

Lateral metastasis of papillary thyroid carcinoma, what else can it be?

I. Kharrat 1, M. Ben Ayed 1, Y. Hbaieb1, C. Kammoun2, T. Boudaouara2, I. zouche3, I. Achour1, A. Chakroun1, B. Hammami1, I; Charfeddine1

1. Laboratoire de recherche Surdit  vertige et cancers ORL, LR23ES01 Service ORL et CCF, CHU Habib Bourguiba, Sfax- Tunisie
2. Service d'anatomie et de cytologie pathologique, CHU Habib Bourguiba, Sfax- Tunisie
3. Service d'anesth sie, CHU Habib Bourguiba, Sfax- Tunisie

Introduction

Papillary thyroid carcinoma (PTC) is frequently associated with lateral nodal metastasis. However, different other entities can be associated with PTC and mimic lateral neck nodal metastasis.

Objectifs

We aim to point to the clinical presentation of different pathologies that present as nodal metastasis of PTC

Materials and methods

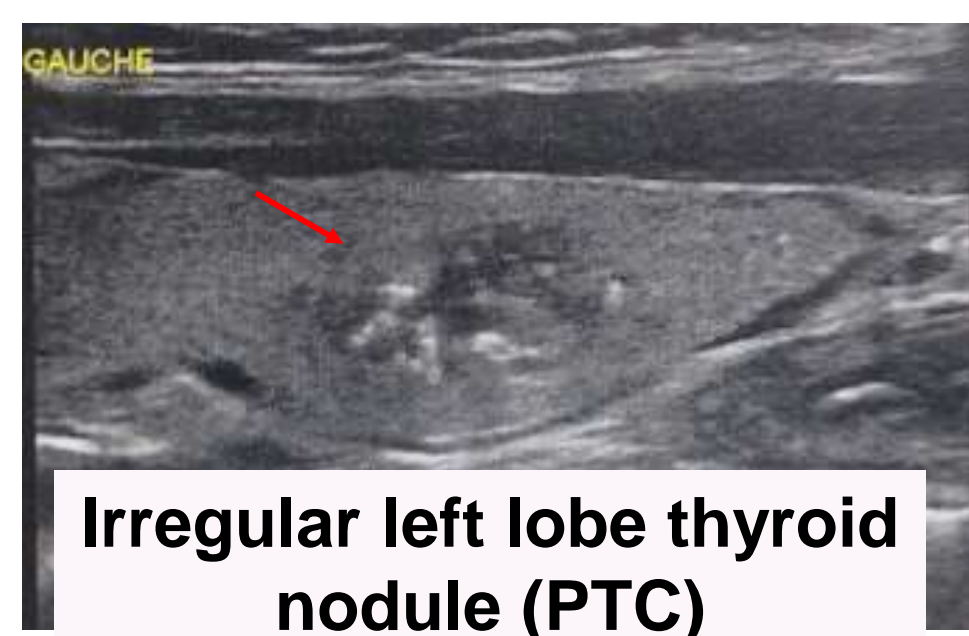
We report 5 cases of an association between PTC with/without lateral neck nodal metastasis(LNNM) and a nodal localization of the following entities:

- Nodal tuberculosis
- Hodking lymphoma
- nasopharyngeal carcinoma

Results

Case 1

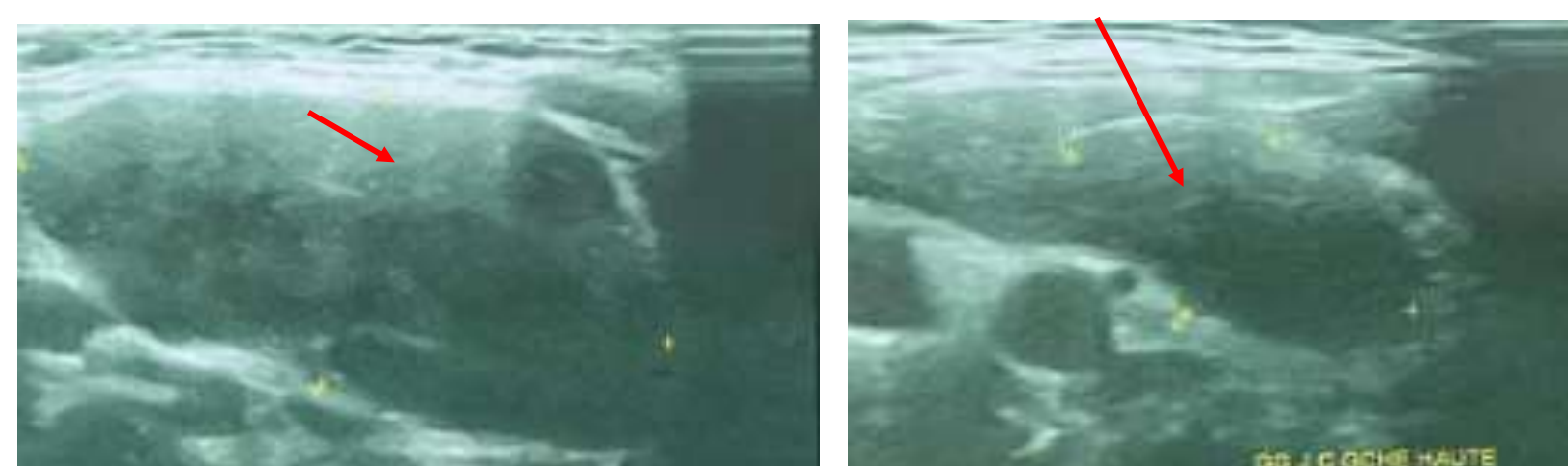
- 21-year-old female
- Total thyroidectomy with TT bilateral CND and LND for a Bethesda6 thyroid nodule with suspicious LNs and negative nodal FNA.
- Histopathology: **level II and III lymphadenitis tuberculosis without LNNM.**



Irregular left lobe thyroid nodule (PTC)

Case 2

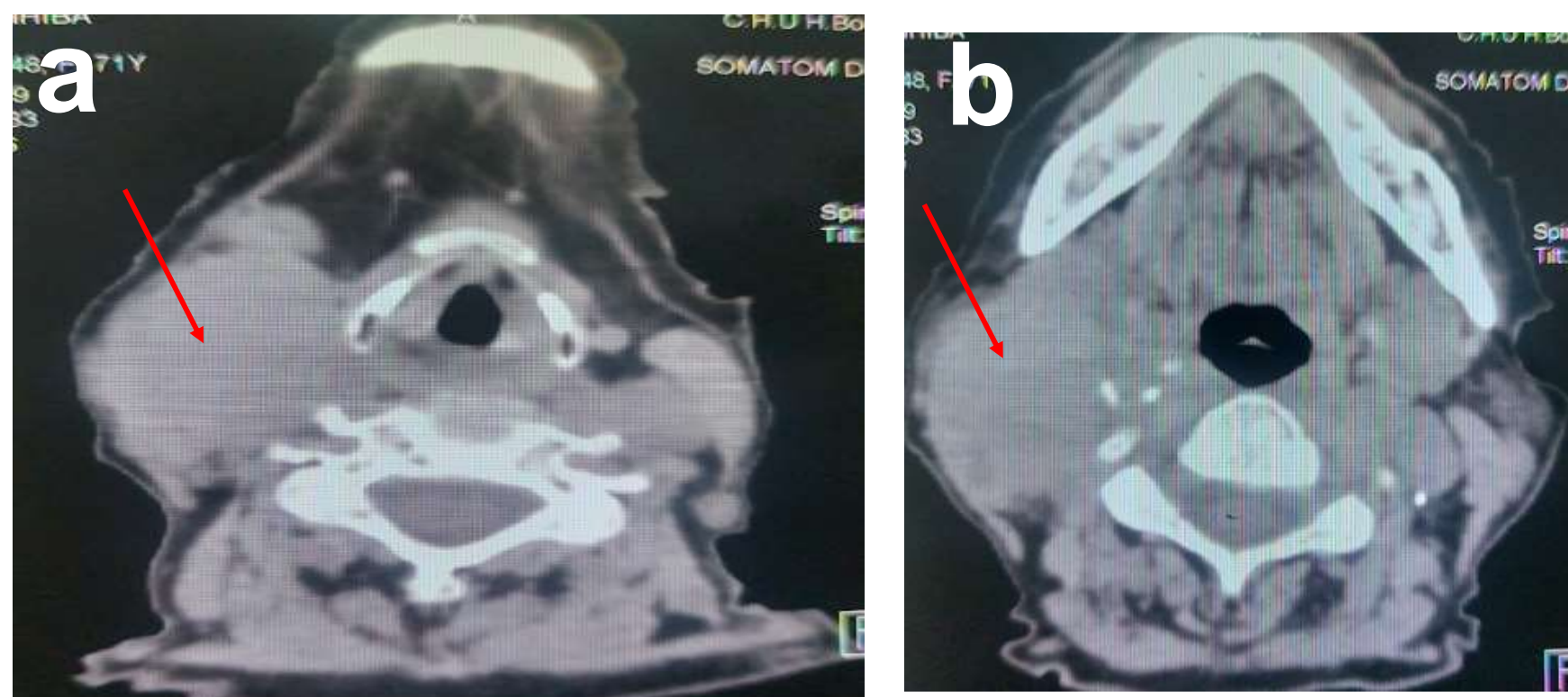
- A 35-year-old female presented
- Suspicious Bethesda 6 thyroid nodule and 3-centimeter level II lymphadenopathy.
- nodal FNA was non-contributive.
- TT, bilateral CND and LND
- Histopathology: **level III tuberculosis associated to level II,III,IV and V LNNM.**



Ipsilateral jugular and submandibular tuberculosis lymphadenitis

Case 3

- Case2: A 27-year-old female
- known history of nodal tuberculosis and lymphoma
- TT with bilateral CND and LND for a Bethesda 6 thyroid gland nodule and bilateral suspicious lymph nodes .
- Histopathology: PTC, CLNM and **association of LLNM and tuberculosis at level IV.**



Computed tomography scan , axial slides showing a lymphadenopathy at the level III (a) and II (b) responsible of a deviation of the vascular and laryngeal structures towards the contralateral side

Case 4

- 30-old female
- undifferentiated nasopharyngeal carcinoma under remission
- Suspicious thyroid gland nodule
- Total thyroidectomy with bilateral CND and unilateral LND
- Histopathology: PTC, without nodal metastasis associated to a **nodal metastasis from a nasopharyngeal carcinoma**

Case 5

- A 75-year-old female
- lateral 7-centimeter neck swelling
- thyroid gland nodule (EU-TIRADS V) with a highly suspicious level II
- total thyroidectomy, bilateral CND and LND
- A 1.5-centimeter PTC without nodal metastasis
- **classical nodular Sclerosis Hodgkin lymphoma at the right level IIb and III.**
- Chemotherapy and radioactive iodine

Conclusion

- Although nodal metastasis of PTC is frequent, it is important to suspect other associated pathologies.
- The clinical context, ultrasound and nodal FNA can be helpful to make the diagnosis.
- Due to the frequency of nodal Tuberculosis in Tunisia, this diagnosis needs to be considered in any enlarged lymphadenopathy even in the context of PTC
- Pre-operative diagnosis of these entities is important to avoid an unnecessary lateral neck dissection

References

- Ito T et al, Preoperatively diagnosed case with co-existence of papillary thyroid carcinoma and cervical tuberculous lymphadenitis. Int J Surg Case Rep. 2015
- Saif Andrabi et al, . Tuberculous cervical lymphadenitis masquerding as metastatis from papillary thyroid carcinoma. Int J Endocrinol Metab. 2012
- Kim SM et al, . Tuberculosis cervical lymphadenopathy mimics lateral neck metastasis from papillary thyroid carcinoma. ANZ J Surg. 2016