kim JW, Roh J-L, Gong G, Cho K-J, Choi S-H, Nam SY, et al. Recurrence in patients with clinically early-stage papillary thyroid carcinoma according to tumor size and surgical extent. The American Journal of Surgery. 2016.
- 2. Akhavan A, Jafari SM, Khosravi MH, Khajehpour H, Karimi-Sari H. Reliability of fine-needle aspiration and ultrasound-based characteristics of thyroid nodules for diagnosing malignancy in Iranian patients. Diagnostic Cytopathology. 2016.
- 3. Hughes DT, White ML, Miller BS, Gauger PG, Burney RE, Doherty GM. Influence of prophylactic central lymph node dissection on postoperative thyroglobulin levels and radioiodine treatment in papillary thyroid cancer. Surgery. 2010;148(6):1100-7.