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A case report and review of the literature.

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Parathyroid adenolipoma. A case report and review of the literature.

The primary hyperparathyroidism is a pathological condition that needs frequent surgical treatment. Usually it is encountered due to a parathyroid adenoma, but in rare cases it is configured as structured parathyroid tissue in a rich environment with a bulk of adipose cells. This pathology initially described as Hamartoma of the parathyroid gland and then as parathyroid adenolipoma is rarely encountered and it requires special care from medical staff because of the difficulty in its early diagnosis and also its treatment.
We are presenting a case treated by our team and a review of the literature on this topic.

KEY WORDS: Hyperparathyroidism, Parathyroid surgery, Parathyroid adenolipoma, Parathyroid hamartoma

Case Report

A 57 years old female patient S.B presented to the family doctor with complaints of fatigue, sweating, thoracic pain, and dyspnea associated with palpitations.
The patient diagnosed and treated for atrial fibrillation, presented to the Emergency Department periodically for rhythm conversion. When the patient presented to the Surgery Department she was being treated with acetylsalicylic acid 100 mg per day, Losartan 50 mg per day and Bisprolol 5 mg per day.
Lab tests and ultrasonography of thyroid gland were performed. Despite an impeccable thyroid hormone profile, a 21x11 mm mass was detected positioned on the left, posterior-inferiorly with peripheral vascularization reported as parathyroid adenoma. The laboratory assessment of parathormone (PTH) level of 209 pg / ml with hypercalcemia 12.3 mg/dl, hypothesizes a primary hyperparathyroidism. The diagnosis of left parathyroid adenoma was confirmed by a combined scintigraphy with a TC 99 vs. Tc 99 Sestamibi (Fig. 1).
The patient undergoes a surgical exploration of the neck where a left inferior parathyroidectomy was performed, founding the gland localized on the posterior part of the inferior pole of the left lobe of the thyroid gland 12 x 6 x 5 mm. Three other parathyroid glands were seen in normal position and morphology.
The patient is discharged on the second postoperative day in good condition and the unit dosage of parathormone 7 days after the surgical intervention was normal. Pathological findings confirm a parathyroid adenolipoma Histologically, the tumor consisted of monomorphous round-to-oval chief cells arranged in solid sheet-like and follicular structures . The tumor stroma was prominently composed of mature adipose tissue (Fig. 2).

Discussion

Primary hyperparathyroidism is an endocrine disorder; the third most common among these diseases, after diabetes and thyroid pathologies. Its prevalence varies between 1.1 - 1.0%. It usually occurs after the fifth

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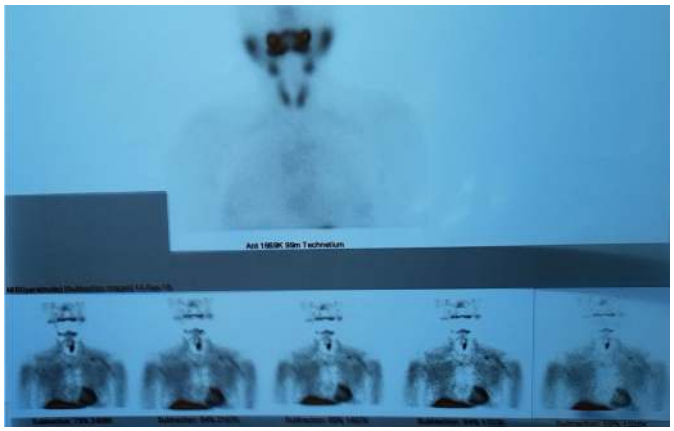

Fig. 1

decades of life and it is most common in females than in males [1,2].
Usually, the disease is randomly diagnosed during laboratory examinations for other purposes. It often presents with non-specific signs such as fatigue, depression, sleeping problems, bones muscle pain, gastro esophageal reflux and attention disorders [3].
Usually, the diagnosis consists of the laboratory data of increased calcemia and parathormone levels combined with the ultrasound or CT scan findings and parathyroid gland scintigraphy. A careful diagnosis should make it possible to identify the pathological gland and possibly the preoperative location of other glands as well, which increases the successful chances of the surgical intervention [4].
Parathyroid lipoadenoma is a rare tumor. It was described as the parathyroid Hamartoma in 1958 by Ober and Kaiser. It received the name "parathyroid adenolipoma" because of its hormonal activity in 1962 by Abdul e Haj [5].
As far as we know the description of this pathology in literature is quite rare and in most of them the tumor secretes parathormone [5-8].
Usually in the parathyroid tissue there are no or minimal traces of adipose cells and in the case of lipoadenoma they are described as present in 20% to 90% of tissue.
In general, the cases found in literature describe the lipoadenoma as found in the neck, but there are also some of them which are described locally in abnormal positions.

Conclusion

Considering a literature review and the case in our experience, we think that parathyroid adenolipoma is a rare pathology, that is usually definitively diagnosed by postoperative biopsy. It is difficult to suspect during the clinical exploration of parathyroid glands. However, it should be considered as a possibility in cases diagnosed with primary hyperparathyroidism.

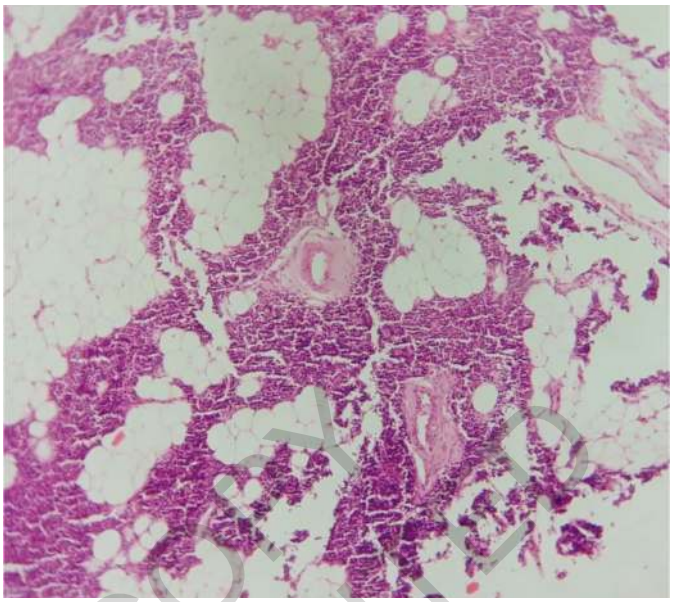

Fig. 2

Riassunto

L'iperparatiroidismo primario è una condizione patologica che richiede in genere un trattamento chirurgico. Di solito è l'effetto di un adenoma paratiroideo, ma in rari casi è configurato come tessuto paratiroideo localizzato all'interno di un tessuto ricco di cellule adipose. Questa patologia inizialmente descritta come amartoma della ghiandola paratiroide e poi come adenolipoma paratiroideo è di raro riscontro, e richiede impegno particolare da parte dei medici per la difficoltà della sua diagnosi precoce e anche del suo trattamento.
Presentiamo qui un caso trattato dal nostro team e una revisione della letteratura su questo argomento.

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