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Pure Mucinous Breast Carcinoma In Young Female: A Rare Entity With Good Prognosis Among Infiltrating Breast Carcinoma S

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ABSTRACT

Mucinous Breast carcinoma is rare malignant breast neoplasm and it constitute only 1-2 % of all invasive breast cancers. Tumor called as Pure mucinous breast cancer when mucinous component is 90% of the tumor. We present a case report of 36-year-old female patient with approximately 3x2 cm size mass on left breast. Lumpectomy specimen of breast with wide local excision received. This tumor was classified as grade 1 (well differentiated) according to modified scarf bloom Richardson grading system. Mucinous breast carcinoma commonly observed in old aged female. This type tumor of tumor usually shows immune histochemistry positivity for ER, PR and HER2 negative which indicate towards good prognosis. Pure mucinous breast carcinoma is very rare entity among all infiltrating breast carcinoma. It is very rarely observed in young age female patient & prognosis is excellent if diagnosed correctly. Therefore, we present this rare case report in this journal.

Key Words: *Mucinous Breast carcinoma, Infiltrating ductal carcinoma*



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INTRODUCTION

Mucinous Breast carcinoma is rare malignant breast neoplasm and it constitute only 1-2 % of all invasive breast cancers[1]. There are 2 types of mucinous breast carcinoma: Pure mucinous (PMC) & Mixed mucinous breast cancer (MMC). Tumor called as Pure mucinous breast cancer when mucinous component is 90% of the tumor[2].

Pure mucinous carcinoma of breast is rare one and associated with better prognosis as compare to infiltrating ductal carcinoma no special type and mixed mucinous breast carcinoma[3]. Mucinous breast carcinoma commonly observed in old aged female[4]. Very few studies show its occurrence in young age[5].

This type tumor of tumor usually shows immunohistochemistry positivity for ER, PR and HER2 negative which indicate towards good prognosis[6].

CASE REPORT

36-year-old female with mass on her left breast presented to sir t hospital, Bhavnagar and radiologically diagnosed as benign breast lesion probably fibro adenoma. Surgeon performed lumpectomy with wide local excision which was skin covered and sent to histopathology laboratory.

Specimen was 9x5x3 cm in size. On cut open we found 3x2x1 cm size well circumscribed movable mass & gelatinous material comes out on opening the mass. Surgical and skin margins were inked & representative tissue sections were given and processed to prepare slide.

Histopathology examination revealed tumor cells floating in large mucin pools. Individual cells showing mild degree pleomorphism and moderate amount eosinophilic cytoplasm. Pure mucinous breast carcinoma diagnosis was made after seeing all slides. This tumor was classified as grade 1 (well differentiated) according to modified scarf bloom Richardson grading system. All surgical and skin margins were free and lymphovascular & perineural invasion were absent in studied section. Immunohistochemistry revealed ER, PR positivity & HER2 negativity.

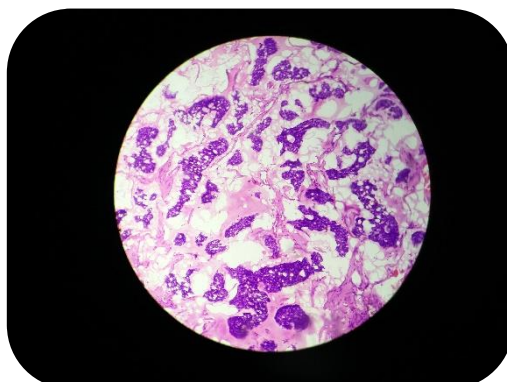


Figure 1 : Histopathological image of Mucinous breast carcinoma

DISCUSSION

Mucinous breast carcinoma characterized by mucin production & mucinous components is 50% or more[7,8]. Pure mucinous breast carcinoma represents only 1-2 % of all invasive breast carcinoma[1].

Most mucinous breast carcinoma patients complain of palpable mass in breast & radiologically it mimics of benign lesion^[9] which was observed in our case as well.

Pure mucinous breast carcinoma usually shows immunohistochemistry positivity for ER, PR and HER2 negative which indicate towards good prognosis[6]. The same immunohistochemistry observed in our case report as well.

Many studies show occurrence of mucinous breast carcinoma in old age female [4,8], which is contrasting feature to that of our case report. Very few studies show its occurrence in young age[5]. In our case report patient age was 36 year which shows rare finding as compare to other studies.

CONCLUSION

Pure mucinous breast carcinoma is very rare entity among all infiltrating breast carcinoma. It is vary rarely observed in young age female patient & prognosis is excellent if diagnosed correctly. Therefore, we present this rare case report in this journal.

Conflicting Interest (if preset give more details): No

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