

# MULTI MODALITY TREATMENT OF SUPRAGLOTTIC STENOSIS SECONDARY TO LARYNGEAL PEMPHIGUS: SHARING EXPERIENCE IN UiTM

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## INTRODUCTION

Supraglottic stenosis is a rare subsite of laryngotracheal stenosis. We present a sharing experience in dealing with supraglottic stenosis secondary to laryngeal pemphigus.

## CASE REPORT

This is a case of 36-year-old lady with supraglottic stenosis secondary to laryngeal pemphigus. She presented to our clinic with shortness of breath and mild stridor mainly on exertion. An office-based procedure of trans nasal scope-guided with serial intralesional steroid injections (SILSI) using single use Olympus Injector Force Injection Needles Max 23G were done which halted the progression of the disease. Eventually, a balloon dilatation under jet ventilation was performed to widen the size of the stenosis. Dilatation was performed using CRE PRO Wire-guided balloon dilatation catheter from size 8mm to 12mm with respective pressure applied for about 2 minutes without interruption of spontaneous breathing, oxygenation, or ventilation. Radial incision of stenosis segment with micro-scissors was performed in between balloon dilatation and the procedure were completed with intralesional steroid injection. During subsequent clinic visit postoperatively, we repeated trans nasal scope-guided with SILSI to further improve the symptoms.

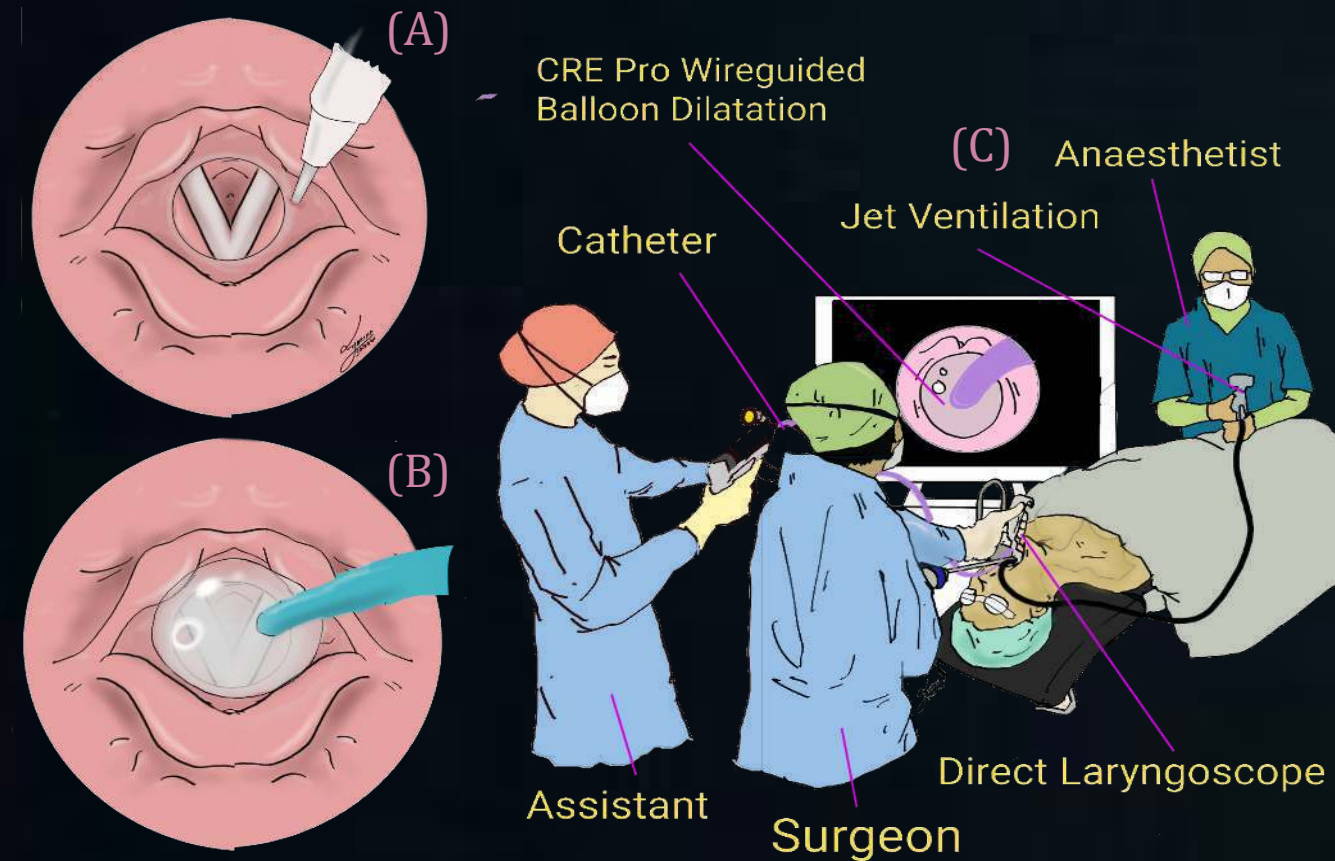


Figure 1 (A) Transnasal scope guided SILSI; (B) Balloon dilatation; (C) The set up during CRE PRO Wireguided balloon dilatation of the supraglottic stenosis

## DISCUSSION

- Mucous membrane pemphigoid is a rare autoimmune disease which affects the larynx in 5% to 15% of cases with a prevalence of 1 in 10 million<sup>1</sup>. Scar formation following acute phase of the disease may lead to narrowing of the airway leading to airway obstruction with the possibility of requiring emergency tracheostomy.
- In this case report, we highlighted multimodality treatment of supraglottic stenosis secondary to laryngeal pemphigus. Office-based procedure of SILSI with addition of endoscopic balloon dilatation under general anaesthesia were performed for this patient with good outcome. SILSI are known to be effective in preventing maturation of scar tissue thus halting the progression of stenosis<sup>2</sup>. Endoscopic balloon dilatation (EBD) has been described as a safe procedure and has been widely used to treat laryngotracheal stenosis<sup>3</sup>.
- However, no case report has been describing EBD in managing supraglottic stenosis making this a 1<sup>st</sup> case to be reported. Postoperatively, clinical improvement of the stenosis are monitored by serial scope findings and patient's health perception are measured by EQ-5D-5L which shows satisfactory outcome.

## CONCLUSION

Multimodality treatment may be required to treat supraglottic stenosis secondary to laryngeal pemphigus. These techniques proved to demonstrate favourable outcome to the patient without requiring a tracheostomy.

## REFERENCES

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## RESULT

Upon follow up, we noted clinical improvement of the stenosis as well as patient's health perception as measured by EQ-5D-5L.

Balloon Dilatation + Transnasal scope guided SILSI	VHI-10	EQ5D5L
Pre-Op	37/40	20%
Post Op 1/52	30/40	60%
Post Op 4/52	24/40	90%
Post Op 7/52	16/40	95%

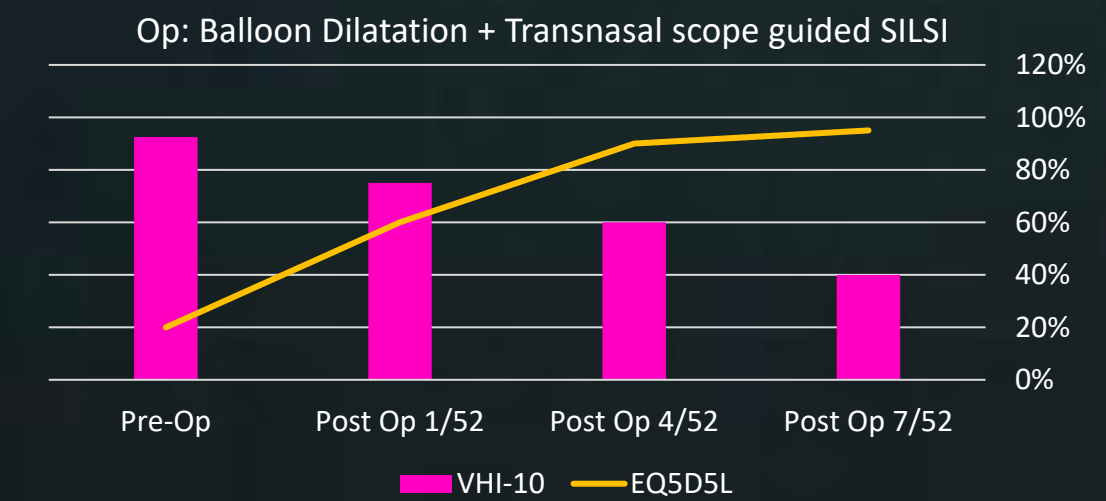


Figure 2 Clinical improvement of the stenosis noted via Flexible nasopharyngoscopy (FNLPS)

