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INVOLVEMENT OF URINARY BLADDER IN LOCALLY ADVANCED NON-UROLOGICAL PELVIC MALIGNANCY ROLE OF EN BLOC RESECTION

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Abstract :
The urinary bladder is commonly involved in pelvic malignancy. Cancers that adhere to the bladder requires en-bloc partial or total cystectomy to achieve negative margins. We report four cases of urinary bladder involvement by locally advanced non urological pelvic malignancy managed by en bloc resection in our department during Jan 2011 to March 2013. En bloc bladder resection was done for 4 patients. In 3cases, the primary tumor was adenocarcinoma of sigmoid colon and one patient had right ovarian malignancy. Three patients were managed with partial cystectomy and one patient was managed by total cystectomy with urinary diversion. One patient died of nonurological complication after a month.
Keyword : Partial cystectomy, Locally advanced colorectal malignancy.

INTRODUCTION:

The urinary bladder is commonly involved in pelvic malignancy. The incidence of adjacent organ involvement in locally advanced colorectal malignancy is 5-12%. It is not known with other pelvic malignancy. No guidelines are available for its management. Cancers that adhere to the bladder requires enbloc partial or total cystectomy to achieve negative margins

METHODS:

Patients who underwent surgery for locally advanced nonurological pelvic malignancy with bladder involvement during Jan 2011 to March 2013 were studied.

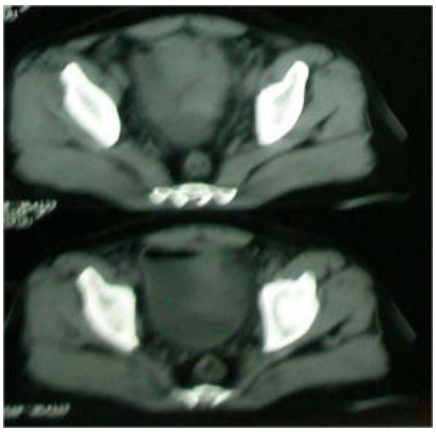
RESULTS:

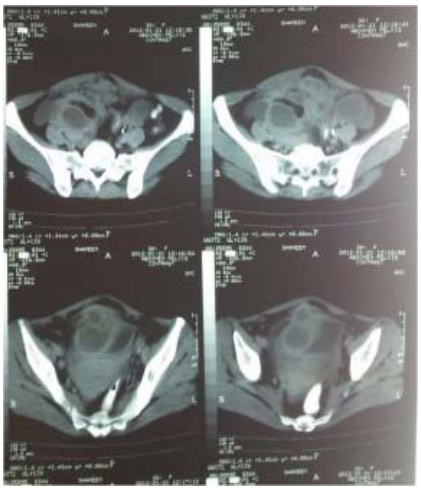
En bloc bladder resection for locally advanced pelvic malignancy was done for 4 patients. Three were male patients and one female patient. One patient presented with fecaluria, dysuria and irritative LUTS, on evaluation was found to have colovesical fistula, Two patients presented with constipation, hematochezia and irritative LUTS and female patient presented with lower abdominal pain with no bladder

or bowel symptoms.

CT and Cystoscopy when combined was able to identify bladder involvement in all 4 cases.In all 3 males, the primary tumor was adenocarcinoma of sigmoid colon. The female patient had right ovarian malignancy. All four patients had bladder infiltration. Three patients only had infiltration of the dome of the bladder, they were managed with enbloc resection of the tumor with partial cystectomy. One patient had infiltration of the bladder base, he underwent total cystectomy with urinary diversion into the transverse colon which was brought out as end colostomy.

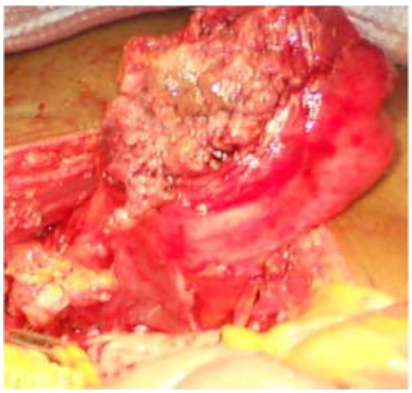
The patient who underwent total cystectomy died of nonurological cause after a month. Other three patients had uneventful post operative recovery, and were treated with adjuvant chemotherapy and are under follow up.

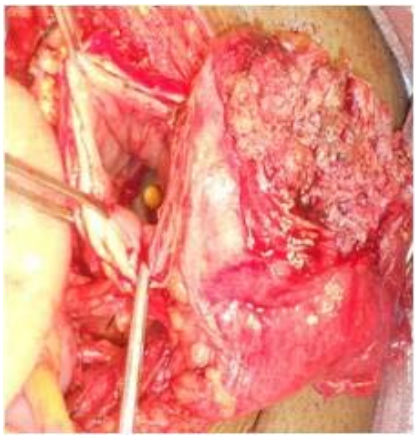


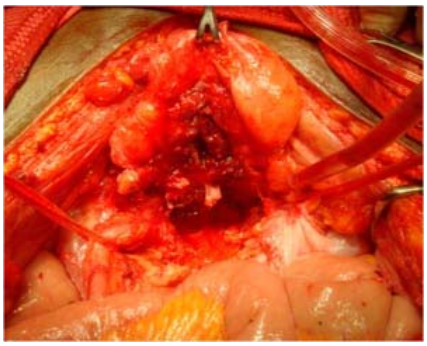


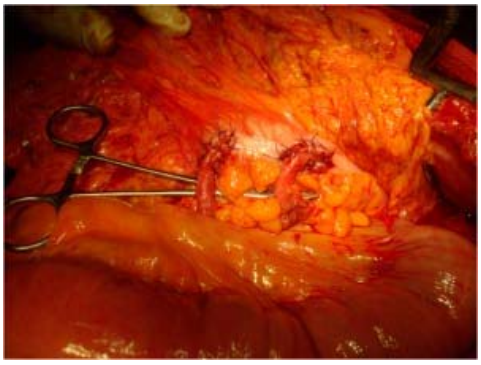
Sigmoid Tumor infiltrating the bladder with colovesical fistula

Bladder infiltrated by right ovarian mass Dome of bladder infiltrated with sigmoid growth Partial cystectomy being done Rectosigmoid growth infiltrating the bladder base

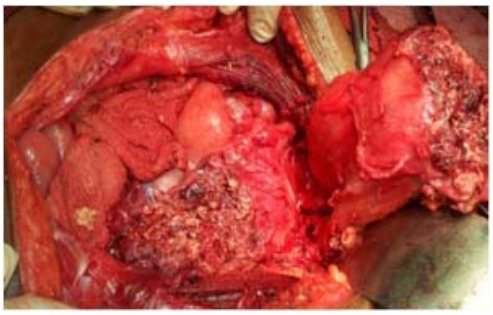








Total cystectomy with urinary diversion done



Partial cystectomy of bladder infiltrated by right ovarian tumor

DISCUSSION:

Bladder involvement in pelvic malignancy is mainly secondary to sigmoid growth followed by ovarian malignancy. The spread of carcinoma of the colon is generally comparatively slow. The tumour is limited to the bowel for a considerable time; it spreads round the intestinal wall and usually causes intestinal obstruction before it invades adjacent structures. The ulcerative type more commonly invades locally and an internal fistula may result, for example, in to the bladder.

Symptoms:

§ Asymptomatic

§ In late stage they can present with colovesical fistula Pneumaturia (50-75%) Fecaluria (35- 50%) UTI (45%) Urine per rectum (5%) Gouverneur's syndrome (suprapubic pain, urinary frequency, dysuria and tenesmus)

Unlike primary bladder cancers these lesions are not multifocal and hence en bloc conservativebladder-sparing surgery can be offered. Preoperative CT scan or MRI can predict lower urinary tract involvement and help in decision-making.The ultimate decision for bladder sparing is based on intraoperative findings. Sparing the bladder might provide better quality of life by avoiding urinary diversion without altering survival.

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