

Radiographic findings may be very helpful in deciding adequate management. A cystic image with fluid contents and an attenuation coefficient similar to water containing calcifications (occurring in up to 15% of cases) may suggest an adrenal cyst. Rozenblit et al. classified non-functioning cystic adrenal masses into four types based on radiographic criteria. Uncomplicated cysts are homogeneous cysts less than 6 cm in size and with a wall less than 3 mm thick; for this variety, regular monitoring is recommended to detect changes in nature or size. Complicated cysts are those with high attenuation values or non-homogeneous, with walls thicker than 5 mm or with central or peripheral thick calcifications. Surgery is recommended for these cysts. Cysts greater than 5–6 cm in size with attenuation values higher than water or with wall thicknesses between 3 and 5 cm are considered indeterminate cysts. For these, lesion puncture or conservative management may be indicated.<sup>5</sup> Fine needle aspiration (FNA) may be helpful for classifying the type of adrenal cyst or for differentiating it from cysts with other origins (liver, etc.).<sup>6</sup> FNA should never be performed for lesions suspected of being parasitic cysts or pheochromocytoma. According to Neri and Nance, this procedure may improve compression symptoms in some patients while avoiding surgical resection.<sup>6</sup> However, other authors think that FNA has a very limited role for establishing lesion malignancy, and that only the pathological study of surgical specimens can provide a definitive diagnosis.<sup>7</sup>

In our patient, surgery was decided upon because the CT image suggested a malignant lesion. However, an endothelial cyst was found. Cyst removal was also associated with an improvement in the symptoms which had led the patient to seek medical help. Although they are not the most common etiology of incidental adrenal masses, these cysts should be considered in differential diagnosis and when treatment is being decided.

## Conflicts of interest

The authors state that they have no conflicts of interest.

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## Unilateral exophthalmos and hypothyroidism<sup>☆</sup>

### Exoftalmos unilateral e hipotiroidismo

Orbital masses and thyroid ophthalmopathy are the most prevalent causes of uniocular proptosis. We report the case of a female patient with worsening of a prior unilateral proptosis due to an associated thyroid ophthalmopathy (TO).

A 41-year-old female patient with primary hypothyroidism and a congenital staphyloma in her left eye reported a worsening of proptosis and left retro-orbital pain over the previous weeks.

A physical examination confirmed a unilateral exophthalmos and ruled out edema or signs of conjunctival inflammation in either eye. The patient had goiter, which could be palpated but was not visible even in the extended neck. There were no adjacent adenopathies. Ultrasound

examination revealed a heterogeneous gland with no nodules. The left lobe was 3.7 cm × 2.0 cm × 1.3 cm in size, and the right lobe 3.6 cm × 1.5 cm × 1.2 cm in size.

Blood tests performed some weeks previously had shown subclinical autoimmune hypothyroidism: TSH 10,337 µIU/mL (0.3–4.5), free T4 1.04 ng/100 mL (0.7–2), antiperoxidase antibodies 817 IU/mL (0.0–35), antithyroglobulin antibodies 59.4 IU/mL (0–40). This condition was being treated with levothyroxine 75 mcg/day.

An orbital CT scan was performed to rule out the presence of a mass, and it showed the increase in diameter of the left eyeball which is characteristic of staphyloma and a mild to moderate bilateral thickening of the extraocular muscles (Fig. 1) suggesting thyroid ophthalmopathy. Anti-TSH receptor antibody level was 27.5 U/L (0–10).

Graves' or thyroid ophthalmopathy (TO) is a condition confined to the orbit in which an immune reaction to an autoantigen, which is probably the TSH receptor, causes an inflammatory reaction affecting the extraocular muscles and orbital tissue.<sup>1</sup> Staphyloma is a bulging of the eyeball caused by congenital or acquired, unilateral or bilateral scleral elongation which usually affects the posterior half of the eye. There are four types of staphyloma: posterior

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**Figure 1** Orbital CT: increased left eyeball diameters, with a slight deformity in the posterolateral scleral rim, consistent with macrophthalmos associated with staphyloma. A mild to moderate thickening of the extraocular muscles of the left eyeball is seen.

pole staphyloma with or without optic nerve involvement, peripapillary staphyloma and giant peripapillary staphyloma. The reported patient had thyroid ophthalmopathy and posterior pole staphyloma.

Despite its name, Graves' ophthalmopathy does not only occur in Graves-Basedow disease. It has, on rare occasions, been reported as being associated with subacute thyroiditis and thyroid cancer and, in up to 10% of cases, with other forms of chronic autoimmune thyroid disease.<sup>2</sup> This prevalence supports the validity of classifications interpreting autoimmune thyroiditis as a single clinical condition with three variants (including the two forms of Hashimoto's disease and Graves' disease).<sup>3</sup> The presence of goiter, hypothyroidism, and thyroid autoimmunity classified our patient as having type 2A Hashimoto's disease.

Although the presence of thyroid ophthalmopathy is confirmed by orbital imaging techniques in virtually all cases of Graves' disease,<sup>4</sup> it is clinically relevant in only 30–50% of these patients, in whom it is usually mild and

bilateral. In the rare cases with unilateral ophthalmopathy, a differential diagnosis should be made with intraorbital masses, carotid-cavernous fistulas, and causes or pseudoexophthalmos such as anisometropic myopia magna.<sup>5,6</sup>

Although the finding of antithyroid antibodies contributes to the diagnosis of autoimmune thyroid disease, antibody measurement is not required for either the diagnosis or the monitoring of ophthalmopathy,<sup>7</sup> which are done by clinical examination and orbital imaging tests (preferably CT, which is also the test of choice for the diagnosis of staphyloma). When the diagnosis is uncertain, the detection of anti-TSH receptor antibodies is highly sensitive and specific.<sup>8</sup> The most relevant aspect of the reported patient was that the involvement of the extraocular muscles was mild and similar in both eyes, and her thyroid ophthalmopathy would have been clinically irrelevant (as occurred in her right eye) in the absence of staphyloma in the left eye, which contributed to making it evident.

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