



Prostate Cancer Revealed by an Orbital Metastasis a Report of a Case and Review of the Literature

Fouad Bakloul, Amine Slaoui, Tariq Karmouni, Khalid Elkhader, Abdellatif Koutani and Ahmed Ibn Attya
Urology B, Ibn Sina Hospital, Rabat, Morocco.

ARTICLE INFO

Article history:

Received: 10 August 2016;

Received in revised form:
20 September 2016;

Accepted: 30 September 2016;

Keywords

Metastatic Disease,
Cancer of the prostate,
orbital Metastases.

ABSTRACT

The invasion of the orbit with metastatic tumors is rare. In addition, some cases of unilateral metastatic disease have been reported but more often it is bilateral involvement. Moreover, it frequently attends locoregional invasion of the orbit by tumors adjacent structures including intraocular tumors in children. In adults, the orbital metastases are mostly of epithelial origin and they are considered a full metastatic site [1, 2, 3, 4, 5, 6]. In the literature, many cases of orbital metastases have been reported, such as esophageal cancer metastasis [7], breast [8], pancreatic [9] as well as lung [10]. Today, metastatic carcinoma of the orbit are 2.3 to 7% of orbital tumors [11, 12]. Cancer of the prostate is the most common cancer in humans outside of skin cancer, and it often leads to bone and visceral metastases. [13] However, the orbital metastases appear at an advanced stage of the disease [3, 4]. The purpose of this article is to report the case of a patient diagnosed with adenocarcinoma of the prostate revealed a metastatic orbital tumor.

© 2016 Elixir All rights reserved.

Introduction

This is Mr. N.B, aged 63 years who consults for exophthalmia following a sports injury. The interrogation reports a decline in progressive visual acuity for a few months working in an unencrypted slimming context and impaired general condition. The examination for admission include a conscious, hemodynamically stable patients with left proptosis, DRE shows a prostate dystrophy. The spa exophthalmia highlights an orbital tumor, histopathological examination of the specimen is in favor of morphological appearance of a cancerous infiltration process expressing PSA compatible with metastasis of a prostatic adenocarcinoma . The patient's PSA level was 485.00 ng / mL. The patient underwent a prostate biopsy confirmed the diagnosis. The abdominal pelvic CT scan revealed the presence of bilateral pulmonary nodules, secondary bone lesions and lymph nodes above and below the diaphragm making mention first lymphomatous origin. The staging was completed by a Tc99m MDP bone scan that objective diffuse secondary bone lesions predominant axial skeleton and roots members.

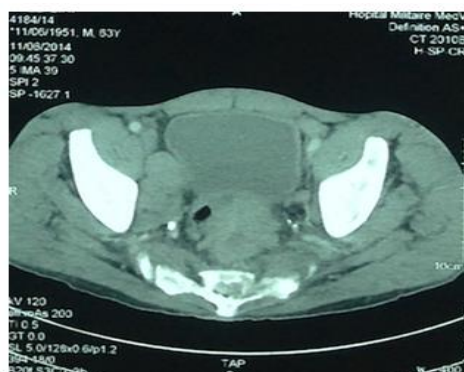


Image 1. Image showing a CT enlarged prostate.

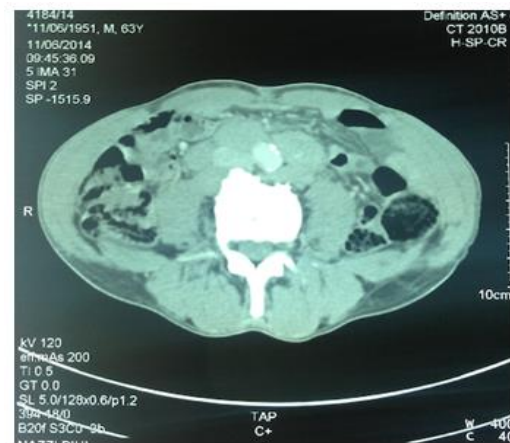


Image 2 . Image showing a CT lymphadenopathy magna inter aorto - cellar.

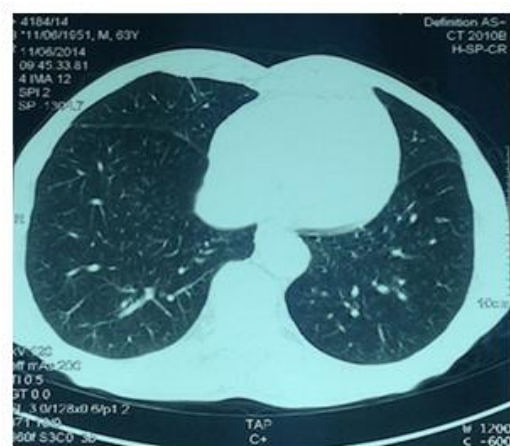


Image 3 . Image CT showing bilateral pulmonary nodules.

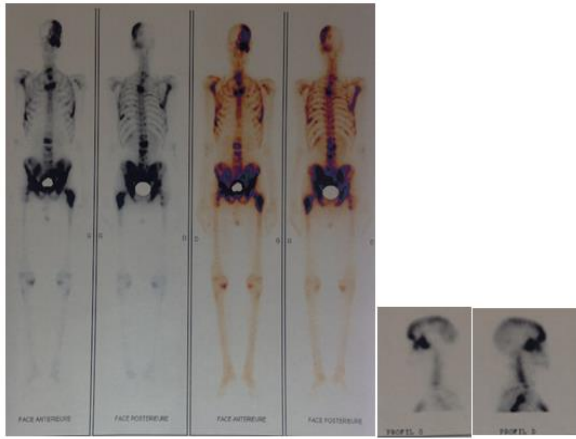


Image 4 . Scintigraphic appearance of diffuse bone lesions secondary to the predominant axial skeleton and roots members .

Given the presence of bone secondary locations , it was decided to put the patient on hormone therapy : Casodex one tablet per day for a period of one month and one injection of Decapeptyl 11.25 will be made on the fifteenth day and every three months.

Discussion

Bone metastases of prostatic adenocarcinoma is the most frequent secondary location [14, 15]. Pelvis, femurs, spine and ribs are the most common sites. [15] The orbit is rarely reached; Moreover, very few cases have been reported in the literature. Indeed, malignancies of the Urological sphere, especially adenocarcinoma of the prostate rarely metastasize to the orbital level. It is exceptional that the orbital metastasis is an occasional discovery of prostate cancer [2, 17].

One of the largest series of cases of metastasis of the eye and orbit of Ferry and Font [5] not objectify that 3 cases of prostatic metastases (1.3%). The same authors then advance a percentage of 3.5 to 4% of orbital metastases in another series of cases [6]. Indeed, according to the study of Fredman on 112 patients (141 eyes), breast cancer is the most common origin, relaying prostate cancer in 5th position. [18]

The maximum survival of all patients described in these series is only 9 years and 3 months, which shows a very poor prognosis for infringement orbital. Generally, bone metastases are predominant in the advanced stages and damage orbital then come worsen [14] prognosis.

Conclusion

Prostate carcinomadiagnosis should be suspected in any man with a suspicious mass that can be orbital metastasis . Indeed, although they appear at an advanced stage of the disease , it can sometimes , as in this patient , appear before the diagnosis of primary lesion . Indeed, as in this patient , the staging of prostate adenocarcinoma was used to map the secondary lesions and through hormone therapy begun in the hope to improve the quality of life of the patient.

Reference

1. Harstein ME, Grove AS Jr, Woog JJ. The role of the integrin family of adhesion molecules in the development of tumour metastatic to the orbit. *Ophthalmic Plastic & Reconstructive Surgery* 1997 ; 13(4) : 227-238.
2. Wijerman PC, Boeve ER, Mickish GHJ, Simonsz HJ, Schroder FH. Orbital tumours as a first indication of urological malignancies. *BJUrol.* 1997 ; 7 : 228-289.
3. Boldt HC and Nerad JA. Orbital metastases from prostate carcinoma. *Archophthalmol* 1988 ; 106 : 1403-8
4. Hingorani M, Davies A, Nischal K and Aclimandos WA. Prostatic orbital metastases and the role of the ophthalmologist. *BJUROL* 1996 ; 78 : 642-658.
5. Ferry AP, Font AP. Carcinoma metastatic to the eye and orbit J. A clinicopathologic study of 227 cases. *ArchOphthalmol* 1974 ; 92 : 276-86
6. Ferry AP, Font AP. Carcinoma metastatic to the eye and orbit. *Cancer* 1976 ; 36 : 1326-1335.
7. Collins MH, Wojno TH, Grossniklaus HE. Metastatic oesophageal carcinoma to the orbit. *Am J Ophthalmol.* 1999 ; 127(2) : 228-9
8. Kuzma BB and Goodma JM. Slowly progressive bilateral enophthalmos from metastatic breast carcinoma. *Surgical neurology* 1998 ; 50(6) : 600-602
9. Geeta N, Chandrakha B, Kumar A, Ittiyavirah AK, Ramadas K, and Joseph F. Carcinoma of the pancreas presenting as an orbital tumour : a case report. *Am J Clin Oncol* 1998 ; 21(5) ; 532-3.
10. Shields JA, Shields CL, Eagle RC Jr, Gunduz K, Lin B. Diffuse ocular metastases as initial sign of metastatic lung cancer. *Ophthalmic surgery and lasers* 1998 ; 29 (7) : 598-601.
11. Silva D. Orbital tumours. *AmJ Ophth.* 1998 ; 65 : 318.
12. Henderson JW (ed). *Metastatic carcinoma in orbital tumours.* Philadelphia, WB Saunders company. 1973 chap 16 pg 474.
13. Tertzakian GM, Herr HW, Mehta MB. Orbital metastasis from prostatic carcinoma. *Urology* 1982 ; 19 : 427-429.
14. Shittu O.B, Ogunbiyi J.O. Orbital metastases of prostatic carcinoma in a tropical African population *WJMJ VOL.22 N2, April-June 2003.*
15. Ivker M, Keesal S, Leberman O. The pelvic lymphatics and vertebral veins in the osseous metastasis of carcinoma of the prostate : A preliminary report. *J Urol.* 1961 ; 86 : 650-654
16. Rigot JM, Duret MH, Custier P, Mazeman E. 2 cases of Oculo-orbital metastases of a prostatic epithelioma. *Ann Urol. (Paris)* 1989 ; 23 : 43-45.
17. Reifler DM, Kini SR, Liu, Little RH. Orbital metastasis from prostatic carcinoma. *ArchOphthalmol* 1984 ; 102 : 292-295.
18. Fredman MI, Folk JC. Metastatic tumours of the eye and orbit. Patient survival and clinical characteristics. *ArchOphthalmol* 1987 ; 105 : 1215-1219.