ATYPICAL METASTIZATION OF PAPILLARY THYROID CARCINOMA TO THE MANDIBLE

CASE REPORT

GUEDES M1, MILHEIRO F1, PIRES-GONÇALVES C1, ROLO D1, REIS J1, FIGUEIREDO DIAS A1
1 Department of Maxillofacial Surgery and Stomatology, Centro Hospitalar e Universitário do Porto

INTRODUCTION

It is estimated that only 1% of the malignant tumours that affect the oral cavity occur due to primary neoplasms of another location, and of these, about 1% originate in thyroid tumours. Papillary thyroid carcinoma (PTC) is the most common and well-differentiated cancer of the thyroid, accounting for 80-90% of the total malignancies that arise in this gland, affecting mainly women between 40-50 years of age. Its metastisation occurs mainly to the regional lymph nodes, with the occurrence of jaw metastases being exceptionally rare. Metastases that occur in the oral cavity appear to exhibit a predilection for the mandibular body and angle, which seems to reflect the rich vascularisation of the medullary space of these regions.

CLINICAL CASE DESCRIPTION

CLINICAL HISTORY

- E.G.F
- Female
- 70 years old
- Referred to our department with complaints of pain and edema in the left mandibular angle region, with roughly 2 months of evolution

PRIORS

- Papillary thyroid carcinoma
  - Total thyroidectomy (07/2015)
  - Therapy with I^{131} (02/2016)
- Active metastatic disease (06/2018)
  - Followed in multidisciplinary consultation for head and neck tumours
  - Radiofrequency ablation for iliac metastasis

PHYSICAL EXAM

- Slightly painful swelling in the upper cervical region/ left mandibular angle
- No other physical findings on the intra-oral/extra oral examination

PHOTOS AND COMPLEMENTARY DIAGNOSTIC EXAMS

FIG.1 – evident swelling of the left mandibular angle.
FIG.2 – OPG. radiolucent lesion at the left mandibular angle.
FIG.3 – Body scintigraphy with I^{131}: hypercaptive focus in the left mandibular region (among others).
FIG.4/5/6 – CT SCAN (Sagittal, Coronal and Axial views): massive lesion (36mm x 41mm x 43mm), heterogeneous capturing, in the left mandibular angle, conditioning extensive bone destruction and invasion of the medial pterigoid and homolateral masseter muscles; "Given the context of known metastatic disease, it is considered likely that it may correspond to bone metastasis".
FIG.7 – US Doppler Study: solid, heterogeneous, richly vascularized lesion.
FIG.8 – Ultrasound-guided FNAB.
FIG.9 – Material obtained preserved in Cytorich®.
FIG.10 – Anatomopathological exam (100x; H/E stain); "nests of cells with cellular atypia...".

DISCUSSION AND CONCLUSIONS

Although extremely rare, the correlation of imaging findings with the clinical manifestations is highly suggestive of a metastatic lesion arising from a PTC in this patient. However, only a more representative biopsy could provide a definitive diagnosis. Bone involvement in metastatic disease and its response to radioactive iodine therapy are predictive factors of survival. Thus, timely detection of these lesions and their therapeutic orientation may have a positive impact on the overall survival rate of these patients.

BIBLIOGRAPHY