THYROID METASTASIS OF BLADDER UROTHELIAL CARCINOMA: A VERY RARE CASE

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ABSTRACT Metastatic disease of the thyroid is a very uncommon situation. The cancers that usually metastasize to the thyroid include the breast, lung, colon and kidney. However, to our knowledge, metastasis from the bladder to the thyroid is exceedingly rare. Here, we report a case of a unique metastatic transitional cell carcinoma to the thyroid gland three years after total cystectomy.

KEYWORDS thyroid metastasis, bladder, urothelial carcinoma

Introduction

Metastatic thyroid disease is uncommon, 1-2% to 24% of secondary thyroid malignant tumours have been reported in autopsy series. (1-2). However, it may occasionally represent the only secondary malignant tumour localisation (3). The cancers that usually metastasize to the thyroid include the breast, lung, colon and kidney. (4) To our knowledge, metastasis from the bladder to the thyroid is exceedingly rare. Here, we report a case of a unique metastatic transitional cell carcinoma to the thyroid gland three years after total cystectomy.

Case presentation

It was a 71-year-old woman known case of urothelial carcinoma pT2N0M0 since 2017 who underwent neoadjuvant cisplatin followed by radical cystectomy. The pathological examination of the bladder had shown a complete pathological response after chemotherapy. However, after 4 years of follow-up, she presented a thyroid swelling. Then, a CT scan showed a multinodular increase on the right side. It is the seat of a hypodense nodule involving the upper pole of the right thyroid measuring approximately 7.4*5.4 centimetres, TI-RADS 4A. This thyroid is responsible for repressing the trachea to the left side.
A biopsy of the nodule was performed. The pathological examination found a malignant tumour proliferation of carcinomatous appearance reminiscent of a primary follicular thyroid tumour.

The immunohistochemical profile showed that antibody TTF1, PAX8 are negative and p63 (4B1E12;GENEPED) and GATA 3 positive. These findings were compatible with metastasis of the bladder transitional cell carcinoma to the thyroid gland.

The patient was referred to the radiotherapy department for dyspnea and dysphagia. Therefore, she was proposed for decompression radiation therapy. She received a total dose of 8 Gy in 1 fraction with good tolerance.

Discussion
Bladder urothelial carcinoma primarily metastasizes into regional lymph nodes and the liver, lung, mediastinum, bone, and adrenal gland. However, (5), it rarely occurs in the thyroid gland. The metastatic tumour to the thyroid gland is encountered rarely in clinical practice. It is a rare malignant tumour that is highly aggressive, commonly occurring in primary malignant tumours of the kidney, gastrointestinal system, lung and breast (6-7). It is observed in elderly individuals, mostly in the sixth and seventh decade (8-9).

In contrast to primary tumours of the thyroid gland, invariably characterized by a female predominance, the thyroid metastasis patients neither sex predominated (female to male ratio of 1:1:1)(1)

Metastases to the thyroid are sufficiently rare that clinical decisions on management are based on retrospective reviews and case reports, with most groups favouring surgical resection when possible. (4-8-9). Radiation therapy could also be an option in special cases.

The appearance of thyroid metastasis has been associated with an unfavourable, preterminal event in the natural history of malignant tumours. (9,11) However, this statement was based on data from single case reports and noncontrolled studies.

Funding
This work did not receive any grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interest
There are no conflicts of interest to declare by any of the authors of this study.

References