An Alternative Retractor for Transcervical Thymectomy Christopher B. Komanapalli, MD¹; Thomas D. Person, MD¹; Paul Schipper, MD¹; Mithran S. Sukumar, MD¹

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ABSTRACT

The Rultract® *Skyhook* retractor, while traditionally used for cardiac procedures, is a versatile retractor that can be used for thoracic procedures. Here we propose the use of the Rultract® *Skyhook* system for transcervical thymectomy as an alternative retractor.

INTRODUCTION

Transcervical thymectomy has made a significant impact on the surgical treatment of patients with myasthenia gravis. It has decreased patient morbidity and increased patient satisfaction. The Cooper retractor allows for visualization of the anterior mediastinum and makes the transcervical approach feasible.[1]. However, this specialized retractor is difficult to obtain. We propose the use of the Rultract® Skyhook retractor that is versatile, economical, and as effective.

TECHNIQUE

The RulTract® *Skyhook* system [Figure 1] is traditionally used for internal mammary artery dissection, re-do sternotomies, and subxiphoid pericardial procedures. This system involves several parts that are critical to its design. The retractor post, which connects the system to the bed, attaches to a rotating extender bar, which allows increased degrees of freedom in movement and placement of the retractor. [Figure 1] The ratchet [Figure 2a] can be attached to various sizes and types of retracting rakes including a dual arm retractor (commonly used for mammary harvest) [Figure 2b,c] or a suprasternal rake used for a transcervical thymectomy [Figure 2d]. This creates a versatile system that can be adjusted to a particular patient without greatly changing the efficacy of the retractor.

While the Cooper retractor is a robust retracting system able to hold weight exceeding that of the Rultract® *Skyhook*, the Rultract® enables surgeons to perform transcervical thymectomy in the majority of patients. The rotating extender bar, post and ratchet, when positioned appropriately on the OR table have a static weight capacity up to 300 lbs. The ratchet, however, when used for lifting the chest (while the remainder of the body is supported by the OR table), is only rated at 80lbs. This is sufficient for the

majority of patients who undergo this procedure. We have successfully performed this procedure with the RulTract in a patient weighing 220 lbs.

The Rultract® *Skyhook* also is backwards compatible with previous Rultract® retraction systems and parts are interchangeable with previous systems. In effect, if all one needs is the ratchet/rake component to add to their existing system, it can be purchased separately. The Rultract® *Skyhook*'s versatility in providing exposure in both cardiac and thoracic surgical procedures makes it an economical option for smaller centers using one retracting system.

Further exposure of the thoracic inlet is facilitated by fish-hook type subplatysmal flap retractors [2] [Figure 3].

CONCLUSION

The cost and difficulty of purchasing a specific retractor for just one procedure has possibly limited transcervical thymectomy as a technique for resecting the thymus gland in myasthenic patients. The Rultract® *Skyhook* retractor affords a cost savings due to its versatility in providing exposure for both cardiac and transcervical thymectomies as well as its interchangeability with previous systems. In summary, we propose the Rultract® *Skyhook* retractor as an equally efficacious device to allow adequate surgical exposure to perform the transcervical thymectomy and has been used by us successfully on patients.

Contact Information: Rultract® *Skyhook* Retractors: www.rultract.net Or call Janice Schilt at (949) 725-9320. rultract@aol.com

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