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Incidental papillary thyroid carcinoma in thyroglossal duct cyst case report

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ABSTRACT

INTRODUCTION: The thyroglossal cyst is found in 7% of the population and the incidental papillary thyroid carcinoma in thyroglossal cyst is a rare entity with an incidence 1 to 2%. The clinical presentation is indistinguishable from a benign lesion and the histopathological postoperative study defines the diagnosis. Papillary carcinomas have favorable prognosis and cervical or distant metastases are rare. There is now a consensus on the indication of total thyroidectomy, radioablation with iodine and/or suppressive therapy with levothyroxine after being removed surgically [1–3] (Patrucco et al., 2015; Gupta et al., 2014; Choi et al., 2013).

CASE REPORT: 46-year-old female patient with an asymptomatic midline neck mass consistent with a thyroglossal cyst. That was excised by Sistrunk's procedure and an intraoperative biopsy that reports papillary carcinoma infiltrating the capsule. It was decide to complete the total thyroidectomy without complications, evolution is consistent and graduated euphonious and no evidence of hypoparathyroidism.

DISCUSSION: Management dilemmas regarding the roles for total thyroidectomy are reviewed in the context of relevant evidence based literature.

CONCLUSION: The initial evaluation of carcinoma of thyroglossal duct cyst includes careful examination, ultrasound and biopsy fine needle aspiration. Sistrunk's procedure is adequate treatment for thyroglossal cyst but find another diagnosis as papillary thyroid carcinoma makes us continue with a total thyroidectomy after discuss the case with experts [4,5] (Tharmabala and Kanthan, 2013; Miranda-Aguirre et al., 2008).

1. Introduction

The thyroid gland develops from an endodermal invagination of the midline between the third and fourth week embryo. This epithelial invagination descends from the blind hole in the base of the tongue across the midline to the front face of the first tracheal rings. It obliterates tract epithelial approximately between the eighth and tenth week. The flaw in the obliteration of this canal produces persistent thyroglossal and the presence of thyroglossal duct cysts. The persistence of the thyroglossal today is estimated at 7% [1,2].

Uchermann described the first cases in 1911 by Brantano and in 1915. Now there have been about 250 cases. Most cases are papillary stock, approximately 85% of cases, and described in greater incidence between the fourth and fifth decade of life [3].

The thyroglossal duct cyst presents thyroid follicles and squamous epithelium. The appearance of a carcinoma in the thyroglossal duct cyst is rare, less than 1%. Most cases are papillary carcinoma (80%) [4].

2. Case presentation

Female patient 46 years old, a native and resident of Saltillo, Coahuila, walks in the emergency room. She begins her disease 3 months ago with increasing volume level anterior cervical hyoid; It is amounting cystic lesion with tongue protrusion and swallowing evidence. There was no history of dysphagia, dysphonia or hoarseness. There was no history suggestive of hypo or hyperthyroidism. The patient gave no history of radiation exposure. There was no other significant or past medical history or relevant

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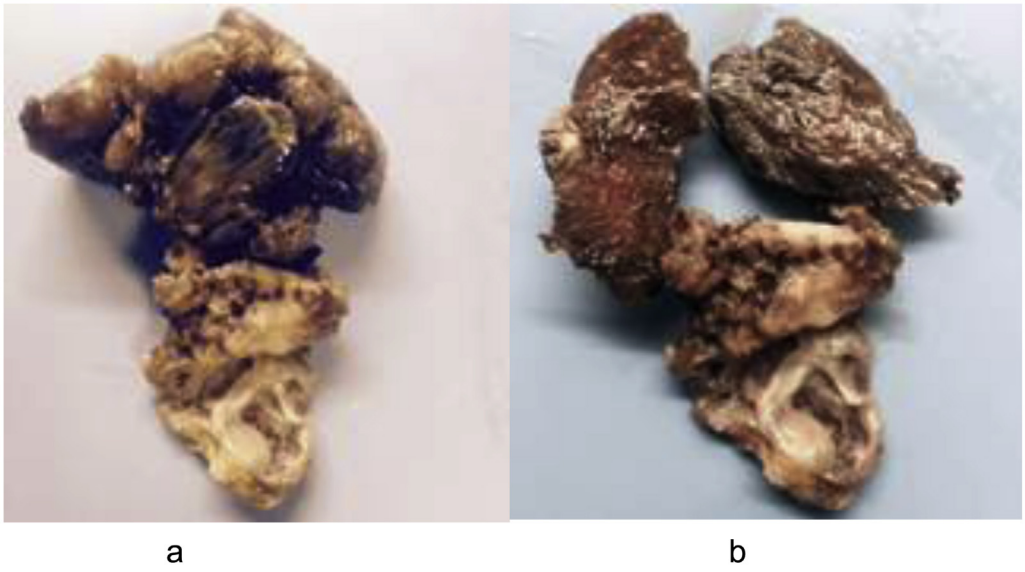

Fig. 1. a–b (Complete specimen was sent for histopathological examination).

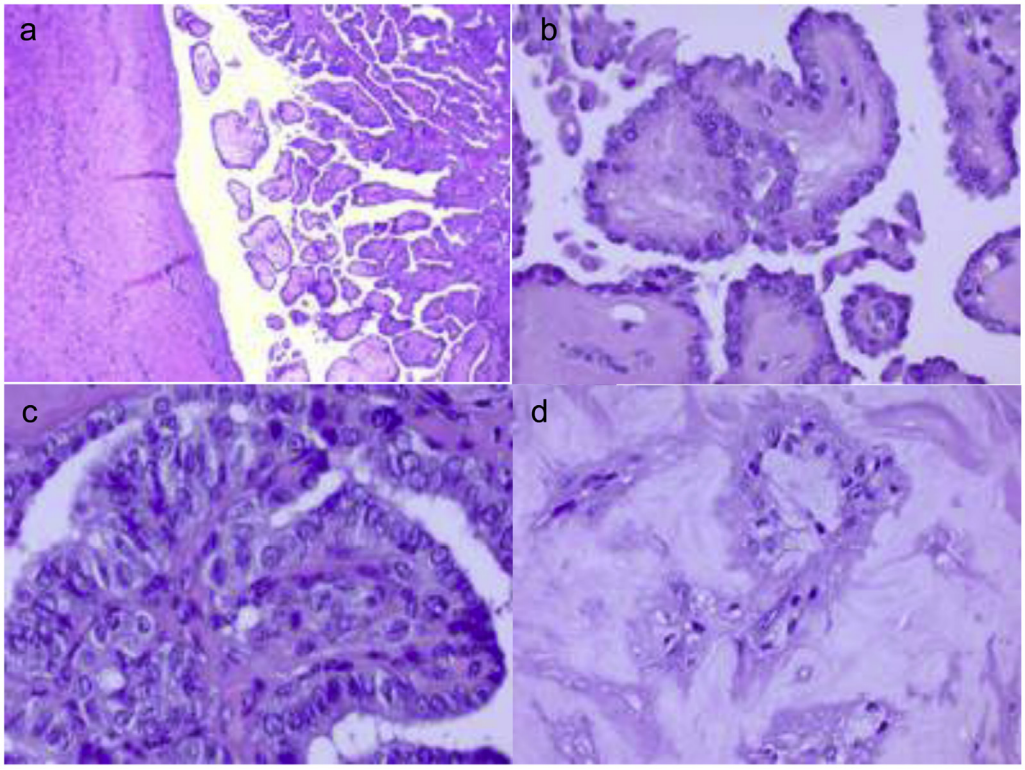

Fig. 2. a–d (Biopsy report revealed fibrocollagenic wall like tissue along with skeletal muscle bundles showing areas of fibrosis and many foci of papillary tumor lined with cuboidal epithelial cells with numerous Psammoma bodies. Papillary carcinoma infiltrates the thyroid capsule).

outcomes. No Drug history, no family history including any relevant genetic information, and no psychosocial history including smoking status and where relevant accommodation type. On examination, there was a single swelling in the region hyoid bone in the midline, approximately 5 × 4 cm in size, oval shape, well defined, and soft in consistency, overlying skin was ordinary in appearance and Could be pinched easily. It moved with deglutition and protrusion of the tongue. On palpation the swelling was soft in consistency. Normal overlying skin. There was no palpable lymphadenopathy. The thyroid gland was clinically regular in shape and size. Rest of the systemic examination was average. A provisional diagnosis of thyroglossal cyst was made. Routine thyroid function blood tests and investigations thyroid profile were normal. USG neck revealed 4.8 × 3.2 cm cystic swelling in the supra hyoid region. Both lobes of the thyroid gland were normal. There was no Pre-intervention consideration. On march 30th of 2016 under