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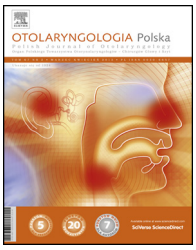

Case report/Kazuistyka

Intralaryngeal ectopic thyroid

Tarczyca ektopowa w lokalizacji wewnątrzkrtaniowej

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ABSTRACT

Lingual thyroid is the most common presentation of ectopic thyroid tissue. In contrast, to that laryngeal location is extremely rare. We report a case of 59 years old woman with a history of progressive dyspnea and nodular thyroid goiter. Endoscopic examination revealed subglottic smooth tumor of the right side of the larynx. CT scans revealed mass localized in infraglottic part of the larynx, causing infraglottic stenosis. The biopsy of the tumor revealed: Struma nodosa. Reviewing the literature we found only seven cases described. We present development of the thyroid gland and origins causing ectopy.

Introduction

Lingual ectopy is the most common location of ectopic thyroid gland. In contrast, to that presence of ectopic tissue in the larynx is extremely rare. We have performed review of the literature using following databases: U.S. National Institutes of Health's National Library of Medicine (NIH/NLM): http://www.ncbi.nlm.nih.gov, PMC: http://www.ncbi.nlm.nih.gov/pmc, Pubmed: http://www.ncbi.nlm.nih.gov/pubmed and Google Scholar: http://scholar.google.pl. As a result we found seven cases of the laryngeal ectopic thyroid described.

Case report

A 59-year-old woman was referred to the Otolaryngology Department of the University Hospital in Wroclaw, with

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Fig. 1 – The tumor

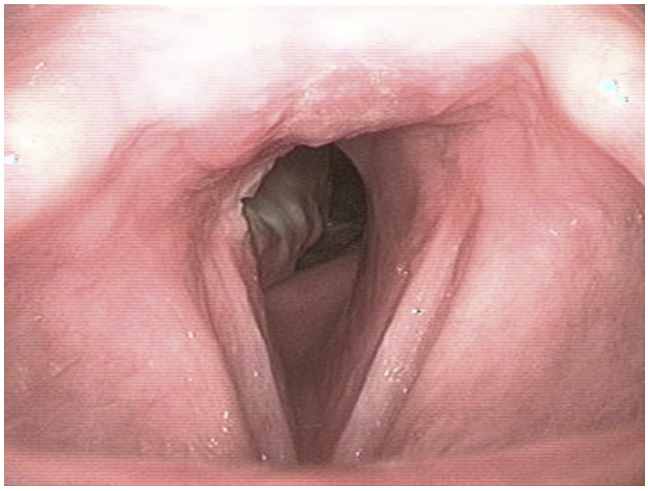

Fig. 3 – Post biopsy endoscopy of the larynx

subglottic laryngeal tumor for an evaluation and treatment. She had a 2–3 year history of progressive dyspnea, nodular thyroid goiter (not treated), arterial hypertension, hospitalized because of depression and anxiety disorders. Never smoked, not relevant family history.

Laryngological examination revealed septal deviation, without significant pathology within the ear and throat. Laryngeal endoscopy demonstrated normal epiglottis and symmetric movement of the vocal folds. Subglottic smooth tumor of the right side of the larynx, on the level of cricoid cartilage. Surface of the tumor had intense vascular pattern. Diameter of the larynx was reduced by the tumor mass to 33% (Fig. 1). Autofluorescence endoscopy did not show a loss of green fluorescence (which is present in malignant lesions) (Fig. 2).

The ultrasound examination of the neck revealed enlarged, heterogeneous, thyroid gland with presence of numerous normoechoic focal lesion with calcifications and fluid parts in both lobes with diameter till 1.6 cm in the right and 0.9 cm in the left lobe. Increased vascular flow pattern on Doppler examination was observed. The ultrasonography demonstrated multinodular goiter. Along the large neck vessels on the right side and in submandibular region on the left side hypoechoic lymph nodes with hyperechoic hilum (1.2–1.6 cm) were present.

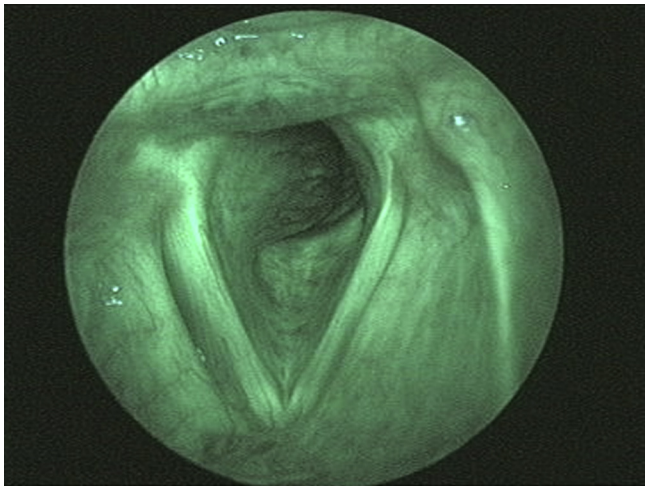

Fig. 2 – Autofluorescence endoscopy of the tumor

CT was performed: in supraglottic and glottic part of the larynx no evidence of pathology was observed. CT scans revealed mass localized in infraglottic part of the larynx on the right wall with dimensions 2.2 cm long and 1 cm wide, causing infraglottic stenosis. Tumor had well-defined borders. Heterogeneous pathological enhancement was observed after intravenous administration of contrast. Furthermore not enlarged thyroid gland with numerous hypoechoic nodules, fibrous strands and calcifications were described. Along the course of the large cervical vessels single lymph nodes with maximal diameter 1.3 cm were observed. The decision of surgical biopsy was undertaken. In the first step of surgery patient underwent tracheotomy and further biopsy in direct laryngoscopy (in Kleinsasser suspension laryngoscope) was proceeded. Cystic tumor filled by mucosal yellow liquid was removed. The patient had no complications during the postoperative period (Fig. 3). Tracheostomic tube was removed on the second day after surgery. Patient went back home.

The biopsy of the tumor revealed: Struma nodosa [M-71624]. Scintigraphy of thyroid gland showed: bilobal, enlarged, proper located thyroid gland. In external lower part of the right lobe cold area without uptake of isotope. Uptake of Iodium isotope after 24 h on the level of 10.5% (Fig. 4). The patient was consulted in the Department of Endocrinology with conclusion: normal thyroid function, no need of endocrinological treatment.

Two weeks later the patient was admitted again to the ENT department with progressive hoarseness and mixed (inspiratory–expiratory) dyspnea. She was qualified for surgical removal of the tumor. First condition of thyroid gland and trachea were evaluated. Frontal wall of trachea was controlled and revealed normal cartilaginous structure of the trachea without any pathological findings. Afterwards by the laryngofissure approach the tumor mass was found on the level of the cricoid cartilage and totally removed (Fig. 5). There were no complications in postoperative period. Endoscopy performed