



Case Report

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A Prostate Cancer Metachronous to A Breast Cancer in A 74-Year-Old Male

Sossa Jean¹, Musimwa Ganza Trésor¹, Fanou Lionelle¹, Hounto Yao Félicien¹, Yevi Dodji Magloire Inès¹, Hodonou Fred Jean-Martin¹, Avakoudjo Déjinnin Josué Georges¹

¹ Clinique Universitaire d'Urologie-Andrologie (CUUA), Centre National Hospitalier et Universitaire Hubert Koutoucou Maga (CNHU-HKM), Cotonou, Benin

Abstract

A 74-year-old male presented right breast cancer and prostate cancer. He had metastatic lesions on the right 7th and 8th ribs. The exact one of both cancers that had metastasized to the bone was not determined. That exceptional association of metastatic breast and prostate cancer in the same male individual was treated with Doxorubicin, Cyclophosphamide, and Triptorelin. Unfortunately, the patient could afford only 2 cycles of Doxorubicin and Cyclophosphamide and got lost to follow-up.

Keywords: Breast cancer, Prostate cancer, Metastatic lesions.

INTRODUCTION

Breast cancer is rare in males ^[1]. The association of breast cancer and prostate cancer in the same individual is uncommon despite both cancers sharing some risk factors ^[2,3]. We present a male with both right breast and prostate cancer.

CASE REPORT

A 74-year-old male consulted for a persistent non-productive cough coupled with chest pain that irradiated into the right upper arm. Eight years and five months earlier, the man concomitantly underwent a right mastectomy and a left inguinal hernia repair. In fact, with a complaint of an inguinal mass, the patient was diagnosed with a left inguinal hernia. Then he was sent to the anesthetist to be prepared for a hernia repair. But three weeks later, he presented anew with an ulcerated right nipple slightly elevated by a nodule. There was no spontaneous bleeding, no palpable homolateral axillary nodes. On ultrasonography, there was no axillary node and no liver metastasis. On computed tomography, the lungs, pelvic and abdominal organs were normal. The urine was sterile on culture and the PSA level was 13.25ng/ml. The prostate was normal on rectal examination. A prostate biopsy was performed but the pathological examination of the cores found no cancer. Afterwards, a right mastectomy and a left inguinal hernia repair were concomitantly performed in the man. The pathological examination of the mastectomy specimen revealed an invasive SBR grade I ductal carcinoma. Nevertheless, the pathological laboratory could not test the presence of estrogen receptor (ER), progesterone receptor (PR) and HER2 gene's mutation in the specimen. The patient was scheduled for a second prostate biopsy, but he had disappeared. Every attempt to reach him was unfruitful. More than eight years later, he spontaneously came back to the hospital and complained of a persistent cough, chest pain and continuous loss of weight. He presented multiple right axillary nodes, a painful right upper arm, and an entirely indurated prostate. The PSA level had turned to 94.75ng/ml. There was no liver metastasis on ultrasonography.

*Corresponding author:

Dr. Jean Sossa

Clinique Universitaire
d'Urologie-Andrologie
(CUUA), Centre National
Hospitalier et Universitaire
Hubert Koutoucou Maga
(CNHU-HKM), Cotonou, Benin
Email: feminawa@yahoo.com

A computed tomography demonstrated multiple metastases in the lungs and on the 7th and 8th right ribs (Figure 1 A, B). A prostate biopsy revealed an ISUP grade group I adenocarcinoma. The patient had already lost both his father and mother but could not tell the cause of their death. We deemed it unworthy to determine which one of the two cancers had yielded the bone metastases. In sum the 74-years-old man concomitantly presented breast cancer and prostate cancer with metastatic costal lesions. We combined Doxorubicin, Cyclophosphamide and Triptorelin to treat him. The patient underwent 2 cycles of Doxorubicin and Cyclophosphamide and got lost to follow-up as he could not afford anymore the cost of the treatment.



Figure 1 (A, B): Computed tomography showing multiple pulmonary metastases

DISCUSSION

The incidence of male breast cancer varies from 0.5% to 1% [1,4]. Our patient was diagnosed with breast cancer when he was 65.5 years old. Breast cancer affects males aged from 60 to 71 years [1,2,4,5] and thus falls into the age-related risk group of the prostate cancer [3]. The breast cancer is potentially possible in males but as males normally have ductal and not lobular tissue, most male breast cancers are invasive ductal carcinoma [2,5]. Similarly, BRCA 2 mutation as a risk factor for either breast cancer or prostate cancer [2,3,6,7], suggests the possibility that both diseases supervene in the same male individual. However, the association of breast cancer and prostate cancer in the same patient is an uncommon clinical event. Most authors have reported breast cancer in males during hormonal castration for prostate cancer [8,9,10]. To our knowledge, no case of prostate cancer metachronous to breast cancer and outside androgen deprivation therapy has been reported so far. Our patient was diagnosed with localized breast cancer. Woefully, he has been lost to follow-up until his disease turns metastatic. The pulmonary metastases in our patient may be attributed to the breast cancer as they are not frequent in an ISUP grade group I prostate adenocarcinoma [11]. Either one of the breast or prostate cancer might have metastasized to the ribs [12,13]. The treatment of male breast cancer uses similar protocols as in females, combining surgery and chemotherapy [2]. Some authors have treated male metastatic breast cancer with bilateral orchiectomy or hormonal castration [14]. We think that the prognosis in our patient will

depend more on the breast cancer than on the prostate cancer. The survival rate of treated male breast cancer may reach 49.9% at 5 years in an environment with limited resources [15].

CONCLUSION

The diagnosis of breast cancer and prostate cancer in the same male individual is possible. In the absence of the same therapy for both diseases, the treatment may combine the known therapy for each one of them.

Conflict of Interest

The authors declare no conflicts of interest.

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ORCID ID

Sossa Jean: <https://orcid.org/0000-0002-7111-9426>
 Musimwa Ganza Trésor: <https://orcid.org/0000-0003-4206-2333>
 Fanou Lionelle: <https://orcid.org/0000-0002-0358-2961>
 Hounto Yao Félicien: <https://orcid.org/0000-0001-8149-5073>
 Yevi Dodji Magloire Inès: <https://orcid.org/0000-0002-2504-5403>
 Hodonou Fred Jean-Martin: <https://orcid.org/0000-0003-0989-0380>
 Avakoudjo Déjinnin Josué Georges: <https://orcid.org/0000-0001-6987-6578>

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