ABSTRACT

**Educational Objective:** At the conclusion of this presentation, the participants should be able to understand the patient history, associated symptoms, treatment, and outcome of patients with a posterior glottic bridge.

**Objectives:** 1) To review three cases of posterior glottic bridges and discuss the patient history, associated symptoms, treatment, and outcome; and 2) to compare this case series to other cases in published literature.

**Study Design:** Case series and literature review.

**Methods:** The medical records of three patients presenting with posterior glottic bridges were reviewed and compared. Data collected included age, gender, length of intubation, associated symptoms, treatment, and outcome. Literature of previously reported cases was examined to facilitate comparison and discussion of this rare diagnosis.

**Results:** Three patients with average age of 31.3 years were intubated for an average of 18.7 days. Two of the three patients were intubated after a motor vehicle collision. The most common symptoms were dysphonia, dyspnea on exertion, and cough. Underwent lysis of the bridge using laryngeal micro-instruments with topical application of mitomycin-C. There has been no recurrence in follow-up. No patient required a tracheostomy. Review of the literature on this disease revealed similar patient history and outcome.

**CONCLUSIONS**

Posterior glottic mucosal bridges are a rare complication of endotracheal intubation that is not well-documented in the literature. Similar to our case series, previously documented cases report presenting symptoms of dysphonia, exercise intolerance, cough, shortness of breath and aspiration. The gold standard method for diagnosis of these lesions is by direct laryngoscopy. However, flexible laryngoscopy can also help in diagnosis in the clinic setting. In our case series, the patients were treated with simple lysis of the mucosal bridge using microlaryngeal instruments, followed by topical application of mitomycin-C. Posterior glottic mucosal bridges are a rare complication of endotracheal intubation. Both methods provide major improvement in symptoms. Some suggest that cold instruments are ideal in the treatment of small lesions and that the CO2 laser should be reserved for treatment of larger lesions. The CO2 laser has good hemostatic properties and is appropriate for heavily vascularized lesions. The CO2 laser is much more costly than cold instrumentation, thereby further supporting the use of microlaryngeal instruments for lysis of small lesions. Four cases were reviewed and recurrence, and our cases series has no recurrence to date.

**REFERENCES**