

# Inhabitual presentation of parathyroid adenoma

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## Abstract

Spontaneous extracapsular hemorrhage of a parathyroid adenoma causing cervico-mediastinal hematoma is a rare but life-threatening manifestation. . The first documented case of spontaneous cervical hematoma due to a parathyroid adenoma was described by Capps in 1934. A cases of parathyroid hyperplasia or carcinoma were also described. Up to now, less than 60 cases have been reported worldwide.



Figure 1: Extended cervical ecchymotic lesion

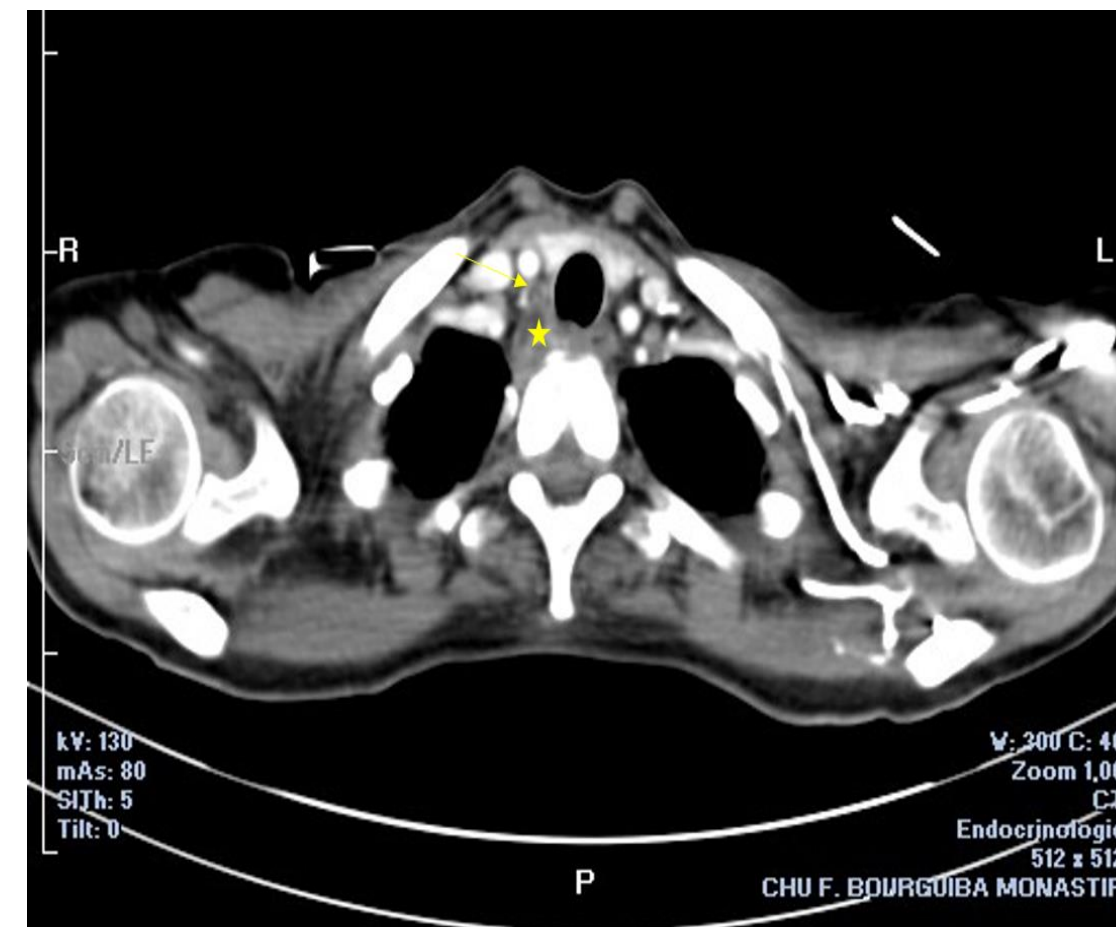


Figure 2: Axial cervical CT-scan showing the retropharyngeal hematoma (star) with a right retrothyroid gland nodule that correspond to a parathyroid gland (arrow)

## Objectifs

We aim to present a rare case of cervico-thoracic hematoma secondary to a spontaneous rupture of a parathyroid adenoma and to specify its clinical, radiological, therapeutic and evolutionary features.

## Case report

A 50-year-old woman with no significant pathological history who presented to the emergency department for cervico-thoracic ecchymotic lesion associated with upper dysphagia (figure 1). History evolved for five days. There was no context of trauma or anticoagulant treatment. The patient complained from generalized bone pain.

## Résultats

Physical examination find no cervical mass. A cervico-thoracic scan showed an extended retropharyngeal hematoma extended to the posterior mediastin associated an inferior right retro-thyroid nodule (figure 2). Biology: PTH =780 pg/mL, malignant hypercalcemia (3.4 mmol/L) and hypophosphoremia (0.58 mmol/L). The diagnosis of symptomatic primary hyperparathyroidism was concluded. Cervical ultrasound and MIBI scintigraphy confirmed the parathyroid nature of this nodule. Treatment: two months after the hemorrhagic episode, surgical removal of a 3 cm right inferior parathyroid gland was performed.

after the hemorrhagic episode (figure 3). Histological examination confirmed the diagnosis of parathyroid adenoma. Evolution : normalization of the phosphocalcium balance and PTH level (31 pg/mL). No sign of recurrence was noted after one year of follow-up.



Figure 3: peroperative view showing the right parathyroid gland adenoma (arrow) closely to the thyroid gland (star)

## Conclusion

The parathyroid origin should be evoked in the presence of any spontaneous cervico-thoracic hematoma. Whereas, differential diagnosis such as cervical abscess, superior vena cava syndrome, artery dissection, or subacute thyroiditis should be considered. In absence of airway compromise or hemodynamic instability, conservative approach should be considered and the parathyroid surgery delayed within six weeks after. Otherwise, a rapid surgical intervention became necessary.

## Références

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