

Transoral Endoscopic Thyroidectomy with Central Neck Dissection

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To the Editor: We have read with interest the article reported by Guo *et al.*,^[1] who performed a transoral thyroidectomy with central neck dissection on human cadavers by using a sublingual combined bilateral vestibular access. Interestingly, the described technique is identical to our approach that we published as a video paper in 2009.^[2] Although we could demonstrate the surgical feasibility of a total transoral thyroidectomy as early as 2008, we still had concerns about its clinical application, e.g., floor of mouth and specimen volume, manipulation of instruments, visualization of the recurrent laryngeal nerve, and risk of mental nerve lesion by the lateral vestibulum trocar. Therefore, we decided not to proceed to clinical application before further preclinical investigation results were available. One group did not share our view and applied this technique on eight human beings where they encountered above cited concerns resulting in severe complications, such as paresthesia of the mental nerve (6/8 patients), conversion to open surgery due to specimen size (3/8 patients), palsy of the recurrent laryngeal nerve (2/8 patients; one permanent) and local streptococci infection at the vestibular incision site necessitating surgical revision.^[3] These serious adverse events finally forced this group to stop their clinical study. Another group recently published the results of their pilot study on 5 patients with primary hyperparathyroidism who underwent a transoral parathyroidectomy.^[4] In two patients, the procedure had to be converted to the conventional technique. One patient had transient recurrent laryngeal nerve palsy, while one patient suffered from a transient palsy of the right hypoglossal nerve with persisting dysgeusia. Three patients developed swallowing problems. In four patients, the visual analog scale pain score was

high. Also here, the authors terminated their study because of the high complication rate.

Despite these clinical drawbacks, mainly due to a hasty clinical application, we encourage innovative working groups like Guo *et al.* to continue investigating this new promising approach before commencing further human trials that has tremendous implications regarding expectations, surgeon responsibility and most importantly, patient safety.^[5] We should always keep in mind that we are dealing with the highly standardized thyroid surgery where morbidity is below 4%.

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Access this article online

Quick Response Code:



Website:
www.cmj.org

DOI:
10.4103/0366-6999.159366

Received: 07-03-2015 **Edited by:** Xin Chen

How to cite this article: Benhidjeb T. Transoral Endoscopic Thyroidectomy with Central Neck Dissection. *Chin Med J* 2015;128:1838.

Source of Support: Nil. **Conflict of Interest:** None declared.