

EDITORIAL COMMENT

Transoral parathyroidectomy—Why make a simple operation complicated? A surgical fantasy

Luis Hurtado et al. from Mexico have reported their sizeable experience of transoral parathyroidectomy—scarless parathyroidectomy.¹ The authors described 21 patients of whom surgery was successful in 20 cases. Interestingly, all patients had well-localized preoperative imaging intraoperative parathyroid hormone (PTH) assay to determine the satisfactory drop in parathormone levels. The average size of the parathyroid lesion was more than 2.6 cm.

Clearly, there has been considerable interest in the recent literature for transoral thyroidectomy.² However, the experience with transoral parathyroidectomy remains sparse. The principles of surgery and the technique remain the same. Having read the manuscript in detail and having examined the technology involved, one comes up with feelings as to why make a simple operation of well-localized parathyroid adenoma by transcervical approach to a more complicated endoscopic transoral surgery. Clearly, the finding of the well-localized enlarged parathyroid gland is easy with a small incision in the neck. The average size of the transcervical incision is approximately 3 cm, and invariably, the healing is excellent with barely perceptible scar.

There is a large experience of transoral thyroidectomy in Thailand and Korea, with limited experience and expertise in the United States.³ However, this approach becomes a focus of discussion in the majority of endocrine conferences. The authors do not mention much about the learning curve, which has been reported anywhere from 30 to 35 cases, which will probably require a dedicated fellowship or hands-on experience in a major center where transoral endoscopic approach is popularized.

It would be also quite difficult in the United States to get informed consent from a patient for a new surgical procedure and to convince them that if failed, a conversion may be necessary for an open parathyroidectomy. What would happen if the PTH level does not decrease to a satisfactory level requiring a patient to have additional exploration either on the same side or on the opposite side?

Even though the reported risk of nerve injury is the same, one would be concerned about the use of energy devices

near the recurrent laryngeal nerve and antegrade dissection on the surface of recurrent laryngeal nerve. Anytime there is a new surgical procedure, we need to be critical of its implementation, especially in relation to experience, duration of the surgical procedure, complications, and long-term follow-up. The entire idea of remote access thyroid or parathyroid surgery is to avoid an incision in the neck. This raises the question of whether it is worth investing our time, energy, and finances in remote access parathyroidectomy, where scarring is generally well accepted by the patients.

Various surgical procedures are available for well-localized parathyroid adenomas, such as focal or bilateral exploration, use of Gamma probe, and intraoperative PTH. Many surgical approaches are available, such as standard cervical approach, minimally invasive video-assisted parathyroidectomy, posterior neck-face lift approach, transaxillary, or transoral as described in the manuscript. These are truly not minimally invasive. They may be looked upon as maximally invasive, as well as maximally expensive.

The patient selection and acceptance is also very important. There will clearly be a selection bias and limitation of adoption of this new surgical approach. The surgical complications may be varied, and the long-term implications remain unclear at this time. The question always comes up about credentialing, institution and surgeon responsibilities, and privileges with each institutional review board. The learning curve issue is a major concern, and the risk of complications is probably high in the early learning curve. How would a surgeon get experience, and how would a surgeon convince a patient with minimal experience? The cost, safety, and efficacy of the procedure remains unclear, and patient satisfaction, which needs to be compared to a small cervical incision, are some of the issues unclear at this time.

Implementation of a new surgical procedure is not necessary all the time. Several aphorisms come to mind, such as: when technology is master, the results are disaster; modern technology will turn a third-class surgeon into a second-class one, but never a second-class surgeon into a first-class surgeon. The best tools in the operating room are surgeons' hands and eyes, as they are connected to the brain. I do respect modern technology and technical advances. However, I am not convinced there is a bigger role for transoral parathyroidectomy in

Synopsis for Table of Contents: Transoral vestibular approach to parathyroid surgery is a new innovative technique as a scarless surgical procedure. Several issues related to long-term complications, recurrent hyperparathyroidism, and learning curve need to be addressed prior to routine application of this new technology.

day-to-day clinical practice. Despite the above comments, I would like to congratulate the authors for their excellent results and implementing new technology in their practice.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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