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Short Communication

Metastatic Prostate Cancer at the Cervicofacial Level in Two Cases

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Abstract

Prostate cancer is the leading urological cancer in men in Congo. Metastases of the ENT and cervicofacial regions in prostate cancer are rare. The objective of this study was to report the clinical, paraclinical and evolutionary aspects of cervical and maxillofacial metastases of two cases of prostate cancer followed at the University Hospital of Brazzaville. These were patients aged 64 and 71 years, respectively, in the advanced stages of the disease. As the patients were no longer operable, systemic treatment was the essential therapeutic modality that improved the quality of life of both patients.

Keywords: Advanced Prostate Cancer; Metastasis; Cervicofacial; ENT

Introduction

Prostate cancer is the most common urological cancer [1]. It is the sixth leading cause of cancer death in men with a relatively higher mortality rate among men of African descent [2]. In Congo, the incidence rate of prostate cancer is estimated at 4.06 cases per 100,000 inhabitants [3,4]. In our context, as in all regions of Sub-Saharan Africa, the discovery of prostate cancer is most often made at advanced stages [5-7], often with metastases to sites rarely described in the literature [8]. ENT and cervicofacial metastases of prostate origin are rare [8,9]. Ninety percent of prostate cancer metastases occur on the axial skeleton and proximal long bones [8]. The objective of this study was to report the clinical, paraclinical and evolutionary aspects of cervical and maxillofacial metastases of two prostate cancer cases followed at the University Hospital of Brazzaville.

Observation 1

Mr. L.T., 64 years old, with no particular pathological history, had consulted in 2013 for a right laterocervical mass that had been evolving for 4 months. He also reported a notion of dysuria and pollakiuria. Clinical examination revealed a good general and hemodynamic condition, a right laterocervical mass measuring 3.5 cm long axis (Figure 1) of firm, painless consistency and fixed to both planes without trismus. Examination of the oral cavity revealed an indurated, ulcerative ulcerative palate lesion of 1.5 x 2 cm extending to the right jugal mucosa and oropharynx, bleeding on contact. The digital rectal examination revealed a hard, painless, nodular-surfaced prostate on both lobes.

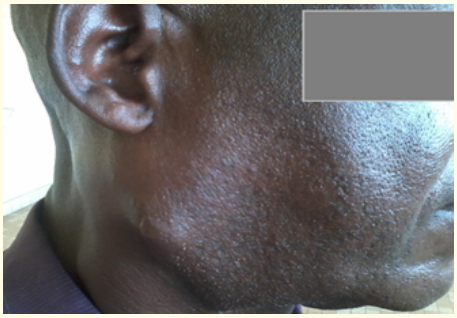

Figure 1: Right Laterocervical Mass.

Paraclinically, the total PSA level was 370 ng/ml. Computed tomography of the facial mass was used to objectify an isodense tissue tumor mass measuring 65.6 mm x 30.8 mm located at the level of the right outer edge of the palate, centered by a lateral hypodense and punctiform gap associated with voluminous ipsilateral laterocervical lymphadenopathy. This tumor mass did not lye the bone tissue and enhanced after contrast (Figure 2).

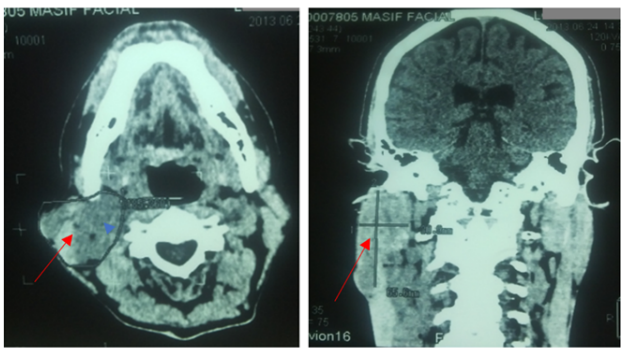

Figure 2: CT images showing cross- and frontal sections of an isodense tissue tumor mass of the right outer edge of the palate associated with a voluminous right laterocervical lymphadenopathy.

Prostate MRI was in favor of a prostatic tumor invading periprostatic fat, seminal vesicles with bilateral extension to the ilio-obturator lymph nodes. X-rays of the spine and pelvis showed the presence of mixed bone metastases. Pulmonary exploration was normal. The thyroid test was normal.

Prostate biopsy revealed prostatic adenocarcinoma with Gleason score 9 (4+5). Biopsies of the right laterocervical mass and the oral lesion were consistent with tumor proliferation resulting in tubular formations bordered by several eosinophilic beds with nuclear atypia suggestive of metastasis of prostatic adenocarcinoma (Figure 3).

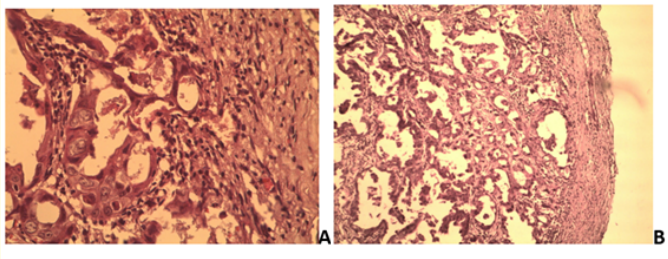

Figure 3: Histological images of prostate biopsy tissue and cervical mass.

Treatment with hormone therapy based on an LHRH agonist (Triptorelin) had led to a regression in the volume of the cervical mass and healing of the oral lesion. The patient was lost to follow-up 4 years after a last PSA level of 18 ng/ml.

Observation 2

Mr M.J, 71 years old, had consulted in 2017 for lumbar spine pain and functional impotence of the pelvic limbs. He had undergone an upper prostatic adenomectomy three years earlier and the histopathological analysis of the surgical specimen was in favour of prostatic adenocarcinoma, Gleason score of 8 (4+4) with a total PSA level of 4.2 ng/ml. The clinical examination revealed a patient in a deteriorating general condition, a lumbar spinal syndrome, flaccid paraplegia with abolition of osteotendinous reflexes, and anesthesia in the saddle. Blood pressure was 120/60mmHg and peripheral pulse rate was 80 beats per minute. On digital rectal examination, the prostate shell was hard in consistency, irregular in surface, and poorly bounded. Paraclinically, the total PSA was 6821.54 ng/ml in the context of anaemia with a haemoglobin level

of 7.3 g/dl and renal function was normal. Thoraco-abdominopelvic computed tomography revealed a heterogeneous mass of the right thyroid lobe, 67 mm long, plunging into the thorax (Figure 4). The residual prostate of 33 mm transverse diameter with left lateral bump. The left internal and external iliac lymphadenopathy were variable in size. Radiographs of the axial skeleton showed images of metastatic multifocal osteocondensation and lysis. Thyroid function was normal with T3 at 1.81 mmol/L and T4 at 164.7 mmol/L.

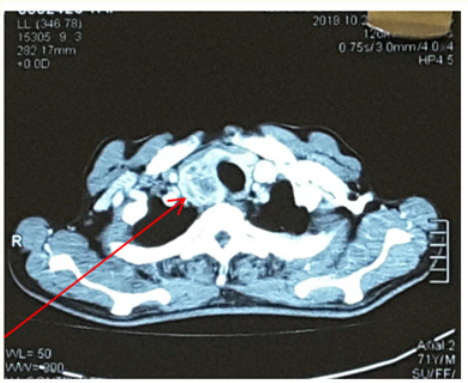

Figure 4: Cross-section through C6 showing the right thyroid intralobar mass (red arrow).

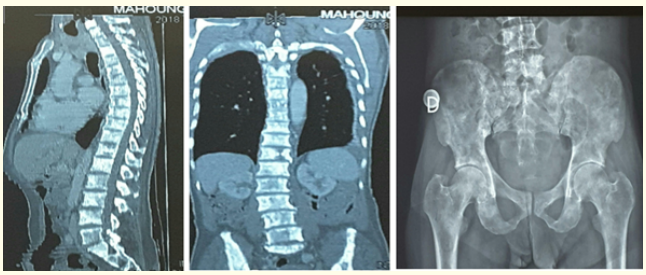

Figure 5: CT images of the spine in sagittal and coronal sections, and standard radiograph of the frontal pelvis showing multifocal metastatic lesions of the axial skeleton.

Hormone therapy was instituted and the course was marked by the occurrence of death at the fourth week after several episodes of anaemia treated with blood transfusion.

Feedback

Prostate cancer is the most common cancer in men and mostly affects older people [10,11]. It poses a serious challenge in men of African descent due to genetics, lifestyle, and environmental factors [12]. The true incidence of prostate cancer is underestimated in sub-Saharan countries due to lack of screening and lack of access to health care [12]. In Congo Brazzaville, prostate cancer is the leading urogenital cancer in men with an estimated incidence rate of 4.06 cases per 100,000 inhabitants, a mean age of 69 years and a maximum frequency between 65 and 75 years [3, 4]. A study carried out in the urology and andrology department of the University Hospital of Brazzaville by Ondziel., *et al*. reported 485 patients for prostate cancer in 11 years (between 2008 and 2018) [7]. In the same period, two prostate cancer patients had lesions, metastases to cervicofacial sites, an incidence of 0.41%.

While in Western countries prostate cancers are diagnosed at the localized stage in more than 80% of cases, at which stage men receive some form of curative treatment (active surveillance, radical prostatectomy or radiotherapy) [13,14]; In our sub-Saharan regions, the management of prostate cancer is called into question by the late presentation at the incurable stage [5]. In our urology and andrology department at the University Hospital of Brazzaville, 97% of prostate cancer cases are diagnosed at the metastatic stage of the disease [7]. According to Jalloh., *et al*. the lack of financial means and health facilities are the cause [6]. Also, the lack of knowledge about prostate cancer [15] can also be considered as a risk factor for late diagnosis of this pathology. As a result of these limitations, many cases of prostate cancer remain undiagnosed at the localized, curable stage [5]. Patients are often motivated by symptoms related to complications of advanced disease. Sometimes symptoms are related to metastases to sites that have been poorly described in the literature [16]. These rare sites are often indicative of generalized disease and poor prognosis [8].

Prostatic metastases to ENT and cervicofacial sites are exceptional, originating from undifferentiated tumors with highly expressed neuroendocrine components [8]. Several studies have been described as a few clinical cases, some of which report an initial lesion of prostate cancer that led to the discovery [16,17]. In our study, cervicooral lesion was the main symptom that led to the diagnosis of prostate cancer in a patient.

Metastases from prostate cancer to the thyroid gland are very rare. They were reported by the authors in the form of clinical cases [18,19]. Since prostate cancer metastases to cervicofacial sites are

considered atypical, their diagnosis requires immunohistochemical investigation to confirm the primary focus [20].

Conclusion

Prostate cancer is a rare cause of soft tissue metastases from the cervicofacial region. A radiological and, above all, histopathological assessment makes it possible to make the etiological diagnosis. The basic treatment is for primary cancer, but the prognosis at this stage is often poor.

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