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Spindle cell carcinoma of breast in a 36 year old female: A case report with Review of Literature

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Abstract

Spindle cell carcinoma of breast is a rare subtype of breast cancer that falls within general category of metaplastic breast carcinoma . It accounts for about 0.3% of all the breast carcinomas. Here we present a case of a 36 year old female who presented with recurrent spindle cell carcinoma of breast.

Keywords: Spindle cell carcinoma, Breast

Introduction

Spindle cell carcinoma of breast is a rare subtype of breast cancer that falls within general category of metaplastic breast carcinoma [1]. It accounts for about 0.3% of all the breast carcinomas [2]. There are no clinical symptoms that would distinguish spindle cell carcinoma from other types of breast cancer. Thus diagnosis is dependent on histological evaluation of tissue samples from biopsy. Spindle cell carcinoma tumours of breast tend to have spindle shaped cells along with some other components like squamous cells , lobular carcinoma , ductal carcinoma , in situ ductal component [3] . There is also lack of clarity to the genetic origin of spindle cells. Some researchers feel that malignant spindle cells are of myoepithelial cell origin , while others maintain that malignant spindle cells originate in epithelial cells that have somehow genetically evolved into spindle cells [4]. But more and more evidence suggests that spindle cell carcinoma is a unique sub category of metaplastic breast cancer.

Case Report

A 36 year old female patient presented with lump left breast with ulceration for last 4 months. The lump was steadily increasing in size. It was hard and measured 15*15 cm in size occupying almost whole of the outer quadrant of breast. No axillary nodes were present. FNAC of the lump showed benign phylloides tumour. Wide excision of the tumour was done and specimen sent for histopathology. The specimen consisted of tumour with overlying skin having multiple variable sized nodules on its surface with ulcerated area. On cutting inner surface showed fleshy few fibrous areas comprising of grey white areas of necrosis and haemorrhage. Microscopic examination showed atypical oval to spindle shaped cells arranged in form of herring bone as well as haemangio-pericytomatous pattern. Cells were highly pleomorphic and showed areas of myxomatous regeneration. Features those of malignant spindle cell lesion.

The patient underwent chemotherapy with 5 fluorouracil , doxorubicin and cyclophosphamide following this. But she reported with recurrence of lesion within one month. Her mammography report showed a hypoechoic round to oval lesion with regular margins and no calcification and cystic components. She underwent a revision mastectomy the specimen showed spindle cell malignancy. Inspite of extensive tissue sampling there was no epithelial component found. Patient was again sent for further cycles of chemotherapy and is symptom free at the time of reporting of this case.

Discussion

Majority of the spindle cell carcinomatous tumours contain a spindle cell component greater than 80%. Spindle cell tumours tend to be grossly nodular hard well circumscribed and mostly occur in post menopausal women [5]. Diagnosis usually requires a wide excision biopsy because FNAC are uncertain. Axillary spread is 0 -26%. It depends on the amount of epithelial component. Haematogenous spread to lungs and bones occur. On mammogram spindle cell carcinomas predominantly manifest as circumscribed round oval or lobular, non calcified high density masses [6]. In contrast Infiltrating Ductal Cell carcinoma typically presents with an irregular shape and speculated margins. They may stain positive for keratin and vimentin. Differential diagnosis includes benign and malignant entities such as fibromatosis, phylloides tumour, myofibroblastic tumours and primary low grade sarcoma [7].

Several studies have suggested that spindle cell carcinoma represents a more aggressive form than other cancers due to lack of specific treatment options. The prognosis is similar to the prognosis of other breast carcinomas. The higher the spindle cell component the better the prognosis. No standard treatment options exists. Patients are treated with mastectomy and chemotherapy. Radiotherapy can be considered for small potentially early survival benefit. For late stage disease mastectomy is appropriate, however survival is poor and radiation contributes to no significant additional benefit [8].

Conflicts of interest: None

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References

1. Luini A, Aguilar M, Gatti G, Fasani R, Botteri E, Brito JA, et al. Metaplastic carcinoma of the breast, an unusual disease with worse prognosis: the experience of the European Institute of Oncology and review of the literature. Breast Cancer Res Treat 2007;101:349-53.
2. Park HS, Park S, Kim JH, Lee JH, Choi SY, Park BW, et al. Clinicopathologic features and outcomes of metaplastic breast carcinoma: comparison with invasive ductal carcinoma of the breast. Yonsei Med J 2010;51:864-9.
3. Lee AH. Recent developments in the histological diagnosis of spindle cell carcinoma, fibromatosis and phyllodes tumour of the breast. Histopathology 2008;52:45-57.
4. Tse GM, Tan PH, Lui PC, Putti TC. Spindle cell lesions of the breast: the pathologic differential diagnosis. Breast Cancer Res Treat 2008;109:199-207.

5. Giordano SH, Cohen DS, Buzdar AU, Perkins G, Hortobagyi GN. Breast carcinoma in men: a population-based study. Cancer 2004;101:51-7.
6. Podetta M, D'Ambrosio G, Ferrari A, Sgarella A, Dal Bello B, Fossati GS, et al. Low-grade fibromatosis-like spindle cell metaplastic carcinoma: a basal-like tumor with a favorable clinical outcome. Report of two cases.. Tumori 2009;95:264-7.
7. Gobbi H, Simpson JF, Borowsky A, Jensen RA, Page DL. Metaplastic breast tumors with a dominant fibromatosis-like phenotype have a high risk of local recurrence. Cancer 1999;85:2170-82.
8. Deville P, Tavassoli FA; International Agency for Research on Cancer; World Health Organization; International Academy of Pathology. Pathology and Genetics of Tumours of the Breast and Female Genital Organs. Oxford: Oxford University Press; 2003.

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