

Editorial

# Controversies in Thyroid Surgery: Debating Transoral Endoscopic Thyroidectomy versus Small Incision Thyroidectomy

Zuhair Dahham Hammood

*General, laparoscopic and Oncosurgery, Tikrit Teaching Hospital, Saladin, Iraq**\* Corresponding author: [Zuhairdh86@gmail.com](mailto:Zuhairdh86@gmail.com) (Z. D. Hammood). General, laparoscopic and Oncosurgery, Tikrit Teaching Hospital, Saladin, Iraq*Received: April 1, 2024  
Revised: April 8, 2024  
Accepted: April 13, 2024  
First Published: April 15, 2024

Copyright: © 2024 Hammood. This is an open access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Citation: Hammood ZD. Controversies in Thyroid Surgery: Debating Transoral Endoscopic Thyroidectomy versus Small Incision Thyroidectomy. Barw Medical Journal. 2024;2(3):1-2.  
<https://doi.org/10.58742/bmj.v2i2.86>

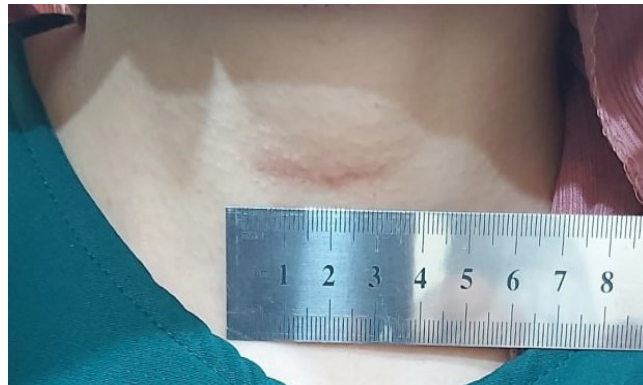
In the ever-evolving landscape of thyroid surgery, one cannot ignore the ongoing debate surrounding the optimal approach for thyroidectomy. Minimally invasive thyroidectomy techniques have been developed. However, there is currently no single accepted technique in minimally invasive thyroidectomy (MIT) [1]. Proponents of transoral endoscopic thyroidectomy via vestibular approach (TOETVA) advocate for its minimally invasive nature and favorable cosmetic outcomes [2]. Experienced thyroid surgeons performing thyroidectomy with an anterior incision, shortening the classic Kocher incision by 2-3 cm without the need for additional complex instruments with simple preparation and minimal costs, have obtained better cosmetic results compared to open surgery [1]. Supporters of open thyroidectomy with or without endoscopic assistance through a 3 to 4-cm incision (small incision thyroidectomy; SIT) argue that their approach achieves similar minimally invasive results while maintaining the safety and efficacy of traditional open surgery [3,4].

TOETVA has garnered attention for its innovative approach, utilizing a natural orifice—the mouth—as the entry point for thyroidectomy. Advocates of TOETVA highlight its cosmetic advantages, as the incisions are hidden within the oral cavity, resulting in virtually scarless necks. Furthermore, TOETVA offers reduced postoperative pain and faster recovery times than traditional open surgery, enhancing patient satisfaction and quality of life. Proponents argue that the evolution of TOETVA represents a paradigm shift in thyroid surgery, offering patients a less invasive alternative with comparable oncological outcomes [5]. Conversely, proponents of SIT through a 3 to 4-cm incision contend that their approach achieves similar minimally invasive results while preserving the safety and efficacy of traditional open surgery. They argue that the smaller incision size of open thyroidectomy minimizes tissue trauma and postoperative pain, leading to faster recovery times and superior cosmetic outcomes compared to larger incisions (Figure 1,2).



**Figure 1.** Preoperative marking of the site of the incision on the neck creases

Moreover, advocates of SIT emphasize the importance of tactile feedback and direct visualization in ensuring optimal surgical outcomes, which may be compromised in endoscopic approaches such as TOETVA [2,3,5].



**Figure 2.** Appearance of the scar of total thyroidectomy after one month

Among these contrasting viewpoints, it is essential to recognize that TOETVA and SIT have their respective strengths and limitations. While TOETVA offers the attraction of scarless necks and enhanced cosmetic outcomes, concerns remain regarding its learning curve and technical challenges, particularly in cases of large or multifocal thyroid tumors. Conversely, SIT boasts a long-standing safety and efficacy track record, with established surgical technique and perioperative care principles. However, its neck incision may be perceived as a drawback by patients seeking minimally invasive alternatives. Addressing these controversies requires understanding patient preferences, tumor characteristics, and surgeon expertise. Individualized decision-making is paramount, carefully considering the risks and benefits of each approach. Moreover, ongoing research and innovation are essential to refining surgical techniques and optimizing outcomes in thyroid surgery.

**Conflicts of interest:** The author has no conflicts of interest to disclose.

## References

1. El-Labban GM. Minimally invasive video-assisted thyroidectomy versus conventional thyroidectomy: a single-blinded, randomized controlled clinical trial. *Journal of minimal access surgery*. 2009;5(4):97-102. [doi:10.4103/0972-9941.59307](https://doi.org/10.4103/0972-9941.59307)
2. Anuwong, A. Transoral Endoscopic Thyroidectomy Vestibular Approach: A Series of the First 60 Human Cases. *World J Surg* 40, 491–497 (2016). [doi:10.1007/s00268-015-33201](https://doi.org/10.1007/s00268-015-33201)
3. Zhou Jian, Ju Hongqing, Ma Hongyan, Diao Qixian. Clinical Efficacy of Modified Small Incision Thyroidectomy and Analysis of Influencing Factors of Postoperative Hypocalcemia. *Frontiers in Surgery*. 2022; 9:905920. [doi:10.3389/fsurg.2022.905920](https://doi.org/10.3389/fsurg.2022.905920)
4. Liu, J., Dong, S., Meng, X., Xue, S., Chen, G.. Skills of Minimally Invasive Endoscopic Thyroidectomy via Small Incision of Neck (Experience of 1,226 Cases). In: Li, S., Jin, Q., Jiang, X., Park, J. (eds) *Frontier and Future Development of Information Technology in Medicine and Education. Lecture Notes in Electrical Engineering*. 2014; 269. Springer, Dordrecht. [doi:10.1007/978-94-007-7618-0\\_145](https://doi.org/10.1007/978-94-007-7618-0_145)
5. Karimov, Z., Kim, SM., Turk, Y. Gianlorenzo Dionigi, Edgar Salas Moscoso, Murat Ozdemir. et al. Complication and conversion outcomes in transoral endoscopic thyroidectomy vestibular approach (TOETVA): a retrospective multicenter propensity score-matched cohort study. *Updates Surg*. 2024; 76: 227–238. [doi:10.1007/s13304-023-01721-2](https://doi.org/10.1007/s13304-023-01721-2)