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Surgery

The Association of Cervical Lymph-Node with Thyroid Papillary Carcinoma, Case Report

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Abstract **Case Report**

The association of cervical adenopathie with a cervical carcinoma location suggests a lymph node metastasis and requires a complicated and radical surgery. The most common location of extrapulmonary tuberculosis is cervical lymph nodes (63-77%) [1]. We report a tuberculous lymphadenetis mimicking lymph node metastasis in a 35-year-old patient operated for progressive cervical tumefaction. It was a papillary thyroid carcinoma found after an isthmo-lobectomy. The pathologic findings imposed a thyroidectomy totalization and an ipsilateral central neck lymph node dissection. The operatory finding of a controlateral adenopathy manly with the development of a controlateral cervical adenopathie suggesting lymph node metastatic extension. A lymph node excision was undertaken and the pathologic study revealed a tuberculous lymphadenitis. The patient was treated by put under antibacillary treatment and evolution was satisfactory. We also expose, through this work, a certain number of techniques of exploration likely to ascertain the diagnosis of a tuberculous lymphadenitis and to monitor the therapeutic strategy.

Keywords: Thyroid, Papillary carcinoma, tuberculosis, cervical lymph-nodes, adenopathy.

INTRODUCTION

Thyroid cancers are the most common endocrine cancers. Radical surgical intervention must involve lymph node dissection. Papillary carcinoma is the most common form of differentiated thyroid cancer. The most common location of extrapulmonary tuberculosis is cervical lymph nodes.

CASE REPORT

We report the case of a 35-year-old patient admitted to our department with progressive cervical tumefaction. Clinical examination found a right thyroid 1cm nodule without clinical signs of dysthyroidism. The cervical ultrasound individualized a right thyroid nodule indexed TIRADS-4 without any suggesting lymph node metastatic pattern. Laboratory exams, mainly Serum TSH, T3 and T4, didn't show any anomaly. The patient had a right isthmo-lobectomy. The pathology of the specimen showed papillary thyroid carcinoma. The patient was admitted to the operatory room for thyroidectomy totalization and cervical node examination. Surgical examination found a significant left swollen lymph node in the territory of the upper cervical nodes. The decision was to perform a thyroidectomy totalization and a cervical node dissection for a suspected node metastatic papillary carcinoma. The pathologic study revealed a tuberculous lymphadenitis without any signs of malignancy. The patient received iodine 131 therapy and was put under antibacillary treatment and hormone therapy with good clinical and biological follow up.

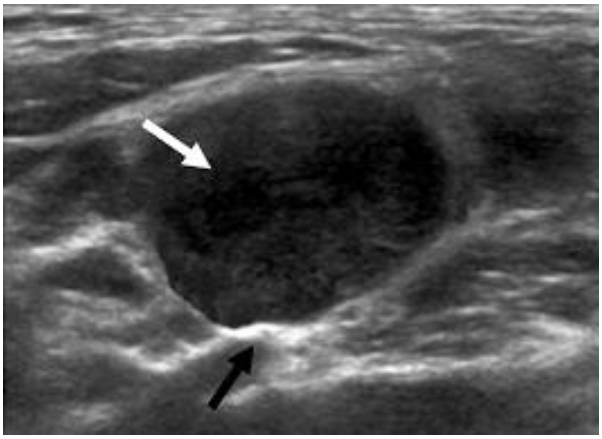

Fig-1: Ultrasound: hypoechoic node with necrosis (white arrow) and peripheral calcification (black arrow)

Fig-2: Surgical findings: Ipsilateral central neck dissection and a tuberculous adenopaty (black arrow)

Fig-3: Surgical findings: Ipsilateral central neck dissection and a tuberculous adenopaty (black arrow)

DISCUSSION

The most common location of extrapulmonary tuberculosis is cervical lymph nodes (63-77%). It most frequently involves unilateral laterocervical and supraclavicular swelling with rigid painless consistency.

The diagnosis of cervical lymphadenopathies in a context of papillary carcinoma of the thyroid suggests in the first place the diagnosis of a metastatic extension. In such a context, many surgeons recommend to accomplish with an appropriate lymph node dissection.

However, although this attitude is particularly justified from an oncological point of view, the differential diagnosis should also consider other diseases, especially benign or inflammatory, which may explain the presence of this lymphadenopathy. Therefore, the preoperative pathological proof of metastatic origin of the lymphadenopathy is necessary in order to avoid as much as possible for these patients lymph node dissection sometimes unnecessary and even susceptible to expose to serious post-surgical complications [2, 3].

Ipsilateral central neck dissection appears to be sufficient in patients with tumors <1 cm. In tumors >1 cm, bilateral dissection should be considered as these patients are more likely to have bilateral positive nodes. If tumor size is used as criteria for prophylactic node dissection, approximately 1/3 of patients can be spared a bilateral dissection [4].

Ultrasound appears to be the most common form of exploration sensitive for the detection of lymph node metastases. The ultrasound findings making suspicion of metastatic lymph nodes include: an axial ganglion diameter which must be greater than 7 mm, a rounded shape, the presence of intranodular cystic necrosis, peripheral or intranodular calcifications and loss of echogenicity of the lymph node hilum [5]. Thus, the presence cystic necrosis or peripheral calcifications lymph node on ultrasound in the context of differentiated thyroid cancer rather suspect a metastatic localization than a simple benign or inflammatory process [5].

Fine needle aspiration biopsy (FNAB) takes an important place to supply the relatively low specificity of ultrasound. However, the diagnostic efficiency of FNAB varies depending on series from 46 to 90%, which often requires the use of iterative samples [6, 7]. Open biopsy is only used when FNAB has not been diagnostic [8]. To overcome this constraint, Baek was able to demonstrate that the Polymerase Chain Reaction (PCR) contributes to the detection of Mycobacterium genes tuberculosis in the suction product with a 82.4% sensitivity compared to needle aspiration alone (52.9%) and a specificity approaching 100% [9].

Therefore, when doubt persists as to the preoperative distinction between metastatic extension and tuberculous lymphadenitis, needle aspiration combined with PCR most often contributes to the establishment of the differential diagnosis, especially in patients who have had a history of tuberculosis [10].

CONCLUSION

When we have a preoperative pathology diagnosis of cervical lymph nodes the excessive dissection, sometimes source of complications, could be avoided. The association of lymph node tuberculosis and differentiated thyroid cancer does not significantly

affect the management of the patient, since the bacillary treatment and metabolic radiation therapy can be administered concomitantly.

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