



Papillary thyroid carcinoma of isthmus: total thyroidectomy or isthmusectomy?

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Papillary thyroid carcinoma (PTC) is the most common malignant tumor originated from thyroid follicular epithelial cells. PTC is mostly located in the thyroid gland lobe. According to relevant literature, the incidence rate of thyroid isthmus papillary carcinoma is 2.5–12.3% (1). Compared to those located in the glandular lobe, papillary carcinoma of the isthmus of the thyroid has a higher probability of extraglandular infiltration, multifocal tumor, and lymph node metastasis due to different anatomical locations (2). The treatment plan for papillary carcinoma of the isthmus of the thyroid is still controversial, with the core of the controversy being the scope of surgical resection of the thyroid and whether preventive central lymph node dissection should be performed. Some scholars advocate for simple isthmus resection, preserving bilateral glands without the need for preventive lymph node dissection; some scholars advocate for total thyroidectomy and preventive central lymph node dissection.

Recently, Gong and his colleagues performed a meta-analysis to compare the recurrence rate and incidence of complications between total thyroidectomy and subtotal thyroidectomy for PTC of isthmus (PTCI) (3), which has been published in *Gland Surgery*. Gong *et al.*'s research found no significant difference between the two surgical methods. After careful reading, we found that some issues may have an impact on the conclusion.

Firstly, the inclusion criteria proposed in the article are that both the control group and the experimental group have more than ten people. In *Tab. 1*, we found that

reference 23 (4) only has six people in the control group, which does not meet the inclusion criteria specified in the article.

Secondly, reference 23 (4) was published in 1993, and the inclusion criteria proposed in the article require case selection to meet the criteria of the 2015 American Thyroid Association (ATA) guidelines for indications for surgical treatment of differentiated thyroid cancer; this poses a conflict in terms of timing.

Thirdly, the inclusion criteria proposed in the article state that studies with a follow-up period of more than 2 years are required to be included. However, the original reference 22 (5) mentioned a follow-up period of 2–54 months, indicating that some patients did not meet the criteria for a follow-up period of more than 2 years. If reference 22 (5) needs to be included, it is recommended to remove the inclusion criterion of follow-up period of 2 years or more.

At present, a consensus has been reached on performing total thyroidectomy combined with central lymph node dissection for patients with preoperative detection of central lymph node metastasis. However, there is still controversy over whether prophylactic central lymph node dissection should be performed for papillary carcinoma of the isthmus without lymph node metastasis in preoperative imaging examinations. One drawback of this meta-analysis is the lack of subgroup analysis on whether total or partial thyroidectomy is combined with neck lymph node dissection.

In conclusion, Gong *et al.* performed an excellent study to explore the therapeutic effects of total thyroidectomy and partial thyroidectomy on PTCl. The authors' contribution to this study is appreciated. In our opinion, additional high-quality studies are needed to further confirm the conclusions.

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Footnote

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