ENDOSCOPIC THYROIDECTOMY IN A PATIENT WITH PRIOR IMPLANT-BASED CHIN AUGMENTATION USING THE TRANSORAL AND SUBMENTAL THYROIDECTOMY TECHNIQUE

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Background: Open thyroidectomy is the gold standard intervention for advanced Graves’ disease that is unresponsive to medical therapy. Endoscopic techniques have become increasing popular as they provide superior aesthetic outcomes when compared to open techniques. The transoral endoscopic thyroidectomy vestibular approach (TOETVA) technique is the most widely employed endoscopic technique for removal of the thyroid gland. A history of implant-based chin augmentation is considered a contraindication for this procedure as the implant may impede port placement through the intraoral incision. Additionally, there are concerns for iatrogenic bacterial seeding to the chin implant. The transoral and submental thyroidectomy technique (TOaST) is another endoscopic technique that employs an extraoral submental incision for placement of the central port. 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.

Materials/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. Her surgery was complicated by transient paresis of her left recurrent laryngeal nerve. The appearance of her neck and chin, with exception of decreased fullness following resection of her enlarged thyroid gland, remained unchanged. Our patient’s hyperthyroidism went into remission post-operatively and did not recur at a later date.

Conclusions: This is the first reported case of complete thyroidectomy being performed using an endoscopic technique in a patient with history of implant-based chin augmentation. The TOaST technique proved to be both safe and efficacious for treatment of our patient’s hyperthyroidism. More 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.

Images / Graph / Table