

ROBOTIC THYROIDECTOMY: AN INITIAL EXPERIENCE WITH RETROAURICULAR APPROACH.

Saeed, Ahmad¹; Moulthrop, Thomas¹; Aslam, Rizwan¹; Kandil, Emad¹

¹Tulane University, Department Of Surgery, New Orleans, LA, USA

Background/Purpose: Retroauricular robotic assisted thyroidectomy was recently described as a remote access technique for thyroid surgery. We have modified the established surgical approach by creating a wider working space between the two heads of sternocleidomastoid muscle. We are reporting our initial experience to identify challenges and limitations of this new surgical approach.

Methods: Prospective review of eight female patients who underwent retroauricular robotic hemithyroidectomy performed within four months. Clinical characteristics, pathology data, total operative time, blood loss, surgical outcomes and length of hospital stay were evaluated.

Results: Mean age was 44 ± 4.95 years, and mean body mass index was 28.7 ± 2.13 . Mean thyroid nodule size was 3.3 ± 0.53 cm. All cases were completed successfully via single retroauricular incision. There was no conversion to an open approach. Mean total operative time was 104 ± 9.45 minutes, and mean blood loss was 18 ± 5.68 ml. In addition to retroauricular robotic hemithyroidectomy three cases underwent neck lift surgery with a mean total operative time of 127 ± 24.35 . There were no cases of permanent vocal cord paralysis or permanent hypoparathyroidism. All patients left the hospital on the same day of surgery.

Discussion & Conclusion: Single-incision retroauricular robotic hemithyroidectomy can be safe and feasible alternative to other remote access techniques. However, additional studies in a high patient population are warranted to further evaluate the benefits and limitations of this new approach.