FP 12: Clinical Outcomes Post CO<sub>2</sub> Laser Posterior Cordotomy With Anterior Partial Arytenoidectomy in Bilateral Vocal Fold Immobility: A Case Series Retrospective Review of Twenty-Two Filipino Patients in a Tertiary Hospital

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## ABSTRACT

Design: A 5-year descriptive case series retrospective chart review was performed from

twenty-one patients with bilateral vocal fold immobility who underwent CO<sub>2</sub> laser posterior cordotomy with anterior partial arytenoidectomy retrieved from hospital records from 2010-2015 in a tertiary hospital in Bonifacio Global City, Taguig,

Philippines.

Background: Bilateral vocal fold immobility leads to upper airway obstruction, due to the

permanent adducted position of both vocal folds, occasionally necessitating tracheostomy. This may also present with dyspnea manifested as easy fatigability, noisy breathing, stridor during sleep or asphyxiation.  $CO_2$  laser posterior cordotomy with anterior partial arytenoidectomy is currently the accepted

procedure in re-establishing airway patency in bilateral vocal fold immobility.

Results: Of the twenty-one patients who underwent laser posterior cordotomy with anterior

partial arytenoidectomy, all patients experienced significant improvement of symptoms with no need for an advanced airway. Sixteen patients underwent tracheostomy prior to surgery and all were successfully decannulated within 4 weeks post-surgery. Three patients experienced post-operative laryngeal granuloma formation, which resolved after being managed conservatively with steroids and proton pump inhibitors (PPIs). One patient experienced aspiration to liquids, which resolved 2 weeks after conservative therapy. All patients reported a

good serviceable voice with return of normal swallowing function.

Conclusion: All patients with tracheotomies pre-operatively were successfully decannulated

with a good serviceable voice. Transient complications occurred in 19% of patients however, the impact was minimal with spontaneous resolution of these complications.  $CO_2$  laser posterior cordotomy with anterior partial arytenoidectomy is therefore a safe and procedure that is done for cases of bilateral vocal fold

immobility.