

Critical Airway: A Rare Case of Laryngeal Myxedema with Longstanding Subglottic Myxedema

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Objectives: We report the findings of an adult female with laryngeal myxedema and longstanding subglottic myxedema due to untreated hypothyroidism. This case illustrates the progression of our patient's hospital course and ultimate resolution of symptoms after months of support and thyroid medication.

Methods: Case presentation of a 39-year-old female from Ohio that presented with biphasic stridor, shortness of breath, hypoxemia, neck swelling, and laryngeal myxedema. The clinical features of her condition will be illustrated, and similar cases will be compared.

Results: A 39-year-old female presented to the emergency department with the symptoms noted above. After medical management failed, the decision was made to perform an awake fiberoptic intubation which was successful. She was found to be profoundly hypothyroid with a TSH of 65 and a free T4 of <0.1. After the 9th day of intubation, due to continued laryngeal myxedema, a tracheostomy was performed. She continued to have subglottic myxedema even after resolution of her supraglottic myxedema and continued thyroid medication. A capping trial was successful on day 128 and she was kept overnight. Her tracheostomy spontaneously decannulated on day 134; she was observed for two nights and was discharged home in good condition and with a healing stoma.

Conclusion: Laryngeal myxedema is a rare complication of severe hypothyroidism. With increased awareness of this complication, we hope that there will be an emphasis in education from providers on the importance of adequate management of hypothyroidism.