Peer Review File

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Reviewer A

The authors reviewed 403 PTC patients who underwent total thyroidectomy (TT) or thyroid lobectomy (TL) from 2000-2010. They found obesity to be associated with multifocality. However, the authors did not find obesity to be associated ejtn recurrence, tumor size, multifocality, ETE, CLN mets, or multifocalitu on multivariate analysis.
This is a very straight-forward study that is easy to follow.

Comment 1: Discussion: Remove lines 143, 159, 161-162, and 182. It is appropriate to summarize the existing literature but please explain how your study differs from the others and adds to the existing literature.
Reply 1: Thank you for kindness. We removed the above lines. And we added what you pointed out.
Change in the text: page 11~12, line 204~222.

Reviewer B

In this retrospective study authors explore the potential role of obesity as a risk factor for recurrence of papillary thyroid carcinoma.
The study has some importance as this subject has not a definitive answer. However, the contribution, due to the retrospective nature of the study and the number of patients, is minor.
The study has an important shortcoming that must be modified.

Comment 1: Namely, that nowadays obesity, according to WHO criteria, cannot be defined as BMNI equal or above 25 kg/m2. I suggest the authors to re-calculate their results applying current criteria for obesity (BMI equal or above 30) vs. non-obesity (BMI<30). Otherwise they could change the focus of their study to the comparison between normal weight and the “overweight or obesity” group and change the title accordingly.
Reply 1: Thank you for your kindness. We changed from “obesity” to “overweight or obesity,” including the title. And we added the contents of the definition of obesity.
Change in the text: page 1, line 2~3, page 3, line 65~73.

Comment 2: Additionally, as the association of “overweight or obesity” with recurrence in the univariate analysis seems to be driven by a gender disproportion, I think they should discuss more the role of male sex as a driver of poor prognosis.
Reply 2: Thank you for your kindness. We added the role of male sex.
Change in the text: page 11, line 210~215.

Comment 3: Another element of discussion is the inclusion of glucose and cholesterol concentrations in the analysis. I assume this is an attempt to include some variables related to insulin-resistance which has been advocated a risk factor for thyroid cancer.

In this sense, as if that was the intention, it would be interesting to add the triglyceride concentration to the analysis. Also they should discuss why these variables have been added to the analysis.
Reply 3: I appreciate your kindness. We added the contents of insulin resistance. However, we had no laboratory results of triglyceride level. So we did not add these data.
Change in the text: page 11~12, line 215~222.

Minor changes.
Comment 4: Line 115: Compared with patients with non-obese group, obese group demonstrated (...) higher solitary PTC (P = 0.006) does not fit with data in Table 1 (i.e. higher rate of solitary nodule in non-obese).
Reply 4: Thank you for your kindness. We revised what you pointed out.
Change in the text: page 7, line 132.

Comment 5: Table 2: c & d superscripts do not have the corresponding footnote.
Reply 5: Thank you for your kindness. We deleted c & d.
Change in the text: Table 2.

Comment 6: Paragraph in line 192 seems out of place as it looks like a repetition, with different wording, of paragraph in line 182, please re-write the section between lines 182 and 195 for better understanding.
Reply 6: Thank you for your kindness. We deleted repetition and revised the paragraph.
Change in the text: page 11, line 204~209.

Comment 7: General comments
The English writing needs to be considerable improved. I suggest using a professional writing service.
Reply 7: Thank you for your kindness. We revised the manuscript through our professional writing service.