Intention to treat versus per protocol analysis in “Randomized trial of prophylactic ipsilateral central lymph node dissection in patients with clinically node negative papillary thyroid microcarcinoma”

Akshay Vijayakumar¹ · Kirubakaran Kothandaraman¹ · Sourabha Kumar Patro¹

Received: 8 October 2021 / Accepted: 15 October 2021 / Published online: 27 October 2021
© The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2021

Dear Editor,

We have read the published manuscript “Randomized trial of prophylactic ipsilateral central lymph node dissection in patients with clinically node negative papillary thyroid microcarcinoma” published in your journal with <https://doi.org/10.1007/s00405-019-05702-3>.

The manuscript describes that an intention to treat type of analysis for the study. However, the CONSORT chart depicts that the patients who were lost to follow up were removed from the analysis [1]. As per the standard practice in intention to treat analysis, all patients who are randomized are analyzed at the end of the study which is classically described as “once randomized, always analyzed” [2]. A per protocol analysis has been actually done in the study, which excludes the lost to follow up patients for analysis. Intention to treat analysis is a superior analysis [3] to that of the per protocol analysis that has been actually done in the study. Hence, the manuscript of the article is misleading as the patients who were lost to follow up had been excluded from analysis by the authors; and the CONSORT chart depicts contrasting information to what has actually been done in the study.

Similarly, the significant levels of thyroglobulin (Tg) levels in the CND (–) group, the incidence of significant presence of positive lymph nodes in the pathological specimen of the patients in the CND (+) group, and evidences in the literature regarding detection of metastatic lymph

nodes of significant numbers and percentage in specimens of CND performed for early stage papillary carcinoma thyroid patients does raise concerns regarding the possibility of leaving behind gross disease in papillary thyroid cancers [4].

We would like to opine that formulation of clinical guidelines is a long way to go in terms of the need for CND for papillary thyroid micro carcinomas. The results of this manuscript should be taken with caution in clinical management.

References

1. Kim BY, Choi N, Kim SW, Jeong HS, Chung MK, Son YI (2020) Randomized trial of prophylactic ipsilateral central lymph node dissection in patients with clinically node negative papillary thyroid microcarcinoma. *Eur Arch Otorhinolaryngol* 277(2):569–576
2. Tripepi G, Chesnaye NC, Dekker FW, Zoccali C, Jager KJ (2020) Intention to treat and per protocol analysis in clinical trials. *Nephrology (Carlton)* 25(7):513–517
3. Weiss A, Beck-Fruchter R, Nothman S, Baram S, Geslevich Y (2020) Intention to treat analysis versus per-protocol analysis. *Hum Reprod* 35(11):2635–2636
4. Yuan J, Li J, Chen X, Lin X, Du J, Zhao G, Chen Z, Wu Z (2017) Identification of risk factors of central lymph node metastasis and evaluation of the effect of prophylactic central neck dissection on migration of staging and risk stratification in patients with clinically node-negative papillary thyroid microcarcinoma. *Bull Cancer* 104(6):516–523

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This comment refers to the article available online at <https://doi.org/10.1007/s00405-019-05702-3>.

✉ Sourabha Kumar Patro
sourabhlipi@gmail.com

¹ Department of Otolaryngology and Head and Neck Surgery, Postgraduate Institute of Medical Education and Research, PGIMER, Sector 12, Chandigarh 160012, India