Case report

Teratoma in a thyroglossal duct cyst: a rare occurrence

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Abstract. Although teratoma is a relatively commonly encountered pediatric tumor, cervical teratomas are rare, with only 217 cases recorded to date. These are thought to arise from the thyroid gland, with only anecdotal reports of teratomas arising in thyroglossal duct cysts.

Key words: Teratoma – Thyroglossal duct cyst – Neck

Introduction

This report describes a 15-month-old boy with a teratoma arising in a thyroglossal duct cyst. There have been only three previous reports of teratomas associated with thyroglossal duct cyst [12–14], only one of which included histologic proof of the pathology [13]. This paper adds a case of this rare entity to the literature and discusses the etiology, diagnosis, and management of this anomaly.

Case report

A 15-month-old white male was born weighing 1,995 g at 31 weeks' gestation to a 28-year-old GIV, PO, Ab III mother. The maternal history was significant for diabetes, hypertension, and hypothyroidism, all requiring medical management. The patient was seen by his pediatrician at 1 year of age for a midline anterior neck mass. Evaluation at that time revealed a cystic, 2 × 3-cm midline mass of the neck. Laboratory studies included a serum thyroxine (T₄) RIA level of 8.3 μg/dl and TSH level of 1.1 μIU/ml, both within normal limits. The mass progressively enlarged over the next few months; it remained soft and cystic in nature, without any evidence of associated infection. The child remained totally asymptomatic without any respiratory or swallowing difficulties. Preoperative physical examination revealed a 4 × 6-cm cystic mass of the anterior neck, slightly to the left of the midline. Radiologic evaluation included an ultrasound study of the neck (Fig. 1) that showed a 3.5 × 2.2 × 3.3-cm cystic structure containing particulate matter anterior to the thyroid gland and trachea with a normal right lobe of the thyroid gland visualized separate from the mass. A thyroid scan revealed diminished uptake of

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Fig. 3. Thyroglossal duct cyst containing a benign teratoma: A cyst wall lined by ciliated columnar epithelium (arrow); B group of thyroid acini within cyst wall (arrow); C teratomatous elements: enteric mucosa (large arrow) and respiratory mucosa (small arrow).