

## Bilateral synchronous breast cancer in an elderly man: A case report

**Unmesh Vidyadhar Takalkar, Shilpa Balaji Asegaonkar,  
Balaji Narayan Asegaonkar, Pushpa Ravindra Kodlikeri**

### ABSTRACT

**Introduction:** Bilateral synchronous breast cancers are seen extremely uncommonly in men. In this report, we describe a case of synchronous bilateral breast cancer in an elderly male without any significant risk factor.

**Case Report:** A 75-year-old male was presented with mass in right breast. After thorough clinical evaluation he underwent modified radical mastectomy for excision of tumor. Histopathologically, it was invasive duct carcinoma of grade II, stage II and positive for estrogen and progesterone receptors. Patient was managed with radiotherapy, adjuvant chemotherapy and oral tamoxifen 20 mg daily. After three months new lump in contra lateral breast was noticed. Again patient underwent modified radical mastectomy with diagnosis of invasive duct carcinoma of grade II and stage II. He received radiotherapy and hormone therapy. We managed the case of synchronous bilateral breast cancer successfully at our center. After bilateral modified radical mastectomy patient received radiotherapy, adjuvant chemotherapy and hormonal therapy with tamoxifen.

**Conclusion:** Proper clinical evaluation, mammography and fine-needle aspiration cytology play important role in diagnosis of male breast cancer. In depth studies focusing on etiopathology of the disease are necessary to optimize the management of male breast cancer patients.



## International Journal of Case Reports and Images (IJCRI)



International Journal of Case Reports and Images (IJCRI) is an international, peer reviewed, monthly, open access, online journal, publishing high-quality, articles in all areas of basic medical sciences and clinical specialties.

Aim of IJCRI is to encourage the publication of new information by providing a platform for reporting of unique, unusual and rare cases which enhance understanding of disease process, its diagnosis, management and clinico-pathologic correlations.

IJCRI publishes Review Articles, Case Series, Case Reports, Case in Images, Clinical Images and Letters to Editor.

**Website: [www.ijcasereportsandimages.com](http://www.ijcasereportsandimages.com)**

CASE REPORT

OPEN ACCESS

# Bilateral synchronous breast cancer in an elderly man: A case report

Unmesh Vidyadhar Takalkar, Shilpa Balaji Asegaonkar,  
Balaji Narayan Asegaonkar, Pushpa Ravindra Kodlikeri

## ABSTRACT

**Introduction:** Bilateral synchronous breast cancers are seen extremely uncommonly in men. In this report, we describe a case of synchronous bilateral breast cancer in an elderly male without any significant risk factor. **Case Report:** A 75-year-old male was presented with mass in right breast. After thorough clinical evaluation he underwent modified radical mastectomy for excision of tumor. Histopathologically, it was invasive duct carcinoma of grade II, stage II and positive for estrogen and progesterone receptors. Patient was managed with radiotherapy, adjuvant chemotherapy and oral tamoxifen 20 mg daily. After three months new lump in contra lateral breast was noticed. Again patient underwent modified radical mastectomy with diagnosis of invasive duct carcinoma of grade II and stage II. He received radiotherapy and hormone therapy. We managed the case of synchronous bilateral breast cancer successfully at our center. After bilateral modified radical mastectomy patient received

radiotherapy, adjuvant chemotherapy and hormonal therapy with tamoxifen. **Conclusion:** Proper clinical evaluation, mammography and fine-needle aspiration cytology play important role in diagnosis of male breast cancer. In depth studies focusing on etiopathology of the disease are necessary to optimize the management of male breast cancer patients.

**Keywords:** Male breast cancer, Bilateral synchronous breast cancers, Invasive duct carcinoma

### How to cite this article

Takalkar UV, Asegaonkar SB, Asegaonkar BN, Kodlikeri PR. Bilateral synchronous breast cancer in an elderly man: A case report. International Journal of Case Reports and Images 2014;2(5):118–121.

doi:10.5348/ijcri-2014-02-454-CR-6

Unmesh Vidyadhar Takalkar<sup>1</sup>, Shilpa Balaji Asegaonkar<sup>2</sup>, Balaji Narayan Asegaonkar<sup>3</sup>, Pushpa Ravindra Kodlikeri<sup>4</sup>

**Affiliations:** <sup>1</sup>MS, Consultant Surgeon Kodlikeri memorials CIIGMA Institute of Medical Sciences, Aurangabad, Maharashtra, India; <sup>2</sup>MD, Biochemistry, Assistant Professor Department of Biochemistry Government Medical College, Aurangabad Maharashtra, India; <sup>3</sup>MD, D.N.B, Anesthesiology, Consultant Anesthesiologist Kodlikeri memorials CIIGMA Institute of Medical Sciences Aurangabad, Maharashtra, India; <sup>4</sup>Consultant Gynecologist Kodlikeri memorials CIIGMA Institute of Medical Sciences Aurangabad, Maharashtra, India.

**Corresponding Author:** Dr. Unmesh Vidyadhar Takalkar, Kodlikeri memorials CIIGMA Institute of Medical Sciences Opposite S.F.S. School, Jalna Road, Aurangabad, Maharashtra, India - 431005; Ph: 919822042425; Fax: 912402359279; Email: drunmesh.aurangabad@gmail.com

Received: 22 January 2013  
Accepted: 29 June 2013  
Published: 01 February 2014

## INTRODUCTION

Breast cancer is a relatively rare entity in males accounting for less than 1% of all cancer in men and 0.5–0.7% of all breast cancers [1]. Bilateral synchronous breast cancers are extremely uncommon in men. Hence they have not been studied deeply from investigation and management point of view. In this report we describe a rare case of synchronous bilateral breast cancer in an elderly male without any significant risk factors.

## CASE REPORT

A 75-year-old male was presented to our center with complaint of mass in the right breast. On acquisition of detailed medical history, there was no history of hormonal therapy, testicular disease and occupational exposure

to radiation in his lifetime. He was nonsmoker and nonalcoholic. There was no personal and family history of breast cancer. On physical examination, there was a mass in upper outer quadrant of size 4x3 cm under nipple with evidence of bloody nipple discharge. External genitalia examination was normal. Mammography revealed a 3-cm radiopacity with regular margins in retroareolar region. Fine-needle aspiration cytology showed presence of malignant cells. Contra lateral breast was normal on physical examination. The presence of distant metastasis was excluded by computed tomography scan and abdominal ultrasound scan. Laboratory work-up including hematology, liver, kidney and thyroid function tests was within normal limits. Patient underwent modified radical mastectomy with axillary lymph node resection. On gross examination, tumor was of size 4x3x3 cm. Histopathological examination revealed features of invasive duct carcinoma, grade II. Nipple and cut margins of specimen were free of tumor. Also there was no evidence of vascular and perineural invasion. Three of seven axillary lymph nodes were positive for the presence of malignant cells. As per tumor node metastasis (TNM) classification tumor was of stage II. On immunohistochemistry analysis, tumor cells were positive for estrogen receptor (60%) and progesterone receptor (50%).

Patient received six cycles of adjuvant chemotherapy with cyclophosphamide, 5-fluorouracil, epirubicin. After surgical management external radiotherapy was administered to chest wall and axilla with doses of 50 Gy (2 Gy daily with five weekly fractions) for a period of five weeks. Also patient was advised for daily oral tamoxifen 20 mg for 5 years. But after three months during routine follow-up clinician felt a new lump in left breast which was of size 2x2 cm and on fine-needle aspiration cytology showed presence of malignant cells. Patient was managed with modified radical mastectomy with axillary lymph node resection. Histopathologically, tumor was infiltrating duct carcinoma, grade II and 2 of 6 lymph nodes showed presence of malignant cells. Hence, it was stage II carcinoma of breast. Then patient underwent orchiectomy. Again patient received adjuvant chemotherapy and radiotherapy for five weeks and continued with oral tamoxifen 20 mg daily. Now since 18 months patient is disease free.

## DISCUSSION

Bilateral breast cancer in male is an infrequent condition representing 0.5–0.6% of all breast cancers. Recent studies have shown an increased incidence of male breast cancer from 0.86 to 1.08 per 10,000 men [2]. In India Mitra et al. reported incidence of male breast cancer in a tertiary care hospital 0.6% of all cancers in men and 2.5% of all cases of breast cancer [3]. Risk factors for male breast cancer include family history of cancer of breast, obesity, gynecomastia, exposure to radiation, testicular

diseases like undescended testis, orchitis, orchiectomy, Klinefelter syndrome (47,XXY) and hormonal therapy [1]. Also hyperestrogenic states due to liver diseases and hypoandrogenic conditions like infertility contribute to breast cancer in men. Gene mutations of BRCA2, BRCA1 and androgen receptor gene predispose to such condition [4, 5]. Our patient was not willing for such genetic studies. No significant risk factors were identified in the present case. Hence this unusual synchronous bilateral breast cancer presentation may be a sporadic event.

Invasive duct carcinoma is the most common type of malignancy of breast observed in male with strong positivity for estrogen and progesterone receptors in 63–90% of cases [6]. In our case also patient had this common type of breast cancer, but within a period of three months he developed same type of tumor on contra lateral side. We managed the case with bilateral modified radical mastectomy, radiotherapy, adjuvant chemotherapy and hormonal therapy with tamoxifen. For hormone receptor positive breast tumor tamoxifen is the first choice of therapy that can lead to improved overall survival and outcome of the patient. Management in male and female breast cancer to some extent is similar.

Because of rarity of bilateral breast cancer in male there is dearth of such reports in literature. Giordano et al. reported only two cases of bilateral breast cancer among 2537 men with breast cancer [4]. As in males no screening strategies are designed usually they are presented in late stage. Kahla et al. reported a case of hormone receptor positive bilateral synchronous breast cancer in a 71-year-old male with 17 months disease free survival managed with bilateral modified radical mastectomy (MRM) and adjuvant chemo-endocrine treatment [7]. Lambley et al. described a 84-year-old male with bilateral infiltrating duct carcinoma managed by bilateral MRM and tamoxifen but not radiotherapy [8]. Small sample of the cases are available for study because of rarity. Shah et al. reported only 32 cases of male breast cancer over 24 years in their retrospective study [9]. Rai et al. retrospectively analyzed 30 cases of male breast cancer treated at a single center in India over 24 years [10]. They observed occurrence of loco regional recurrence in three cases and distant metastasis in nine patients. But there was no evidence of bilateral breast cancer in a single case. Some studies have shown a worse outcome for male breast cancer compared to female breast cancer, but findings are inconsistent. In our patient, there was a latent period of four months between two incidences of breast cancer.

Woo-Young Sun et al. reported a case of a 54-year-old male with simultaneous bilateral breast cancer in Korea with invasive duct carcinoma in right breast and ductal carcinoma in situ in left breast. Out of 24 cases of synchronous bilateral male breast cancer reported in literature hormonal receptor status (ER or PR) was positive in 87.5% cases [11].

Proper clinical evaluation, mammography and fine-needle aspiration cytology play important role in the diagnosis of male breast cancer. Presence of lump,

nipple retraction and discharge, ulceration and palpable axillary or supraclavicular lymph nodes should lead to a suspicion of malignancy of breast in male [12]. Agrawal et al. emphasized the important psychological aspect of male having ‘cancer of female’ which should be managed by clinician and counselor [13]. In male risk of developing second breast cancer after first breast cancer is much high compared to women [14]. Men with breast cancer have 93-fold greater risk of developing contra lateral breast cancer [1]. If investigated in depth and treated, early patients will definitely benefit with optimum outcome.

Purpose of reporting this case from India was to study and compare clinicopathological profile and management of male breast cancer cases reported in literature. This case report also adds to collection of resources for study of male breast cancer because of synchronous presentation of bilateral breast cancer with latent period of four months. Also this will increase awareness of patients and clinicians about this rare condition. Recently, Jonathan White et al. reported rising number of male breast cancer patients from all countries. But there is limited epidemiological and clinical data related to this disease. Most of the information used in understanding and managing male breast cancer comes from data of female breast cancer which may not always provide an accurate picture [15].

## CONCLUSION

Although rare, incidence of male breast cancer is increasing and survivors are at risk of development of subsequent primary cancers. Despite absence of major risk factor our patient developed synchronous bilateral breast cancer, but was managed successfully with bilateral modified radical mastectomy, adjuvant chemotherapy, hormonal therapy and radiotherapy. Future in-depth studies focusing on etiopathology of the disease will help to optimize the management of male breast cancer patients.

\*\*\*\*\*

## Author Contributions

Unmesh Vidyadhar Takalkar – Substantial contributions to conception and design, Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Shilpa Balaji Asegaonkar – Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Balaji Narayan Asegaonkar – Substantial contributions to conception and design, Analysis and interpretation of data, Drafting the article, Final approval of the version to be published

Pushpa Ravindra Kodlikeri – Substantial contributions to conception and design, Analysis and interpretation

of data, Revising it critically for important intellectual content, Final approval of the version to be published

## Guarantor

The corresponding author is the guarantor of submission.

## Conflict of Interest

Authors declare no conflict of interest.

## Copyright

© Unmesh Vidyadhar Takalkar et al. 2014; This article is distributed under the terms of Creative Commons attribution 3.0 License which permits unrestricted use, distribution and reproduction in any means provided the original authors and original publisher are properly credited. (Please see [www.ijcasereportsandimages.com/copyright-policy.php](http://www.ijcasereportsandimages.com/copyright-policy.php) for more information.)

## REFERENCES

1. Giordano SH. A Review of the Diagnosis and Management of Male Breast Cancer. *Oncologist* 2005;10(7):471–9.
2. Sosnovskikh I, Naninato P, Gatti G, et al. Synchronous bilateral breast cancer in men: a case report and review of the literature. *Tumori* 2007;93(2):225–7.
3. Mitra D, Manna A, Sikdar SK, Sur PK. A clinicopathological study and its prognostic implication in male breast carcinoma. *J Indian Med Assoc* 2007;105(12):681–3.
4. Giordano SH, Cohen DS, Buzdar AU, Perkins G, Hortobagyi GN. Breast carcinoma in men: a population-based study. *Cancer* 2004;101(1):51–7.
5. Hemminki K, Scélo G, Boffetta P, et al. Second primary malignancies in patients with male breast cancer. *Br J Cancer* 2005;92(7):1288–92.
6. Melenhorst J, van Berlo CL, Nijhuis PH. Simultaneous Bilateral Breast Cancer In A Male : A Case Report And Review Of The Literature. *Acta Chir Belg* 2005;105(5):531–2.
7. Kahla PB, Cassaro S, Vladimir FG, Wayne MG, Cammarata A. Bilateral synchronous breast cancer in a male. *Mt Sinai J Med* 2005;72(2):120–3.
8. Lambley J, Maguire E, Yin Lam K. Synchronous bilateral breast cancer in an elderly man. *Breast J* 2005;11(2):153.
9. Parveen Shah, Irfan Rabbani, Omar Shah. Clinicopathological study of male breast carcinoma: 24 years of experience. *Ann Saudi Med* 2009;29(4):288–93.
10. Rai B, Ghoshal S, Sharma SC. Breast cancers in males: A PGIMER Experience. *J Cancer Res Ther* 2005;1(1):31–3.
11. Sun WY, Lee KH, Lee HC, et al. Synchronous bilateral breast cancer: a case report. *J Breast Cancer* 2012 Jun;15(2):248–51.
12. dos Santos VM, Cintra Osterne EM, de Castro RA, Marques HV Jr. Bilateral Male Breast Cancer: Too Many Concerns? *Asian Pac J Cancer Prev* 2007;8(4):640–1.

13. Agrawal A, Ayantunde AA, Rampaul R, Robertson JF. Male breast cancer: a review of clinical management. *Breast Cancer Res Treat* 2007;103(1):11–21.
14. Auvinen A, Curtis RE, Ron E. Risk of subsequent cancer following breast cancer in men. *J Natl Cancer Inst* 2002;94(17):1330–2.
15. Jonathan White, Olive Kearins, David Dodwell, Kieran Horgan, Andrew M Hanby, Valerie Speirs. Male breast carcinoma: increased awareness needed. *Breast Cancer Res* 2011;13(5):219.

Access full text article on  
other devices



Access PDF of article on  
other devices



## Edorium Journals: An introduction

Edorium Journals Team

### About Edorium Journals

Edorium Journals is a publisher of high-quality, open access, international scholarly journals covering subjects in basic sciences and clinical specialties and subspecialties.

#### Invitation for article submission

We sincerely invite you to submit your valuable research for publication to Edorium Journals.

### But why should you publish with Edorium Journals?

In less than 10 words - we give you what no one does.

#### Vision of being the best

We have the vision of making our journals the best and the most authoritative journals in their respective specialties. We are working towards this goal every day of every week of every month of every year.

#### Exceptional services

We care for you, your work and your time. Our efficient, personalized and courteous services are a testimony to this.

#### Editorial Review

All manuscripts submitted to Edorium Journals undergo pre-processing review, first editorial review, peer review, second editorial review and finally third editorial review.

#### Peer Review

All manuscripts submitted to Edorium Journals undergo anonymous, double-blind, external peer review.

#### Early View version

Early View version of your manuscript will be published in the journal within 72 hours of final acceptance.

#### Manuscript status

From submission to publication of your article you will get regular updates (minimum six times) about status of your manuscripts directly in your email.

### Our Commitment

#### Six weeks

You will get first decision on your manuscript within six weeks (42 days) of submission. If we fail to honor this by even one day, we will publish your manuscript free of charge.

#### Four weeks

After we receive page proofs, your manuscript will be published in the journal within four weeks (31 days). If we fail to honor this by even one day, we will publish your manuscript free of charge and refund you the full article publication charges you paid for your manuscript.

#### Mentored Review Articles (MRA)

Our academic program "Mentored Review Article" (MRA) gives you a unique opportunity to publish papers under mentorship of international faculty. These articles are published free of charges.

#### Most Favored Author program

Join this program and publish any number of articles free of charge for one to five years.

#### Favored Author program

One email is all it takes to become our favored author. You will not only get fee waivers but also get information and insights about scholarly publishing.

#### Institutional Membership program

Join our Institutional Memberships program and help scholars from your institute make their research accessible to all and save thousands of dollars in fees make their research accessible to all.

#### Our presence

We have some of the best designed publication formats. Our websites are very user friendly and enable you to do your work very easily with no hassle.

#### Something more...

We request you to have a look at our website to know more about us and our services.

We welcome you to interact with us, share with us, join us and of course publish with us.



Edorium Journals: On Web



Browse Journals

CONNECT WITH US

