

Intralaryngeal extension of a thyroglossal duct cyst

Jurica Putrić Posavec¹, Tena Šimunjak¹, Iva Franković¹, Luka Županović¹,
Dijana Simeunović¹, Boris Šimunjak^{1,2}

¹KB Sveti Duh, Sveti Duh 64, 10000 Zagreb, Hrvatska

²Fakultet za dentalnu medicinu i zdravstvo Osijek, Crkvena 21, 31000 Osijek, Hrvatska

jposavec98@gmail.com

Introduction: Thyroglossal duct cysts are the most common congenital neck mass, accounting for 70% of congenital neck abnormalities, and usually presenting as a painless midline swelling. They originate from a residual tissue of the thyro-glossal duct which normally atrophies by the 10th week of gestation. Typically, thyroglossal duct cysts are located in the anterior neck, inferior to the hyoid bone, and, although anatomically closely related to the larynx, intralaryngeal extension of the thyroglossal duct cyst is seldom observed. We present a case of a patient with a thyroglossal duct cyst exhibiting intralaryngeal extension and a lateral neck positioning. **Case report:** A 45-year-old male patient presented himself to the ENT Clinic with a painless and soft swelling on the left side of the neck and foreign body sensation persisting after a lower respiratory infection and episodes of severe cough. No other symptoms were reported and the patient was a non-smoker with a history of a chronic hypertension. On the physical examination a palpable, painless and movable swelling of the regions II-III on the left side of the neck was found, with no redness of adjacent skin. Laryngeal fiberoscopy showed a submucosal swelling of the left supraglottis just above the left false vocal fold. Vocal fold mobility was normal. CT imaging revealed a spheric, bilobar cystic mass on the ventrolateral and posterior portion of the hyoid bone extending through the thyrohyoid membrane into the supraglottic portion of the larynx. Fine-needle aspiration showed signs of a cyst. An open excision of the cyst with Sistrunk procedure was performed under general anesthesia, and the procedure and the postoperative period went without any complications. A histologic examination revealed the existence of thyroid follicles around the cyst wall and confirmed the diagnosis of a thyroglossal duct cyst. **Conclusion:** The thyroglossal tract normally passes anterior to or through the hyoid bone. In unusual cases like ours, remnants of the tract can curve posterior to the hyoid or erode through membranes/cartilage, allowing a cyst to ingrow into the larynx or pharynx and should be properly differentiated from other intralaryngeal masses with radiologic diagnostics so that an adequate surgical treatment could be performed.

Key words: intralaryngeal extension, neck mass, thyroglossal duct cyst