

## The value of neural monitoring in endoscopic-robotic thyroidectomy approaches

Dear Sir,

We read with interest the article by Sivakumar and Amizhthu titled "Transoral endoscopic total thyroidectomy vestibular approach: A case series and literature review", published on J Minim Access Surg.<sup>[1]</sup>

Certainly, the manuscript is greatly knowledgeable and rises significant additions on endoscopic thyroidectomy.<sup>[1]</sup>

Thyroid surgeons have started performing increasingly complex procedures involving tumour resection, prophylactic node dissection and endoscopic or robotic surgery.

Such complex thyroid surgery entails the risk of recurrent laryngeal nerve (RLN) and superior laryngeal nerve (SLN) deterioration.

Endoscopic and robotic thyroidectomy is a new technique that demands full control of laryngeal nerve function.

In order to avoid adverse outcomes, intraoperative neural monitoring (IONM) has been developed to assess, in real time, the function of the RLN, SLN and nerve roots by continuous vagal nerve stimulation.

Surgeons cannot apply a new approach without perfect governance of the laryngeal nerves. This would be in contrast with the commonly performed routine open surgery. It would be a step back in endocrine surgery.

Endoscopy and robotic approaches have to be in the same security area of open procedure for RLN and SLN management.

Endoscopy requires nerve monitoring to achieve the net benefit of the minimally invasive approach.

The same concerns are for any other new technique and technology applied for thyroid and parathyroid operations.

Endoscopic thyroidectomy is an exciting opportunity for improved techniques and accessories to improve IONM's outcomes.

Thank you for this opportunity.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

Hui Sun, Angkoon Anuwong<sup>1</sup>, Gianlorenzo Dionigi<sup>2</sup>

Division of Thyroid Surgery, Jilin Provincial Key Laboratory of Surgical Translational Medicine, China Japan Union Hospital of Jilin University, Changchun, Jilin Province, China, <sup>1</sup>Department of Surgery, Minimally Invasive and Endocrine Surgery Division, Police General Hospital, Pathumwan, Bangkok, Thailand, <sup>2</sup>Division of Endocrine and Minimally Invasive Surgery, Department of Human Pathology in Adulthood and Childhood 'G. Barresi', University Hospital G. Martino, University of Messina, Messina, Italy

### Address for correspondence:

Prof. Gianlorenzo Dionigi,  
Department of Human Pathology in Adulthood and Childhood 'G. Barresi',  
Division of Endocrine and Minimally Invasive Surgery, University Hospital  
G. Martino, University of Messina, Via C. Valeria 1, 98125, Messina, Italy.  
E-mail: gdionigi@unime.it

Received: 27.12.2017, Accepted: 29.12.2017

### REFERENCE

1. Sivakumar T, Amizhthu RA. Transoral endoscopic total thyroidectomy vestibular approach: A case series and literature review. J Minim Access Surg 2017. [In this issue.](#)

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website: www.journalofmas.com
	DOI: 10.4103/jmas.JMAS_273_17

**How to cite this article:** Sun H, Anuwong A, Dionigi G. The value of neural monitoring in endoscopic-robotic thyroidectomy approaches. J Min Access Surg 2018;XX:XX-XX..

© 2018 Journal of Minimal Access Surgery | Published by Wolters Kluwer - Medknow