A very rare case of neuroendocrine carcinoma of the bladder with unusual revelation "skin metastases": A case report

ABSTRACT

Neuroendocrine carcinoma of the bladder is a very rare tumor, accounting for no more than 1% of all bladder tumors. Its main characteristic is its poor prognosis, which is explained by its high metastatic potential. Classical metastatic sites are lymph nodes, liver and lung, but cutaneous localization is exceptional and can take on different non-specific clinical aspects. In our article, we report the case of a 66-year-old patient who was hospitalized for cutaneous nodules revealing very advanced bladder neuroendocrine carcinoma with lymph node, peritoneal and cutaneous metastases. The particularity of our case report is the very rare histological nature of the bladder tumor, as well as its mode of revelation (cutaneous metastases). In this work, we emphasize the importance of an exhaustive etiological assessment of any skin lesion evolving in a context of altered general condition.

Key words

Neurodocrine carcinoma of the bladder, skin metastases.

Abbreviations

Neuroendocrine carcinoma (NEC), Neuroendocrine tumor (NET), World Health Organization (WHO)

INTRODUCTION

Neuroendocrine carcinoma (NEC) of the bladder is a very rare malignancy accounting for no more than 1% of bladder tumors. It is characterized by rapid metastatic spread and a poor prognosis. Dissemination to the skin is highly unusual and indicates a very advanced stage of bladder NEC. We report the case of a patient presenting with bladder CNE revealed by rapidly progressive cutaneous nodules.

CASE REPORT

The patient was 66 years old, a chronic smoker who had weaned himself off the habit 5 years ago. He was admitted to our clinic to assess the etiology of a skin disorder that had been evolving for 3 months, in a context of profound deterioration of his general condition. Clinical examination revealed cachexia with multiple purplish-red skin nodules on the nape of the neck, back and trunk, ranging in size from 1 cm to 4 cm long axis (Fig 1, Fig2,Fig3); associated with adenopathies measuring over 1 cm, mobile in relation to the deep and superficial planes, in the cervical, left supra-clavicular, axillary and inguinal regions. During his hospitalization, the patient presented a first episode of total hematuria, clotting of great abundance without any other urological sign. The paraclinical work-up showed no urinary tract infection, the inflammatory work-up was disturbed, the PSA assay was negative and the thorcao-abdomino-pelvic CT scan revealed a locally advanced bladder tumour process with locoregional extension responsible for moderate left ureterohydronephrosis, associated

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with pelvic peritoneal carcinosis, retroperitoneal nodules and multiple adenopathies above and below the diaphragm(Fig4, Fig 5).

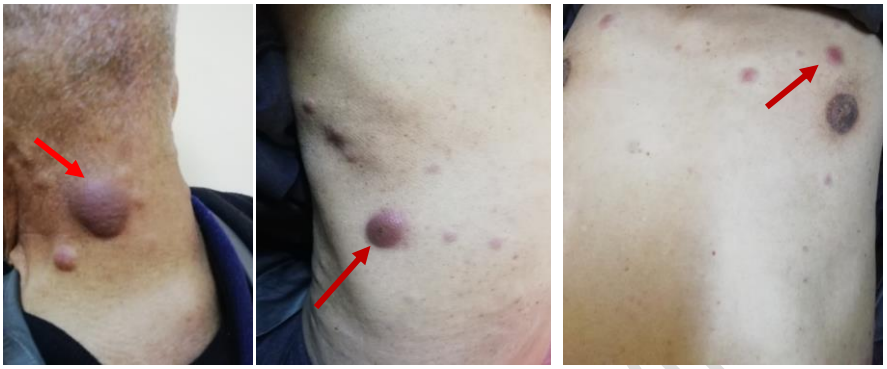

Fig 1, Fig2 et Fig 3 : the 3 figures show skin nodules on the nape of the neck, on the left side of the back and on the trunk. Purplish-red in color and hard in consistency. The largest nodule is located at the nape of the neck.

Cystoscopy-guided biopsy of the bladder tumour was consistent with poorly differentiated small-cell neuroendocrine carcinoma. The same histological pattern was observed on biopsy of a skin nodule with diffuse positivity for cytokeratin (AE1/AE3) and synaptophysin with CD56+. In the light of these data, our patient's diagnosis was neuroendocrine carcinoma with a vesical origin, complicated by lymph node, peritoneal and skin metastases.

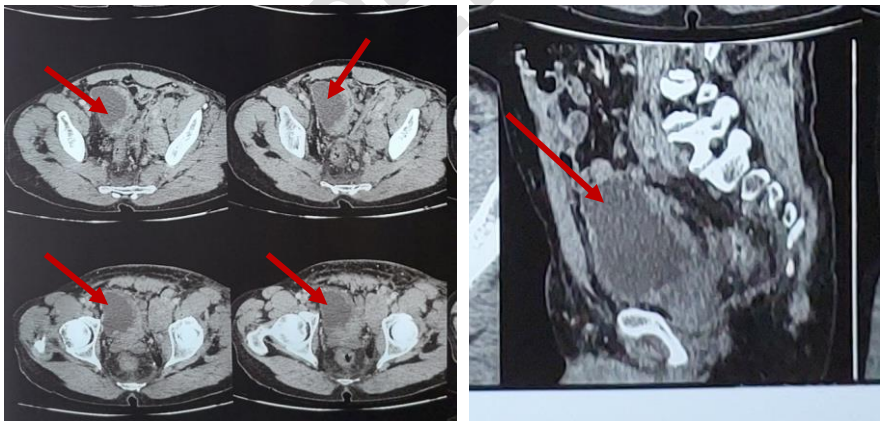

Fig 4 : cross-sectional scan

Fig 5 : sagittal scan section

Figures 4 and 5 show a bladder tumour process with locoregional extension.

Therapeutically, after consultation with the urologists and oncologists, the patient was managed by a palliative care team due to the patient's altered condition and the very advanced stage of the bladder carcinoma.

DISCUSSION

CNE of the bladder is extremely rare, with a rate of 0.35% to 1% (1-2). According to the WHO classification, neuroendocrine tumors (NETs) are divided into three subgroups based on histopathological evaluation, mitotic index and Ki67 index. Grade 1 (low) or 2 (intermediate) tumors are considered well-differentiated and have a better prognosis. Grade 3 (high) or poorly differentiated tumors generally have a high mitotic and/or Ki67 index and exhibit aggressive behavior (1-3). Large- and small-cell tumors are considered high-grade and have a poor prognosis, often reported with a fatal outcome (4).

The most common metastatic sites for NEC are the lymph nodes, liver and lungs(5). The skin is a relatively rare metastatic site for deep cancers, ranking 12th . The highest rates of skin metastases are seen in breast carcinoma (2.42%), followed by lung cancer (1.78%), oral mucosa (1.75%), colon and rectum (0.81%), stomach (0.80%) and oesophagus (0.74%). However, the incidence of skin metastases from bladder tumours is only 0.22%, as reported by a Taiwanese medical center, and they generally appear after an average delay of 18 months (6-7).

Cutaneous metastases can take a number of non-specific clinical forms, hence the importance of biopsying any skin lesion in a patient with neoplasia; three main clinical presentations have been described: nodular lesions (as in our patient's case), sclerotic lesions and inflammatory lesions (8). The presence of cutaneous extension is a poor prognostic factor, with a median survival of less than 12 months(9).

Our patient's case is very rare due to the mode of revelation, which is cutaneous metastases, and the location and histological nature of the primary tumor: neuroendocrine carcinoma of the bladder.

CONCLUSION

CNE of the bladder is a very rare neoplasia with a very high aggressive potential, which explains the rapidity of metastatic extension. Cutaneous metastases of bladder CNE are an unusual situation, and may be the mode of revelation of the primary tumor, as in our patient's case, or appear during the course of the disease.

CONSENT

As per international standard or university standard, patient(s) written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Ethical approval was exempted by the Ethical Committee at Ibn Roch university hospital for reporting this case.

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