Case Report

PUJ-OBSTRUCTION:

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A case of Pelvi Ureteric Junction (PUJ) obstruction resulting in Hydronephrosis in a 27 yrs. old serving soldier with almost 10 yrs. of active service in the Army has been reported.

Case summary:-

Presenting Features:-

1. Dull aching pain on the Rt. loin: 1Yr.
2. Repeated attacks of colics in the Rt. side of the abdomen.
3. Recurrent episodes of fever with chills with urinary symptoms: 1 Yr.

History of the developing symptoms:

Insidious onset.No.h/o haematuria passage of stones in the urine, No h/o Dietl's crisis, No feature suggestive of ureamia & No h/o interruption in the urinary flow.

Examination:

- Averagely built and nourished individual.
- General examination revealed no abnormality
- Vital parameters were within normal limits.
- Abdominal examination revealed no lump.
  However, tenderness in the Rt. renal angle was elicited.

Provisional diagnosis: Rt. Renal colic

Investigations:
R/E Urine
CBC
Urine for C/S
X Ray KUB
X ray Chest
Blood Biochemistry
— All within normal limits

USG A bdomen: Revealed dilated (Rt.) Pelvis with Hydronephrosis suggesting the cause to be an abberent vessel. ?

IVU: Large extrarenal (Rt.) Plevis with hydronephrosis suggesting the cause to be ? A band. There was no ureteric abnormality and both the kidney functions were preserved.

Final Diagnosis: PUJ Obstruction (Rt.)

Treatment given: A dismembered pyeloplasty of Anderson Hyne type was performed under GA. with a DJ stent in situ on 07-03-055 B.S.

Intra operative findings:

Hugely dilated extrarenal pelvis with moderate degree of Hydronephrosis. No abberent Vessel or band was encountered. However, a suspicious adynamic narrowed segment of the PUJ was noted which after excision was sent for Histopathological analysis.

Post Operative Period:
Uneventful

Result: Patients sysmptoms have been alliviated & has been discharged with advices of removal of DJ stent and follow up after 3 months.

Discussion

Hydronephrosis is defined as an aseptic dilatation of the whole or part of the Kidney due to a partial or intermittent obstruction either unilateral or bilateral.

Classically, the cause of unilateral hydronephrosis are grouped into extramuaral, intramural and intraluminal and they are abberent polar artery or vein (Controvesial - cause or effect), a calculus, involvement of ureter by growth in the cervix, prostate, rectum or colon, idiopathic retroperitoneal fibrosis, ureterocele, congentially small orifice of ureter, inflammatory stricture like tuberculosis, trauma or ureteric neoplasm etc.

The congenital causes of PUJ obstruction being congenital stenosis, physiological narrowing or achalasia at the PUJ with an adynamic/dyskinetic segment, or high insertion of ureter in the pelvis etc.

The causes of bilateral hydronephrosis are some form of urethral obstruction or any of the above mentioned causes of unilateral hydronephrosis occuring on both sides.
The extrarenal hydronephrosis is more common. The initial dilatation is in the pelvis itself resulting into hydronephrosis. The process propagates into the renal calicial dilatation causing hydronephrosis which ultimately leads to renal parenchyrual damage.

Treatments Described

The surgical treatment for congenital PUJ Obstruction can be grouped into:

1) dismembered pyeloplasy: eg - Anderson Hyne Pyeloplasty
2) Non-dismembered pyeloplasty: eg. - Culp pyeloplasy, modified culpvy plastic
3) Use of stents for urinary divertion
4) Endopylotomy

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