Endoscopic Thyroidectomy in a Patient with Prior Implant-Based Chin Augmentation using the Transoral and Submental Thyroidectomy Technique: A Novel Case Report

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BACKGROUND

Transoral endoscopic thyroidectomy vestibular approach (TOETVA) is currently the most widely employed endoscopic technique for removal of the thyroid gland. Because TOETVA utilizes an intraoral, any history of implant-based chin augmentation is contraindicated due to concern that:

- Implant may impede port placement
- Concern for iatrogenic bacterial seeding the implant

The transoral and submental thyroidectomy technique (TOaST) is an endoscopic technique that overcomes these concerns by employing an extraoral submental incision for placement of the central port.

PURPOSE

This case report details the use of the TOaST technique in a 60-year-old patient with advanced Graves’ disease and a history of implant-based chin augmentation.

METHODS

A literature review was performed to identify reports of endoscopic thyroidectomy techniques being employed in patients with prior implant-based chin augmentation. No such cases have been reported to our knowledge.

RESULTS

Our patient was managed surgically using the TOaST technique:

- Complications included transient iatrogenic paresis of the left recurrent laryngeal nerve which spontaneously resolved
- The appearance of the neck and chin, with exception of decreased fullness following resection of her enlarged thyroid gland, remained unchanged.
- The patient self-reported an excellent aesthetic outcome and was highly satisfied with her procedure.
- Our patient's hyperthyroidism went into remission post-operatively and did not recur at a later date.

CONCLUSION

This is the first reported case of complete thyroidectomy via endoscopic technique in a patient with a history of implant-based chin augmentation. The TOaST technique was both safe and efficacious for treatment of hyperthyroidism. Future studies are needed to further investigate the TOaST technique’s indications and contraindications so that surgeons may provide optimal care for this unique subset of patients going forward.

REFERENCES