

## Undiagnosed Pelvi-ureteric junction obstruction presented with nonfunctioning kidney



### Medical Science

**KEYWORDS :** Pelviureteric junction obstruction (PUJ), pyonephrosis, nonfunctioning kidney

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### ABSTRACT

*A case of undiagnosed pelviureteric junction obstruction presented with nonfunctioning kidney. We are presenting a case of 26 year old male patient presenting with left flank pain and palpable mass in left lumbar region since 4 months. On investigating we came to a diagnosis of left pelvi-ureteric junction obstruction. Blockage of the PUJ can be present from birth. Obstruction can also result from a kidney stones lodged in the along the PUJ or from an injury. This abnormality can results in non functioning kidney.*

### INTRODUCTION:

Pelviureteric junction obstruction is a common urinary tract abnormality. Commonly the problem appears in childhood. In some people, however, symptoms may not show up until after puberty. PUJ obstruction occurs bilaterally in 10% to 40%. 20-40% cases of children with this condition have a backflow of urine into the kidney. Symptoms of PUJ obstruction in children are fever, nausea, vomiting, abdominal distress and failure to thrive. In adult it is presented as fever, haematuria and urinary tract infection. In some cases this condition goes undiagnosed and patient present with grossly dilated non functioning kidney

### CASE HISTORY:

A case of 24 year old male patient who presented with left flank pain, burning micturation and occasional hematuria since 4 months. Pain was colicky in nature, nonradiating, relieved by taking painkiller. Patient had long ignored the condition and presented with nonfunctioning left kidney.

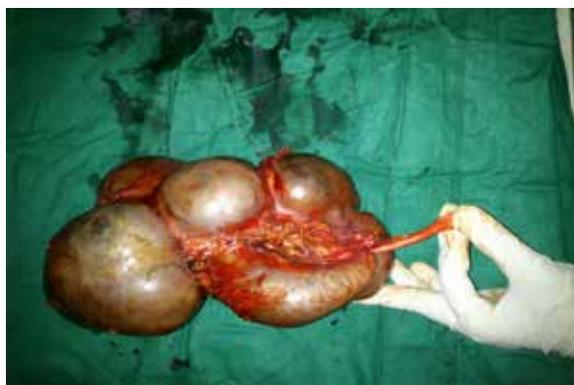
On examination visible lump was present in left lumbar region extending into left iliac fossa. On palpation lump was 20×10 cm located in the left lumbar region. Lump moved with respiration (in downward direction). Upper border of lump was palpable. Lump was noted to be ballotable...

On Investigation: hb 12.3gm% Tc 9300/cumm Urea 35mg/dl Creat 0.65mg/dl

On ultrasound examination grossly dilated left kidney measuring 20×10 cms with dilated left renal pelvis. Right kidney had no abnormality.

CT scan of abdomen and pelvis suggested a grossly dilated left kidney measuring 20×10 cm with dilated left renal pelvis. Left kidney shows no excretion of contrast Right kidney shows normal excretion of contrast. Possibility of left sided pelviureteric junction obstruction with non functioning kidney.

Management: Left sided nephrectomy done under General Anesthesia.



Post operative status was uneventful. Catheter was removed on 4th post operative. Drain was removed 5th post operative day. Patient was discharged on 6th post operative day.

### DISCUSSION:

Pelviureteric junction obstruction is caused by the following:

- abnormalities in the muscles of the ureter
- scar tissue in the ureter
- compression of the PUJ by a blood vessel leading to the kidney
- kinks in the ureter
- fibrous bands around the ureter
- kidney stones
- external trauma, or injury to the body over the kidney area
- injury during endoscopy or surgical procedures

Clinical findings may vary according to patient age. It may be diagnosed in infants based on antenatal ultrasounds. In older patients it may be an incidental finding discovered on X-rays performed for another reason or patients may present with symptoms of pain (especially worse with alcohol).

Diagnosis primarily rest with X-rays tests such as ultrasound, intravenous pyelogram and nuclear medicine studies which examine the area of obstruction and also the effect of the obstruction on the drainage and function of the kidney.

PUJ obstruction can cause a number of problems including loss of function in the affected kidney, kidney infections, haematuria (blood in the urine) and renal stones. .

The need for treatment depends on the effect of the obstruction on the kidney, the presence of complications and the degree of patient symptoms. Surgery is reserved for those patients with pain, diminished kidney function or complications of the PUJ obstruction.

Patients not requiring surgery may be managed with surveillance with careful follow-up.

**CONCLUSION:**

Pelviureteric junction obstruction should be diagnosed early with help of thorough investigation and causes should be treated accordingly so that complication of non functioning kidney can be prevented.