Approach removes thyroid gland with no neck scar or need for special equipment

February 7 2017
A new thyroidectomy approach leaves almost hidden scar. Credit: Dr. Rohan Walvekar

A surgical approach developed by ENT surgeons at LSU Health New Orleans to perform thyroidectomies without scarring the neck appears to be just as successful using standard surgery. When originally used, the approach, which involves making an incision behind the ear instead of in the neck, took advantage of modern robotics and endoscopic technology. It was available to patients only at centers with this specialized equipment. A new study led by Rohan Walvekar, MD, Associate Professor of Otorhinolaryngology at LSU Health New Orleans School of Medicine, shows that the same approach can be employed using standard surgical equipment and techniques, making it much more widely available. The study was published online in the *Indian Journal of Otolaryngology Head and Head & Neck Surgery* January 16, 2017.

"Our goal was to create an efficient, safe and cost effective approach that used standard surgical techniques and skills—making the approach reproducible and attractive to well-trained thyroid surgeons who may not have access to specialized equipment," notes Dr. Walvekar.

Thyroidectomy has been the gold standard procedure for surgical management of thyroid disorders. There has been a concentrated effort to provide alternative approaches to the thyroid gland over the last two decades to avoid the neck scar associated with thyroid surgery. These approaches have been possible due to the incorporation of robotic and endoscopic technology. However, while there continues to be a demand for what is termed "distant" access thyroid surgery, these procedures involve the use of specialized instrumentation and require specially trained surgeons - both of which are available at select centers in the country. In addition, the use of robotic technology for thyroid surgery is
not FDA approved for this indication.

"At LSU Health New Orleans, we were the first to describe the feasibility of distant access to the thyroid using an incision behind the ear—our work was published in 2010 in *Surgical Endoscopy,*" says Walvekar. "Since then, we have modified our technique to create an opportunity for distant access to the thyroid via an incision behind the ear (retro auricular) but allows the use of standard surgical equipment without the need for specialized equipment."

Over an 18-month period, Walvekar examined the outcomes of 10 patients who underwent open retro-auricular thyroidectomy with a slightly modified incision from the original technique. The incision follows the principles of standard face-lift approach incision that optimizes incision placement—hidden in the hairline and a natural skin crease. There were no major complications, and all patients reported satisfaction with the results.

Although the study was small with limited follow-up, the paper clearly demonstrates the feasibility of distant access thyroid surgery using conventional surgical techniques.

Co-authors include Drs. Jason Trahan, Laura Pelaez, Michael DiLeo, Daniel Nuss and Leslie S. Son, all of LSU Health New Orleans School of Medicine's Department of Otorhinolaryngology.

"This approach is a cost effective option for patients seeking distant access thyroid surgery in an environment where health care resources and access to advanced technology are limited," concludes Walvekar.

Provided by Louisiana State University