
Breast Carcinoma in Presence of another Primary Malignancy Involving
Urinary Bladder, A Rare Organ Combination
A Case Report and Review Of Literature

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ABSTRACT

More than one synchronous primary malignancies in anatomically distinct organs is a rare occurrence. Here we attended a post operative case of synchronous breast carcinoma and urinary bladder carcinoma for review and further treatment. We examined the patient and found a surgical incision scar mark in right breast. Pre-operative CT scan of pelvic area showed a growth in urinary bladder which was diagnosed as urothelial carcinoma for which she was operated, stoma was seen at operated site. We examined histopathological sections from tumors of both breast and urinary bladder which the patient had with her. We confirmed the diagnosis of breast tumor as infiltrating ductal carcinoma and urinary bladder tumor as Papillary urothelial carcinoma. Planning of treatment in such situation poses a great challenge.

Key words: synchronous, breast and urinary bladder, Targeted therapy.

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Whether case report publishes any where? NO

INTRODUCTION

Since years, so many cases of synchronous and metachronous malignancy have been reported. Also, cases of synchronous and metachronous primary malignancies with urinary bladder have been reported. Incidence of urinary bladder carcinomas are more in males comparative to females. Here we report a rare case of synchronous infiltrating ductal carcinoma breast with papillary urothelial carcinoma in a 55 years old female.

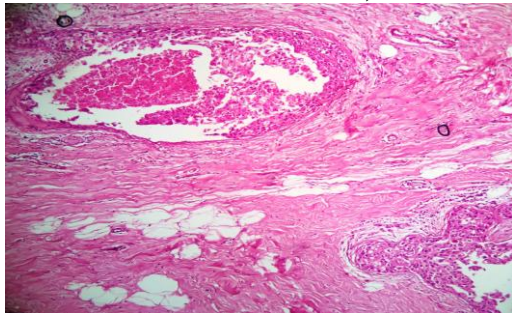
CASE REPORT

Our case was a 57 years old female, Non-smoker non alcoholic. She was a post operative case of synchronous urinary bladder carcinoma and breast carcinoma. She presented to us for review and further treatment. She had no significant family history and history of carcinogenic dye exposure.

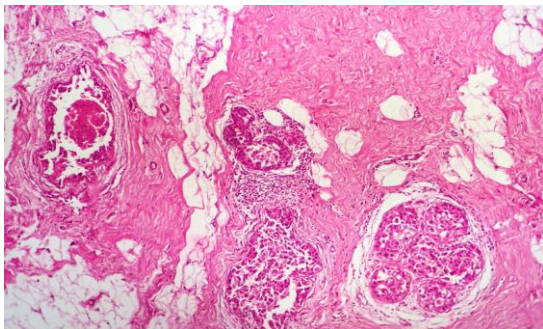
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We examined her and found a surgical incision over right breast [figure] .Her pre operative CT scan abdomen showed a nodular lesion at postero-lateral aspect of urinary bladder [figure]. A stoma is seen over lower abdomen at operated site [Figure] .We reviewed the biopsy samples of resected tumors of both breast and urinary bladder. Biopsy sample from Breast tumor was showing malignant ducts lining with pleomorphic cells, high N:C ratio. There were areas of malignant ducts with comedo necrosis. Nipple showed pagetoid changes. Infiltration of malignant ductal cells in the stroma also seen with inflammatory and necrotic background .We confirmed it as Infiltrating ductal cell carcinoma with in-situ component. Biopsy sample from urinary bladder tumor showed true long papillary structures lined by multilayered malignant cells with high N:C ratio, fine chromatin with inconspicuous nucleoli. Detrusor muscle was invaded by malignant cells. We confirmed it as a case of Papillary urothelial carcinoma.

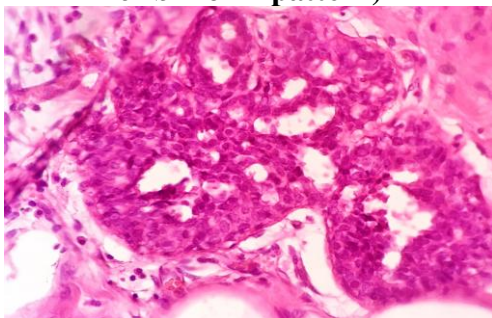
1.jpg (Invasive ductal carcinoma with comedo necrosis)



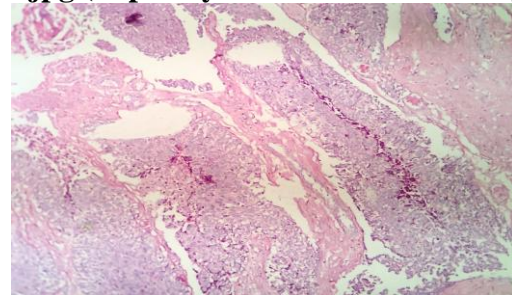
2.jpg (Invasive ductal carcinoma)



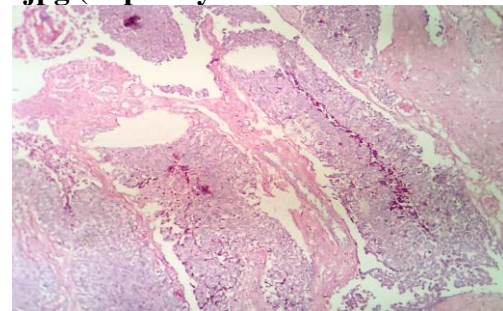
3.jpg (Ductal carcinoma in-situ : cribriform pattern)



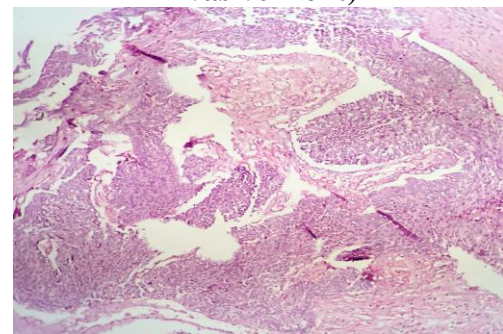
4.jpg (Papillary urothelial carcinoma)



5.jpg (Papillary urothelial carcinoma)



6.jpg (Papillary urothelial carcinoma: invasive front)



DISCUSSION

In 1889 , Multiple primary cancers (MPC) in a single patient was first documented by Billroth et al .¹ Afterwards many cases of MPCs have been published. Incidence increases with age.

In 2013, Pastore AL published one case, in which urinary bladder carcinoma was present synchronously with breast carcinoma and skin carcinoma in a male².Also, Wallace et al reported Lobular carcinoma breast with urothelial carcinoma.³

Singhal MK et.al in October 2014 , reported a case of transitional cell carcinoma UB with metachronous invasive ductal carcinoma breast .⁴

In 2014 november, Yabe N et al, reported one case of synchronous invasive ductal carcinoma breast and non-papillary urothelial carcinoma in male.⁵

Here we reporting a rare case of synchronous infiltrating ductal carcinoma breast with papillary urothelial carcinoma in a 55 years old female.

CONCLUSION

Although second primary malignancy in a patient is not uncommon, but synchronous primary malignancies involving Breast and urinary bladder is a rare phenomenon. In a female at older age, a multi-sectorial approach aiming at early detection and effective management of the disease should be implemented⁶.Also, detailed evaluation of a lesion should be done if it is present anatomically away from the primary malignancy to rule out metastasis; otherwise, synchronous primary malignancy could be missed. This case report with literature review encourage the detailed molecular study of such cases to suggest the etiology and target therapies. Majority of multiple primary cancers occur as a result of random chance, the family syndromes of tumors must always be considered.⁷

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