

Primary Adenocarcinoma of the Urinary Bladder- A Rare Case Report

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ABSTRACT

Background: Urinary Bladder adenocarcinoma is an uncommon malignant tumour accounting for less than 2% of all the malignant urinary bladder tumours. These tumors show varied histologic picture and degree of differentiation.

Case Report: A 60 year old woman came with history of haematuria since one month. Urine cytology shows malignant cells. After Partial cystectomy of the bladder, it was diagnosed with Primary adenocarcinoma of the urinary bladder. An upper gastro-intestinal endoscopy and a colonoscopy excluded any primary site of origin from those gastro-intestinal tracts. After whole-body CT staging scans, an anterior pelvicotomy was performed, confirming an adenocarcinoma of the bladder, with no extra-vesical spreading.

Conclusions: In conclusion, because there are no characteristic symptoms for the adenocarcinoma of urinary bladder, the diagnosis is mainly based on histopathology. Early radical surgery with or without adjuvant radio-chemo-therapy appears to be the best option for adenocarcinoma of the urinary bladder, and a good outcome is likely to be related with a confined disease and small tumor size.

Keywords: Urinary bladder, Adenocarcinoma, Primary

BACKGROUND

Bladder cancer is the most common malignancy of the urinary tract, and the 9th most common cancer diagnosis worldwide, with more than 330,000 new cases each year and more than 130,000 deaths per year. Its generally estimated male: female incidence ratio is 3.8:1.0. ^[1] Adenocarcinoma occurs more frequently in schistosomiasis-endemic regions and is the most common tumor arising in the bladder of patients with exstrophy. ^[2] Haematuria is the most common symptom followed by dysuria, but mucusuria is rarely seen. In this report, we present a rare case of adenocarcinoma of the bladder.

CASE REPORT

A 60-year-old woman was referred to our hospital with a history of chronic

hematuria since one month. The external inspection and digital rectal examination showed no remarkable findings, while urine cytology shows malignant cells.(as shown in fig. 1,2,3). An ultrasound scan showed evidence of a fairly well defined hypoechoic lesion seen in anterior wall measuring 30x17mm. Few echogenic areas are seen within. Part of the lesion protruding in bladder lumen. No obvious vascularity seen. CT scan of abdomen and pelvis urinary bladder shows small mildly enhancing hypodense lesion in the anterior wall of urinary bladder. It shows areas of calcification. It is seen at the level of urachal attachment. It measures 5.0x3.0cm. Could represent neoplastic mass lesion. All necessary preoperative investigation done and patient is declared fit for surgery.

Partial cystectomy with intra abdominal drainage was done under general anesthesia under all aseptic precaution. The bladder mass was removed and specimen was send for histopathological examination. On gross examination we received single globular well circumscribed greyish white mass of 6x5cm. Externally: greyish white, soft to firm

On cut section it was homogenous firm, grayish white. (as shown in fig. 4). On histopathological examination the Section studied shows tumour cells arranged in glandular pattern with pools of mucin separating them. Tumour cells are columnar with pleomorphic hyperchromatic nuclei with moderate amount of eosinophilic cytoplasm. Tumour tissue shows involvement into deep muscle and fibrofatty tissue intervening fibrocollagenous stroma with dilated congested blood vessels with muscle bundles and scanty inflammatory infiltrate. No vascular invasion.(as shown in fig. 5,6,7)

Final impression given was adenocarcinoma of urinary bladder (grade - ii moderately differentiated). An upper gastro-intestinal endoscopy and a colonoscopy excluded any primary site of origin from those gastro-intestinal tracts. After whole-body CT staging scans, an anterior pelvectomy was performed, confirming an adenocarcinoma of the bladder, with no extra-vesical spreading.

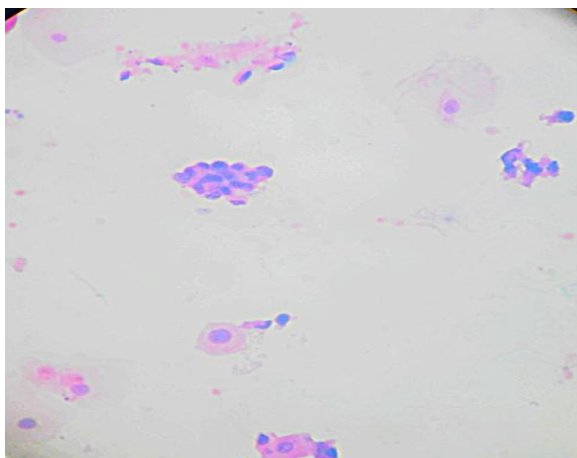


Fig. 1: Urine cytology showing Malignant cells High power view 40x (H&E)

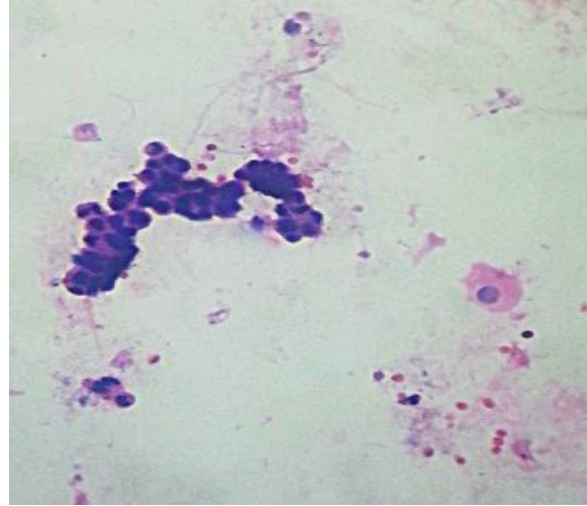


Fig. 2: Urine cytology showing Malignant cells High power view 40x (H&E)

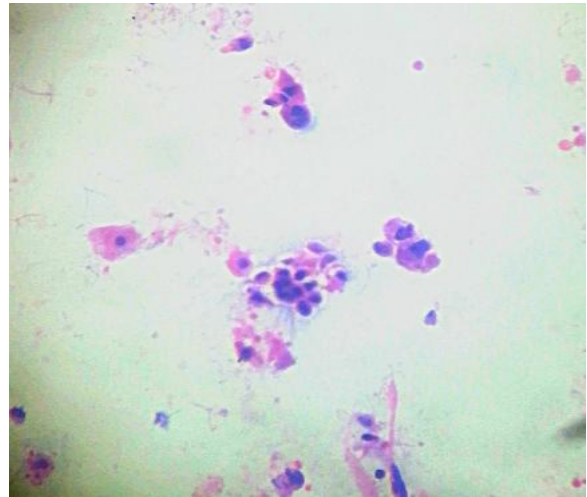


Fig. 3: Urine cytology showing Malignant cells High power view 40x (H&E)

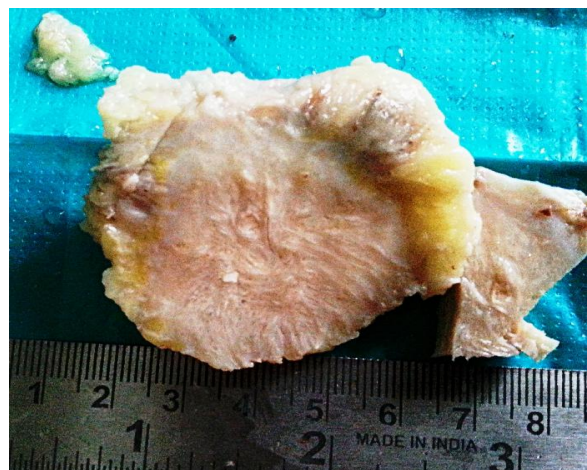


Fig. 4: Gross examination showing single globular well circumscribed greyish white mass of 6x5cm

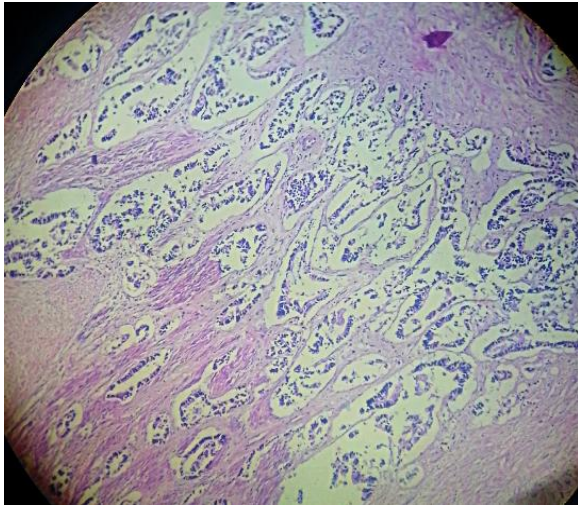


Fig. 5: Microscopic examination showing tumour cells arranged in glandular pattern with pools of mucin separating them. Histopathology SCANNER VIEW 4X (H&E)

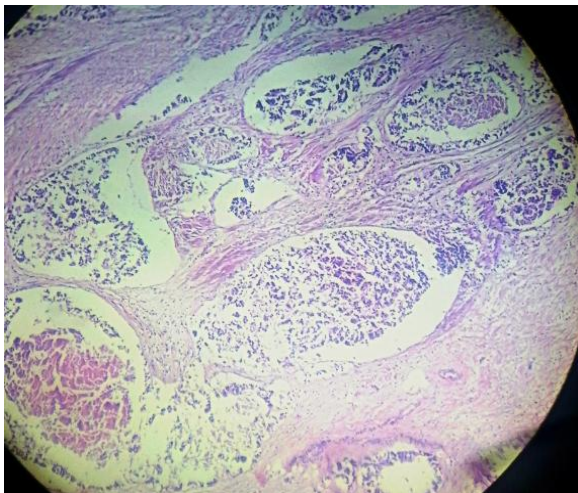


Fig. 6: Microscopic examination showing Tumour tissue involving into deep muscle and fibrofatty tissue intervening fibrocollagenous stroma. Histopathology LOW POWER VIEW 10X (H&E)

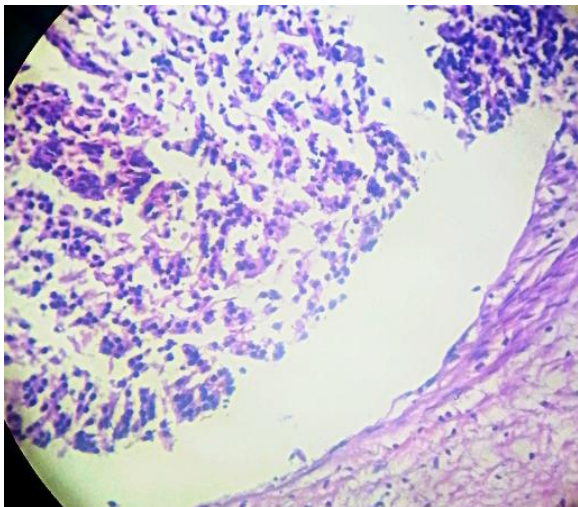


Fig. 7: Microscopic examination showing Tumour cells with columnar with pleomorphic hyperchromatic nuclei with moderate amount of eosinophilic cytoplasm. Histopathology High power view 40X (H&E).

DISCUSSION

Based on the definition of WHO, bladder adenocarcinoma is A malignant neoplasm derived from the urothelium showing histologically pure glandular phenotype [3] Adenocarcinoma of the urinary bladder arising from the urothelial lining is an uncommon malignant neoplasm, accounting for 0.5% to 2.0% of all malignant vesical tumors. [4] Irrespective of the various histologic patterns, there is usually evidence of cystitis cystica et glandularis or surface glandular metaplasia in the adjacent benign urothelium. [5] Patients are usually in their sixth decade of life with a male predilection. The usual presenting symptoms included gross hematuria, dysuria, recurrent UTI and suprapubic pain. Local tumor effects or pain from local spread of the tumor are rare complaints. [6] The most common locations of tumour were from bladder neck and posterior wall, with incidence of 31.6% (12/38) and 26.3% (10/38) respectively. Other common locations included trigone, lateral wall and urethra. [7] About 90% of the tumors arising in exstrophied bladder are adenocarcinomas. [5] They are also more prevalent in settings of vesical schistosomiasis. [8,9] About two-thirds of the adenocarcinomas present as solitary, discrete lesions, unlike the “usual” urothelial carcinomas, which tend to be multifocal. [5,10] Grossly, this tumour may be exophytic, papillary, sessile, ulcerating, or infiltrating and may exhibit a gelatinous appearance. Histologically, pure adenocarcinoma of the bladder may show different patterns of growth. These include: enteric (colonic) type, adenocarcinoma not otherwise specified, signet ring cell, mucinous (colloid) clear cell, hepatoid and mixed. [3] The grading system of bladder adenocarcinomas is based on the degree of glandular differentiation and nuclear pleomorphism (well, moderate, and poorly differentiated). [11] In this case it was primary adenocarcinoma of urinary bladder (grade -ii moderately differentiated). Stage is the most important prognostic factors for

this disease. However, the prognosis is poor since most adenocarcinomas present at advanced stage with muscle invasive disease and beyond (T2/T3). Survival at 5 years is 31% [3]

In general, it is more malignant than common urothelial carcinoma, but more cases and longer follow-up periods are required to elucidate these points. Lymph nodes and bone seem to be the most common metastatic sites for this disease. [7,12]

CONCLUSIONS

In conclusion, because there are no characteristic symptoms for the adenocarcinoma of bladder, the diagnosis is mainly based on histopathology. The radical surgery should be recommended after diagnosis is established. The chemotherapy or radiotherapy may be helpful. Although the TUR-BT has resected all visible tumors and even reached to the muscular layer of the bladder, the POST-TUR intravesical therapy is of no help for preventing recurrence, Early radical surgery with or without adjuvant radio-chemo-therapy appears to be the best option for adenocarcinoma of the urinary bladder, and a good outcome is likely to be related with a confined disease and small tumor size.

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