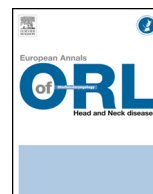




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## Letter to the Editor

### Thyroid hydatid cyst: An unusual site

Hydatid cyst is a parasitic infection due to *Echinococcus granulosus* [1]. The thyroid is a very rare site of hydatid cyst, even in countries in which echinococcosis is endemic (less than 1%) [2]. The authors report the case of a non-smoking, non-drinking 35-year-old man with a history of regular contact with dogs and no family history of thyroid disease. He presented to the head and neck clinic with an anterior neck mass with no signs of thyroiditis and no dysphonia. Physical examination demonstrated palpable thyroid nodules ascending with deglutition. Neck ultrasound revealed two cystic formations on both thyroid lobes (Fig. 1). The laboratory work-up was normal. Thyroidectomy via a classical neck incision was performed with preservation of the parathyroid glands and recurrent laryngeal nerves (Fig. 2).

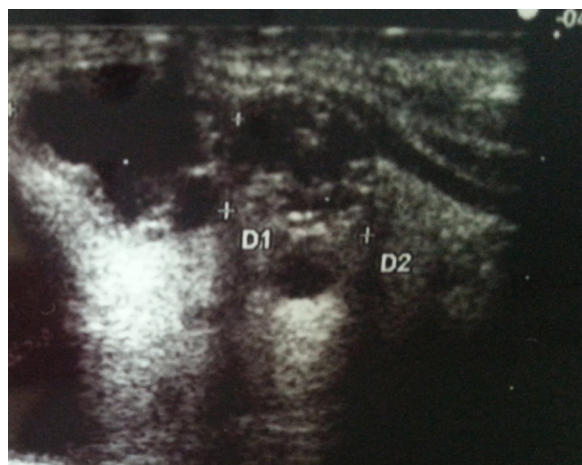


Fig. 1. Ultrasound appearance of two echo-free thyroid cysts with posterior shadow.

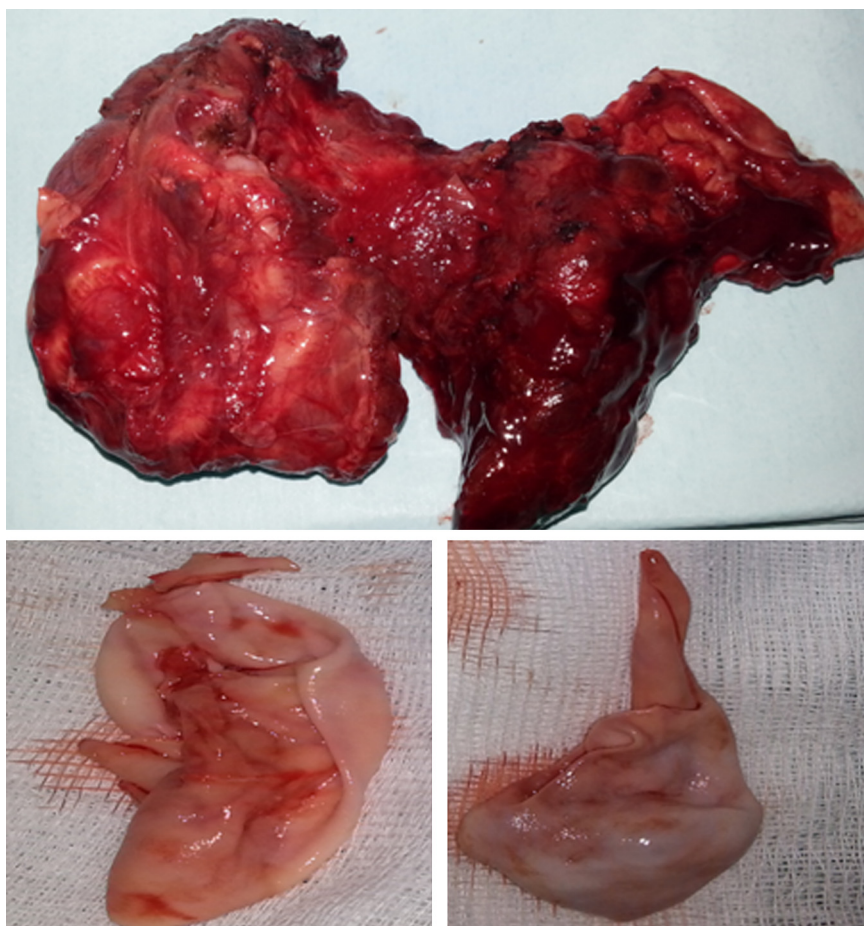


Fig. 2. Total thyroidectomy operative specimen with typical macroscopic appearance of membranes of the two left and right hydatid cysts.

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The postoperative course was uneventful. Histological examination confirmed the diagnosis of completely resected hydatid cyst. Hydatid serology was positive, while abdominal ultrasound and chest CT scan did not reveal any other sites. A favourable clinical course was observed with a follow-up of 2 years.

Hydatid disease of the head and neck is rare, with an estimated prevalence of 0.75% [2,3]. The presence of a thyroid cyst in a patient with clinical and epidemiological features of echinococcosis should lead the ENT surgeon to consider the possibility of hydatid cyst. A history of hepatic or pulmonary hydatid cyst, contact with dogs and the consumption of infested meat are predictive factors of hydatid cyst [4]. In the case reported here, the patient reported regular contact with dogs. The most suggestive clinical sign is a slowly growing, resilient swelling arising in the thyroid gland [1]. Neck ultrasound is the examination of choice and can demonstrate characteristics highly suggestive of hydatid cyst, similar to those observed in the liver, as described in Gharbi's classification (multilocular cyst, detachment of the membrane and calcifications) [5]. Abdominopelvic ultrasound and chest X-ray should be performed to detect other associated sites. Chest CT scan allows a more meticulous assessment of thoracic hydatid disease compared to standard radiology especially for early hydatid cysts and mediastinal hydatid cysts [1,5]. Abdominopelvic CT scan can be performed as a complement to ultrasound, especially in previously operated patients or with associated gastrointestinal disease [2–5]. Hydatid serology guides the diagnosis when it is positive and confirms the diagnosis when the specific test for arc 5 antigen is positive [1]. Surgical treatment consists of total thyroidectomy, avoiding cyst rupture. Antiparasitic treatment with albendazole or mebendazole is indicated in the case of multifocal hydatid disease or intraoperative cyst effraction [2–5]. Our patient did not present any signs of recurrence

after two years of follow-up. Prevention remains essential, comprising public awareness campaigns concerning the importance of hand hygiene, which remains the most effective way to break the parasitic cycle and control all sites of endemic hydatid disease.

#### Disclosure of interest

The authors declare that they have no competing interest.

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