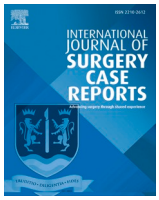
International Journal of Surgery Case Reports 117 (2024) 109534

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.elsevier.com/locate/ijscr



Case report

Breast cancer in adult man treated in a rural hospital: A case report

Moïse Muhindo Valimungighe [a,b], Barthelemy Yevide Agossou [b], Patricia Kavugho Wundiyohangi [c], Franck Katembo Sikakulya [a,d,*], Soumonla Djalali [b], Gaspard Gbessi Dansou [e]

[a] Department of Surgery, Faculty of Medicine, Université Catholique du Graben, Butembo, Democratic Republic of the Congo
[b] Department of Surgery, Hopital de zone de Klouekanmé, Benin
[c] Department of Obstetrics and Gynecology, Faculty of Health Sciences, Cotonou, Benin
[d] Faculty of Clinical Medicine and Dentistry, Department of Surgery, Kampala International University Western Campus, Ishaka-Bushenyi, Uganda
[e] Clinique Universitaire de chirurgie viscérale du CNHU-HKM, Cotonou, Benin

ARTICLE INFO

Keywords:
Male breast cancer
Management
Case report

ABSTRACT

Introduction and importance: Breast cancer in a male patient is an uncommon condition known by the general public yet of the same concern as in a female patient.
Case presentation: A 64-year-old male with a 25 years history of a progressive swelling in the right breast, underwent an ultrasound guided biopsy which revealed a mucinous carcinoma of grade SBR I, right mastectomy with lymph-node dissection were done. His postoperative period was uneventful and patient was a live on 7th post-operative day. Chemotherapy and radiotherapy are being considered.
Clinical discussion: Being rare, breast cancer in males should be fully evaluated and investigated to avoid the associated morbidity and mortality.
Conclusion: Male breast cancer though rare exists and its management follows the same principles as in women. There is a need to do genetic tests to identify patients at risk and guide preventive measures in case of any breast swelling despite the gender.

1. Introduction

Breast cancer is a heterogeneous group of tumours and the most common cancer in women worldwide hence represents a public health problem [1]. However, it remains a rare disease in men [2] that it presents less than 1 % of cases of male neoplasia and 1 to 2 % of all breast cancers [3]. In Benin, out of 109 breast cancer, mean breast cancer represented 1.8 % of confirmed cases [4]. Hence there is still little known to the general public about breast cancer in men and is often diagnosed late with a poorer prognosis [5]. The association of breast cancer and prostate cancer in the same individual is rare although the two share certain risk factors [6].

The aim of this study was to review the management of breast cancer in men living in rural areas and compare it with the literature. This case report has been reported in line with the SCARE 2023 criteria [7].

2. Case presentation

A 64-year-old male with unknown history of breast cancer nor other chronic illness presented with a nodular swelling in the right breast that had been progressively increasing in size for 25 years. Locally the breast was swollen, hard, adherent and ulcerated with shiny skin but mobile in relation to the deep layers [Fig. 1]. On digital rectal examination, the prostate was normal. Ultrasound-guided breast biopsy with pathological examination revealed a mucinous carcinoma grade SBR = (3 + 1 + 1). The extension work-ups (chest X-ray and abdominal ultrasound) were unremarkable. A clean mastectomy done within an hour with lymph node dissection [Figs. 2–3] was performed and the operative specimen [Fig. 4] packed for pathological examination revealed an infiltrating breast carcinoma of grade SBRmII, measuring 11 cm long, with no intraductal component and no Paget's disease. Its deep border of the mass at 1 mm and lateral border at 2 mm and no invasion to the deep muscles. There was lymph node metastasis (3 N+/17 N); stage pT4N1

* Corresponding author at: Faculty of Clinical Medicine and Dentistry, Department of Surgery, Kampala International University Western Campus, PO. Box 70, Ishaka-Bushenyi, Uganda.
E-mail address: francksikakulya@gmail.com (F.K. Sikakulya).

https://doi.org/10.1016/j.ijscr.2024.109534
Received 10 January 2024; Received in revised form 7 March 2024; Accepted 13 March 2024
Available online 19 March 2024

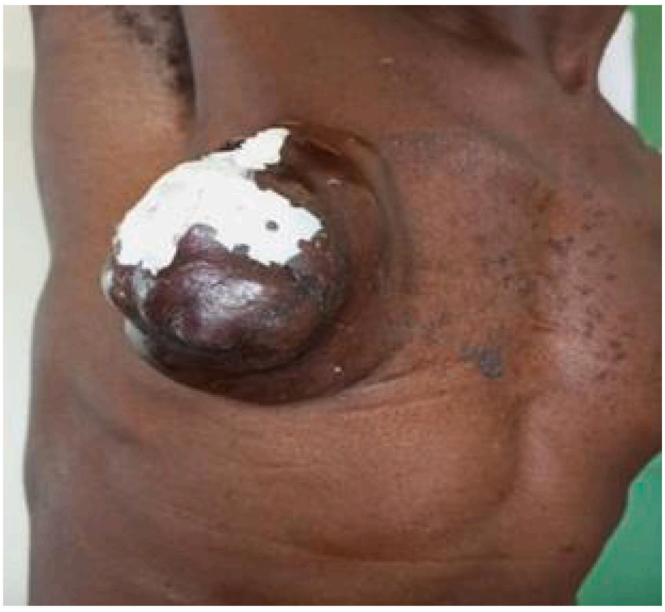


Fig. 1. Ulcerative tumor of the right breast.

(TNM 2017, AJCC 8ed). Noted that patient did not receive any blood transfusion during or after surgery. Immunohistochemistry: Ki67 status: 15 to 20 %; hormone receptor RO: 90 % intensity ++ to +++; RP: 10 % intensity + to ++; HER2 score 0, "HER2 negative status" according to GEFPICS 2021 recommendations. He is currently undergoing FEC 50 + Docetaxel chemotherapy and radiotherapy is being considered.

3. Discussion

In the world, breast cancer is the first malignant tumor in women but relatively rare in men with 1 to 2 % of all breast cancers [3]. In Tunisia, its frequency is estimated at 1.6 % of cancers in men [3]. Breast cancer in men is an unknown pathology to the general public and the discovery of a breast nodule in a man does not cause the same concern as in a woman since the majority of people have trouble realizing that such cancer can occur on a male breast [5]. Being rare, even in our setting, the diagnosis was made late as per this case discussion.

In literature, male breast cancer occurs at an average age range of (60–71) years [8]. Our patient falls within this age range. Testicular abnormalities such as testicular ectopia, orchitis, orchiectomy, congenital inguinal hernias and infertility are factors associated with a high risk of breast cancer in males. Umbilical breasts, history of breast trauma and transsexuality (including surgical and chemical castration) appear to also be involved [9]. The bone scan indicated in our patient's work-up was not performed due to geographical and financial constraints. Our patient's TNM stage (pT4N1M0) indicates that he was diagnosed late as is the case in the literature, where in most scenarios patients were seen at an advanced stage. This may be explained by the thinness of this glandular tissue [10]. Compared with female breast cancer, male breast cancer more often expresses hormone receptors [10] and this is the case in our luminal B patient. While the treatment of breast cancer in women is well codified, there are yet no such systemic rulings established for breast cancer in men. In our patient, neoadjuvant chemotherapy was not used. We opted for initial surgery and adjuvant chemotherapy in view of the social constraints which included the lack of funds since treatment was entirely at the patient's expense and if the socio-economic conditions allowed, an oncogenetic investigation would have been necessary.

4. Conclusion

Although rare, breast cancer in males does exist in our rural areas and its management follows the same principles as the management of breast cancer in females. The search for predisposing factors in the carrier would make it possible to identify subjects at risk and guide preventive actions, as is the case of a nodule in a female or gynaecomastia in males.

Consent for publication

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

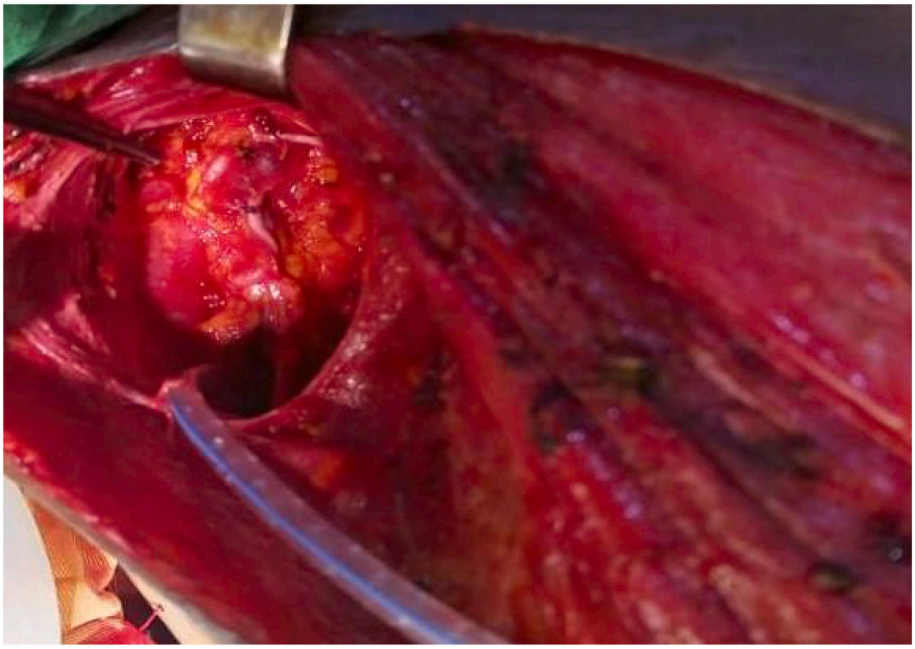


Fig. 2. Intra-operative view during mastectomy.

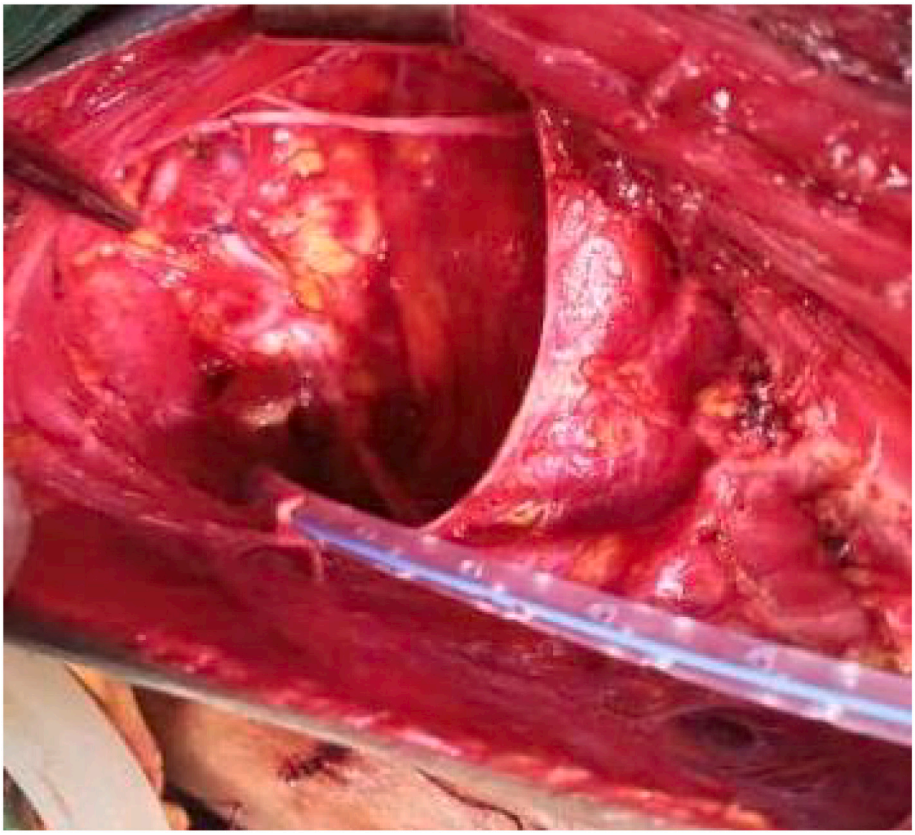


Fig. 3. Axillar région post in block lymph node dissection.

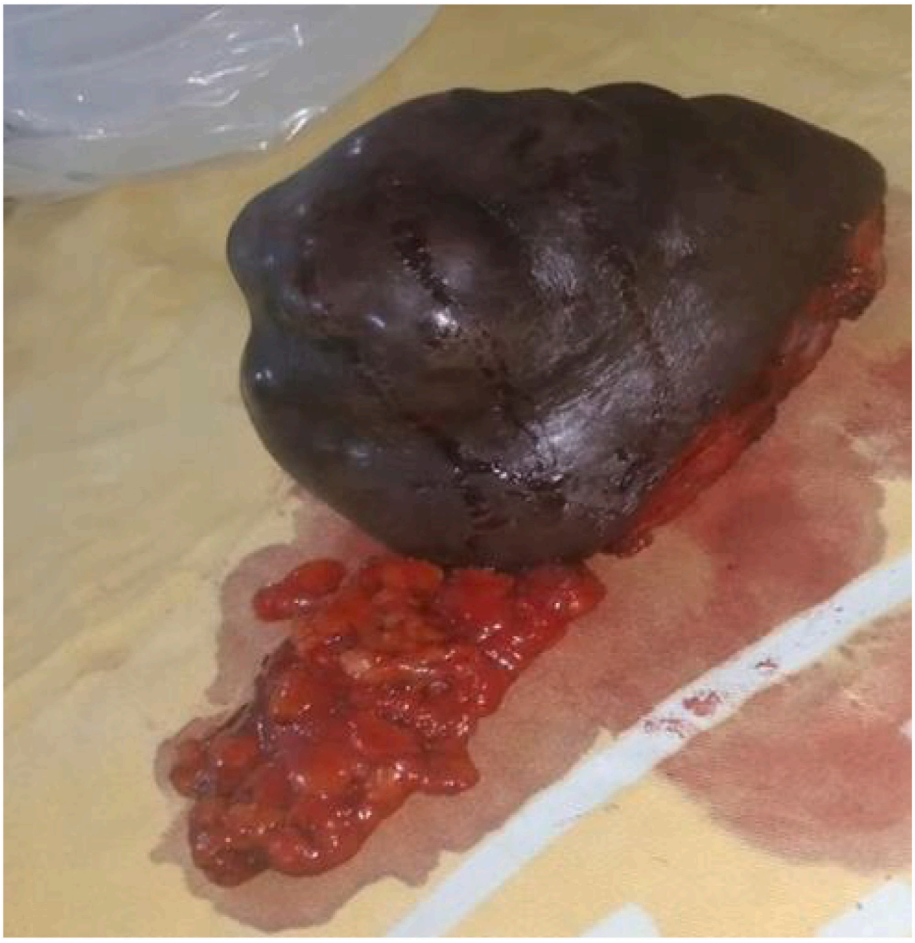


Fig. 4. Breast tissue with lymph nodes post mastectomy.

Provenance and peer review

Not commissioned, externally peer-reviewed.

Ethical approval

Not applicable.

Funding

There was no external funding sourced for this report.

Author contribution

MMV, BYA and GGD managed the patient and wrote the first draft. BYA, PKW, FKS, SD and GGD helped in editing and reviewing the paper. All authors read and approved the final version to be published.

Guarantor

Moïse Muhindo valimungighe.

Research registration number

Not applicable.

Conflict of interest statement

The authors declare no conflicts of interest.

References

[1] Y. Zemmouri, et al., Caracte´risation mole´culaire des cancers du sein en pratique clinique, Gynecol. Obstet. Fertil. (2016), https://doi.org/10.1016/j.gyobfe.2016.03.010.
[2] H. Sancho-Garnier, M. Colonna, Épidémiologie des cancers du sein, Presse Med. (2019), https://doi.org/10.1016/j.lpm.2019.09.022.
[3] Marwa Methamem, et al., Breast cancer in men: a serie of 45 cases and literature review, Pan Afr. Med. J. 36 (2020) 183, https://doi.org/10.11604/pamj.2020.36.183.22574.
[4] D. Gbessi, I. Lawani, C. Tawo-Nounagnon, F. Dossou, Y. Souaïbou, D. Mehinto, J. Olory-Togbe, K. Bagnan, N. Padonou, Management of breast cancer in visceral surgery of CNHU-HKM of Cotonou in Benin, Surg. Sci. 7 (2016) 170–176, https://doi.org/10.4236/ss.2016.73022.
[5] L. Kamilia, et al., Cancer du sein de l'homme: à propos de 6 cas, Pan Afr. Med. J. 16 (2013) 70, https://doi.org/10.11604/pamj.2013.16.70.2345. ISSN 1937-8688.
[6] Y. Elalami, et al., Gynécomastie et cancer du sein chez l'homme, Rev. Méd. Int. Maghrébine 208 (208) (2013) 19–22.
[7] C. Sohrabi, G. Mathew, N. Maria, A. Kerwan, T. Franchi, R.A. Agha, The SCARE 2023 guideline: updating consensus Surgical CAse REport (SCARE) guidelines, Int. J. Surg. Lond. Engl. 109 (5) (2023) 1136.
[8] E. Meriem, et al., Cancer du sein chez l'homme: à propos de 40 cas et revue de la littérature, PAMJ 28 (2017) 287, https://doi.org/10.11604/pamj.2017.28.287.13527.
[9] Sossa Jean, Musimwa Ganza Trésor, Fanou Lionelle, Hounto Yao Félicien, Yevi Dodji Magloire Inès, Hodonou Fred Jean-Martin, Avakoudjo Déjinnin Josué Georges, A prostate cancer metachronous to a breast cancer in a 74-year-old male, JMR 9 (5) (2023) 109–111.
[10] P.E. Goss, C. Reid, M. Pintilie, R. Lim, N. Miller, Male breast carcinoma: a review of 229 patients who presented to the Princess Margaret Hospital during 40 years 1955-1996, Cancer 85 (3) (1999) 629–639.