



**UROLOGICAL INTERVENTION FOR SALVAGE OF RENAL FUNCTION IN CARCINOMA CERVIX CASES –INSTITUTIONAL EXPERIENCE**

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**Key words:**

Obstructive uropathy; Advanced cancer cervix; Urinary diversion.

**ABSTRACT**

Over 70% patients with cancer cervix present in advanced stages of the disease with coexisting urological complications like obstructed uropathy. Patients with advanced or recurrent disease frequently develop infiltration of neighbouring organs like urinary bladder, ureter, resulting in urinary complications including obstruction, fistula formation. The most common presenting symptoms were flank pain, followed by dysuria, elevated renal parameters, urinary leak, pedal edema, oliguria or anuria.

**Aim of Study:** To evaluate the clinical outcome of the various urological intervention administered in a patient with carcinoma cervix.

**Material and Methods:** In this study, 33 patients with advanced cancer cervix (stage IIB and above) admitted in Government Royapettah hospital period of AUG 2016 – JULY 2018. Patient with ca cervix previously treated or untreated, who had obstructed uropathy were evaluated to know the type of urological complications, management and their clinical outcomes were retrospectively analyzed. Proper history and clinical examination, h/o regarding duration of disease, urinary symptoms, treatment in the form of surgery, chemotherapy or radiotherapy was elicited in detail. Patients were then investigated with urine analysis, renal function tests, complete blood count, USG KUB, IVU/CECT KUB/MR UROGRAM and Cystoscopy findings were evaluated.

**Results:** In our study, urological complications were common in the 45 – 50 years of age group. Most common presentation was flank pain, followed by dysuria, and elevated renal parameters.

Renal function test elevated in 15 patients, mean creatinine value 2.4 mg/dl maximum of 4.7 mg/dl, normal in 18 patients. A total of 18 patients had percutaneous nephrostomy and showed clinical improvement. Surgical procedures were Ureteric reimplantation done in two cases, Uretero colonic anastomosis done in two cases, Ureteric reimplantation with psoas stich done in one case, Ileal conduit done in one case, Vesicovaginal fistula repair done in one case.

On analyzing the clinical outcome of patients following urological intervention, about 84.8% of patients showed some improvement but 15.2% no significant improvement due to progression of disease and loss of follow up.

**Conclusion:** Advanced cancer of the cervix leads on to obstructive uropathy, presenting as uraemia. Various urinary diversion procedures are useful in improving renal function, followed by definitive treatment options. At times they serve as life saving procedures.

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**INTRODUCTION**

Cervical carcinoma is the commonest genital malignancy in our country. Lack of proper screening procedures, poor literacy and ignorance do contribute to the delay in diagnosis of cancer cervix. Over 70% patients with cancer cervix present in advanced stages of the disease with coexisting urological complications like obstructed uropathy.

Patients with advanced or recurrent disease frequently develop infiltration of neighbouring organs like urinary bladder, ureter, resulting in urinary complications including obstruction, fistula formation. The most common presenting symptoms were flank pain, followed by dysuria, elevated renal parameters, urinary leak, pedal edema, oliguria or anuria

**Aims and objective**

To evaluate the clinical outcome of the various urological intervention administered in a patient with carcinoma cervix.

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## METHODOLOGY

In this study, 33 patients with advanced cancer cervix (stage IIB and above) admitted in Government Royapettah hospital period of AUG 2016 – JULY 2018.

Patient with ca cervix previously treated or untreated, who had obstructed uropathy were evaluated to know the type of urological complications, management and their clinical outcomes were retrospectively analyzed.

Proper history and clinical examination, h/o regarding duration of disease, urinary symptoms, treatment in the form of surgery, chemotherapy or radiotherapy was elicited in detail.

Patients were then investigated with urine analysis, renal function tests, complete blood count, USG KUB, IVU/CECT KUB/MR UROGRAM and cystoscopy findings were evaluated.

### Inclusion Criteria

- Women with advanced cancer cervix (by FIGO staging) treated or untreated with urological complications were included.
- Patient with Urinary symptoms
- Abnormal renal parameters.
- Structural abnormality on radiological investigations

### Exclusion Criteria

- Urolithiasis
- Neurogenic bladder

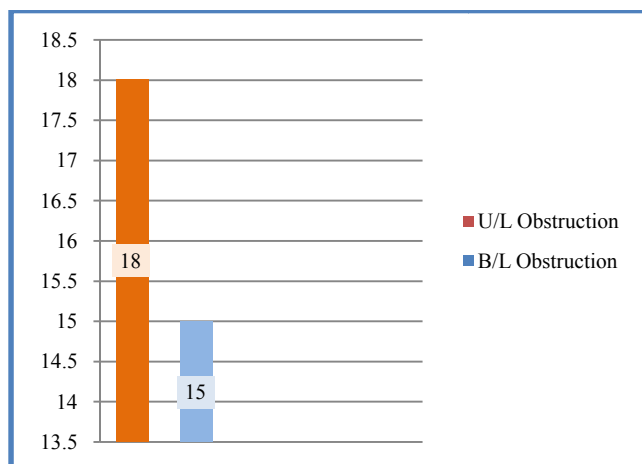
## RESULTS

In our study, urological complications were common in the 45 – 50 years of age group, as similar results are reported by Prajapati *et al.* Most common presentation was flank pain, followed by dysuria, and elevated renal parameters. Renal function test elevated in 15 patients, mean creatinine value 2.4 mg/dl maximum of 4.7 mg/dl. normal in 18 patients.

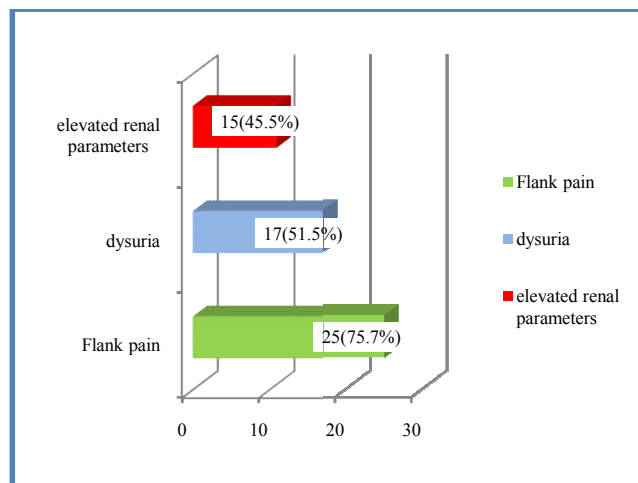
### Investigation

#### Radiological imaging

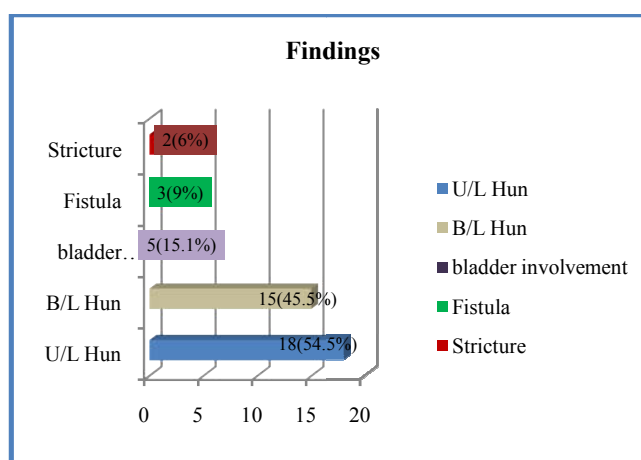
- B/L HUN –15
- U/L HUN- 18
- Bladder involvement- 5
- Fistula -3
- Stricture -2



Ureteral Obstruction



Most common presentation



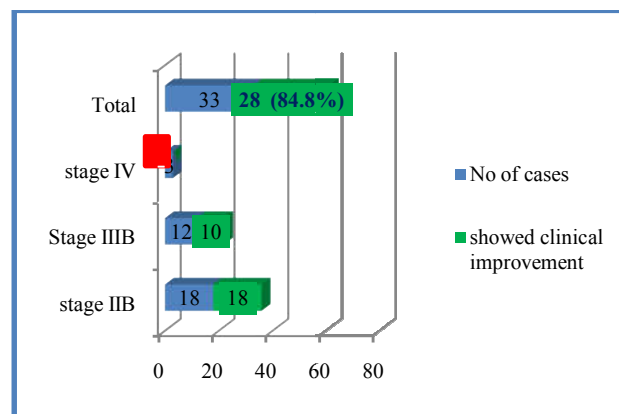
Urological intervention

| No of Pts | Retrograde stenting |     | Percutaneous nephrostomy |     | Surgical procedure  |
|-----------|---------------------|-----|--------------------------|-----|---|
|           | B/L                 | U/L | B/L                      | U/L |   |
| 33        | 5                   | 4   | 10                       | 8   | 1. Ureteric reimplantation -2<br>2. Uretero colonic anastomosis-2<br>3. Ureteric reimplantation with psoas stich -1<br>4. Ileal conduit -1<br>5. Vesicovaginal fistula repair-1 |
|           |                     |     |                          |     | 7   |

### Clinical outcome

Stage IIB- 18 cases - showed clinical improvement  
 Stage IIIB-12 cases - 10 cases showed clinical improvement  
 Stage IV - 3 cases - no significant clinical improvement

### Clinical outcome



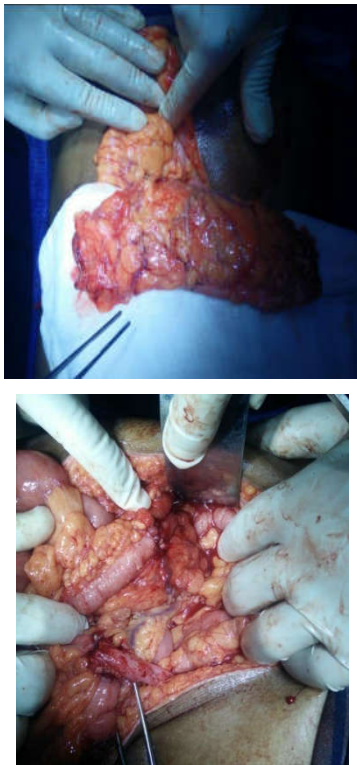
**Ca Cervix with b/l Hun**



**Right pcn with b/l dj Stenting**



**Cystogram - Carcinoma cervix-post Chemo/ Rt- Vesico-vaginal fistula**



**Transverse colon conduit Uretero colonic Stoma anastomosis**



**Post scar- b/l Ureteric reimplantation**

**DISCUSSION/RESULTS**

Cervical carcinoma is the commonest genital malignancy in our country. Lack of proper screening procedures, poor literacy and ignorance do contribute to the delay in diagnosis of cancer cervix. Close proximity of the lower urinary tract with the cervix, are prime factors for the early involvement of renal system in advanced cancer cervix. Stage of the disease does play an important role, stage II B onwards risk of urological involvement definitely increases and various authors have found that advanced stage of the disease was significantly associated with urological complications. In our study, urological complications were common in the 45 – 50 years of age group, as similar results are reported by Prajapati *et al*. As spread to adjacent organs is related to the pathogenesis of cervical malignancy, 15 cases (45.4 %) had bilateral involvement, as compared to Benito *et al*, 73% of cases had bilateral involvement. A total of 18 patient had percutaneous nephrostomy and showed clinical improvement. On analyzing the clinical outcome of patients following urological intervention, about 84.8% of patients showed some improvement but 15.2% no significant improvement due to progression of disease and loss of follow up. Although the various procedures help in improving the quality of life of the patients, allowing them to be eligible for subsequent definitive treatment and prolonging life. Palliative diversion should be the choice only after a reasonable expectation of prolonged survival.

**CONCLUSION**

Advanced cancer of the cervix is commonly associated with a high prevalence of urological complications leading on to obstructed uropathy with uraemia with risk of impending irreversible renal damage. Urological intervention help in

improving the renal function and the quality of life for the patient.

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