LATE CERVICAL NODAL TUBERCULOSIS RECURRENCE MIMICKING METASTASIS OF PAPILLARY THYROID CARCINOMA. A CASE REPORT

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LATE CERVICAL NODAL TUBERCULOSIS RECURRENCE MIMICKING METASTASIS OF PAPILLARY THYROID CARCINOMA. A CASE REPORT (Abstract): Although papillary thyroid carcinoma (PTC) represents the most usual form of thyroid neoplasia the association with cervical tuberculous lymphadenitis (CTL) is rare and diagnosis remains a challenge.

Case report: We report the case of a 78-years-old female patient with personal history of cervical fistulizing tuberculous gumma diagnosed with right lateral cervical mass and Hashimoto nodular thyroiditis. The neck ultrasound and CT exam revealed an enlarged right thyroid lobe containing a nodule of 2/2 cm and right later cervical multiple masses resembling lymphadenopathies. The patient underwent to surgical treatment which consisted in total thyroidectomy and modified neck dissection with resection of internal right jugular vein adherent to the lymph node mass.

Results: The final pathology report demonstrated a pT3mN0LV1Pn0 right lobe papillary thyroid carcinoma on Hashimoto thyroiditis while lymph nodes presented giant epithelioid granulomas with giant multinuclear Langhans cells and central necrosis consistent with the diagnosis of tuberculous adenitis. The postoperative course was uneventful and the patient was referred to both TB and endocrinology specialist.

Conclusions: Cervical tuberculous lymphadenitis can mimic metastatic adenopathy in papillary thyroid carcinoma and frequently the definitive diagnosis is achieved by excisional biopsy and histopathological examination. Keywords: PAPILLARY THYROID CARCINOMA, CERVICAL TUBERCULOUS LYMPHADENITIS, THYROIDECTOMY, LYMPHADENECTOMY.

Papillary thyroid carcinoma (PTC) represents the most generic form of thyroid neoplasia. Total thyroidectomy eventually followed by radiiodine is the treatment of choice while cervical lymphadenectomy is performed in case of apparent or histologically proven lymph node metastases (1). On the other hand, tuberculosis (TB) remains a major health problem today. It mainly involves the lungs but can cause infection in almost all tissues in the body. Lymph node tuberculosis (LNT) is a common cause of lymphadenopathy in areas in which TB is endemic. Although new diagnostic methods have been developed, especially in patients without a history of tuberculosis, the cervical tuberculous lymphadenitis (CTL) diagnosis remains a challenge.
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CASE REPORT

We report the case of a 78-years-old female patient who has been referred to our surgical unit by the endocrinologist with right lateral cervical mass and Hashimoto nodular thyroiditis. Significant elements in the history of the patient were a cervical fistulizing tuberculous gumma almost 50 yrs. ago, left mastectomy for in situ breast cancer (2014), arterial hypertension and atrial fibrillation under treatment. The physical examination revealed a good general appearance patient, of normal weight, vitals stable, apyrexial. Neck examination reveals a right lateral aspect elastic tender mass from the top of posterior triangle extending behind clavicle and palpable nodular right thyroid lobe; suprasternal scar from previous treated skin TB. Laboratory tests showed autoimmune thyroiditis (ATgAB-629 IU/ml, APOAB-446 IU/ml) with mild hypothyroidism, iron deficiency anemia. The neck ultrasound exam revealed an enlarged right thyroid lobe containing a nodule of 2/2 cm, a micronodular normal sized left lobe and right later cervical multiple masses resembling lymphadenopaties. Thyroid scintigraphy described a heterogenous goiter with hypo/affixation of the right lobe nodules and inferior pole retrosternal, right lobe is compressed by a cervical mass with no uptake of Tc. CT scan showed along right internal jugular vein- multiple cystic tumors forming a mass of 43/48/73 mm (fig 1, 2).

FNAC from the largest thyroid nodule showed a benign aspect. Chest X-Ray, abdominal ultrasonography and ENT – indirect laryngoscopy examination were all normal. Patient underwent to surgical treatment which consisted in total thyroidectomy and modified neck dissection with resection of internal right jugular vein adherent to the lymph node mass. The frozen section of lymph nodes revealed TB adenitis.

Fig. 1. Cervical coronal section: supraclavicular and right inferior jugular cystic tumors (black arrows). Similar lesion in contact with right thyroid lobe (white arrow). Compression on right jugular vein (thin arrows).
Fig. 2. 3D reconstruction – right jugular vein compression (thin white arrows), right thyroid lobe increased in volume (black arrows), jugular supraclavicular tumor mass (thick white arrows)

The final pathology report demonstrated a 2.5 cm papillary thyroid carcinoma on the right lobe and Hashimoto thyroiditis, capsular invasion (fig. 3), left lobe Hashimoto thyroiditis, all lymph nodes without tumor cells, giant epithelioid granulomas with giant multinuclear Langhans cells and central necrosis - TB adenitis (fig. 4). The staging of the tumor was pT3mN0LV1Pn0.

Fig. 3. Papillary thyroid carcinoma with capsular invasion, HE, x10

Fig. 4. Giant epithelioid granulomas and central necrosis, HE, x10

The postoperative course was uneventful and the patient was discharged in the 5th postop day and referred to both TB and endocrinology specialist.

DISCUSSION
One of the most common clinical presentation of extrapulmonary tuberculosis is cervical lymphadenitis. In a study published in 2000, Kanlikama et al. demonstrated that the history of TB contact is in only 21.8% and tuberculosis infection occurs in only 16.1% of the cases with cervical lymphadenitis (2). Cervical tuberculous lymphadenitis
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may appear either a unilateral single or multiple painless mass and is usually found in the supraclavicular area (3). Partially, these clinical features are common to those of the metastatic adenopathy from PTC. The sonographic characteristics of tuberculous adenopathy are very like metastatic cervical nodes from PTC namely intranodal cystic necrosis and calcification. CT scan can be a valuable complementary test in cervical tuberculous lymphadenitis but is not sufficient to make a certain diagnosis. The most common pattern on CT is a node with main area of necrosis but in our case the features were not consistent. Fine-needle aspiration cytology could have shown a well-formed epithelioid granuloma and the presence of caseous necrosis but, again, in our case the appearance was uncertain. Coexistence of thyroid cancer and cervical tuberculous lymphadenitis is rare. However, some similar cases have been reported to date (4, 5) but preoperative diagnosis was impossible for most cases. As the other case reports, we could not distinguish preoperatively whether cervical lymph nodes enlargement was due to PTC metastasis or tuberculosis infection either by clinical findings or imaging studies.

CONCLUSIONS

In our experience, cervical tuberculous lymphadenitis can mimic metastatic adenopathy in papillary thyroid carcinoma. Preoperative diagnosis can be difficult but is valuable in avoiding unnecessary and complications prone neck dissection. In the presence of enlarged cervical lymph nodes on a patient with TB history, tuberculous lymphadenitis should be considered. The definitive diagnosis of tuberculous lymphadenitis is done by excisional biopsy and histopathologic examination if all other techniques fail.

REFERENCES