AN UNUSUAL CAUSE OF ANURIA IN A CHILD

Dr.Venkateswari Ramesh

Dr.Janani Sankar's unit

Kanchi Kamakoti CHILDS Trust Hospital

Presenting complaints - Feb 2015

- 1 ¾ yr, female toddler
- Bilious vomiting – 1 day
- Not voided urine – 1 day

- No h/o fever/loose stools/constipation/ dysuria/hematuria/abdominal distension
- ?Increase in frequency of micturition

Past history – Dec 2014

- History of trauma while playing with elder sibling
- Developed Scalp hematoma
- Presented with low Hb (6gm/dl)
- Workup for bleeding diathesis – normal
- Hematoma resolved with FFP & PRBC

On examination

- Sick looking
- Some dehydration
- BP – normal
- Abdomen - soft, no distension, not tender
- NG aspirate - bilious

Labs

Urea – 92
Creatinine – 1.68

Na – 130
K – 7.4
HCO3 – 20

CBC – N

X-ray abd – N

USG abd: marked free fluid, kidneys, bladder normal

Treatment

- NPO, NG aspirate, Ceftriaxone
- Dehydration fluid correction
- Hyperkalemia – medical management

Catheterised – 200ml urine drained

initial hematuria, cleared gradually

(urine albumin3+, plenty of pus cells & RBC's)

Polyuria (7-8ml/kg/hr) - ?postobstructive diuresis

Shifted to PICU

36hrs later

UREA	95	34
CREAT	1.1	0.55
K	4.6	3.8
HCO3	15	20

Catheter removed & Shifted out of PICU

Surgical consult – nil surgical

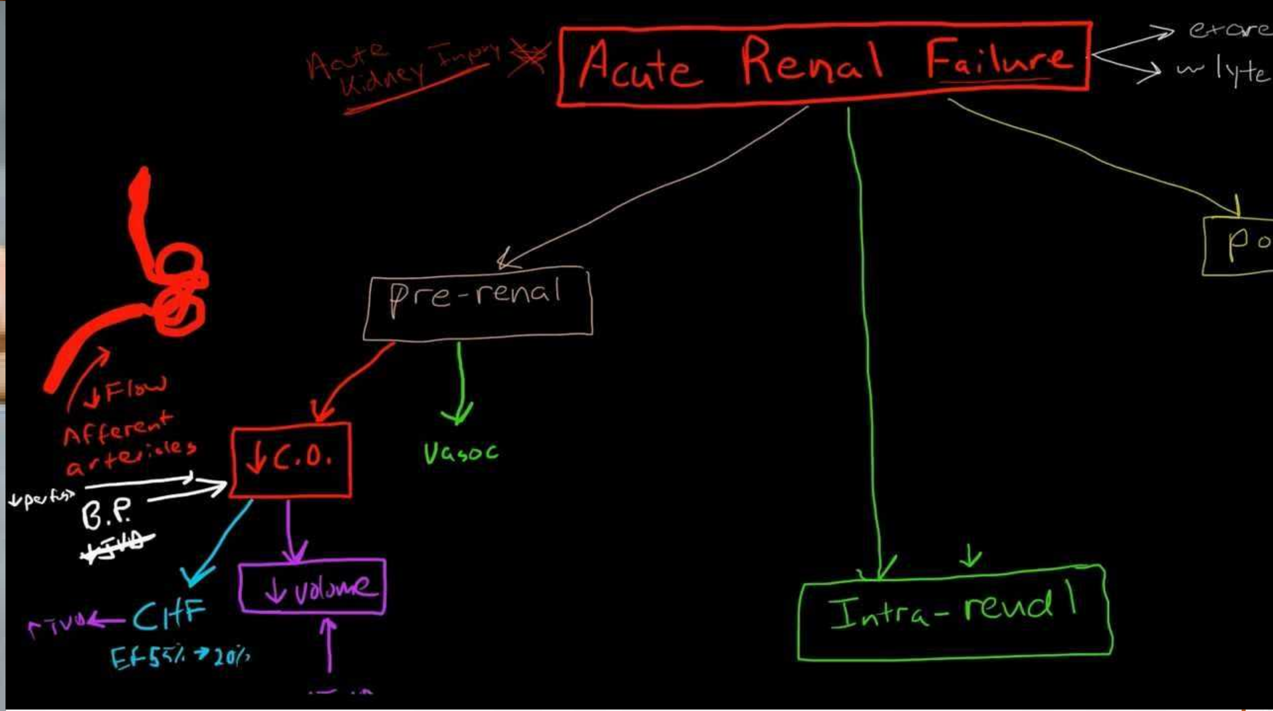
Empirical antibiotic for 1 week

Blood & urine c/s – sterile

Bilious vomiting settled gradually

Recurrence of Anuria

Urea	53
Creatinine	1.7
Na	150
K	3.4
HCO3	10



USG Abd – mod free fluid, kidneys N, bladder N

Recatheterised – diuresis 4-5ml/kg/hr

Recurrent episodes of anuria

Urea	67	32	29
Creat	2.12	1.4	1.7
K	4.2	4.5	4.2
HCO3	13	7	11

USG Abdomen

Cystos copy

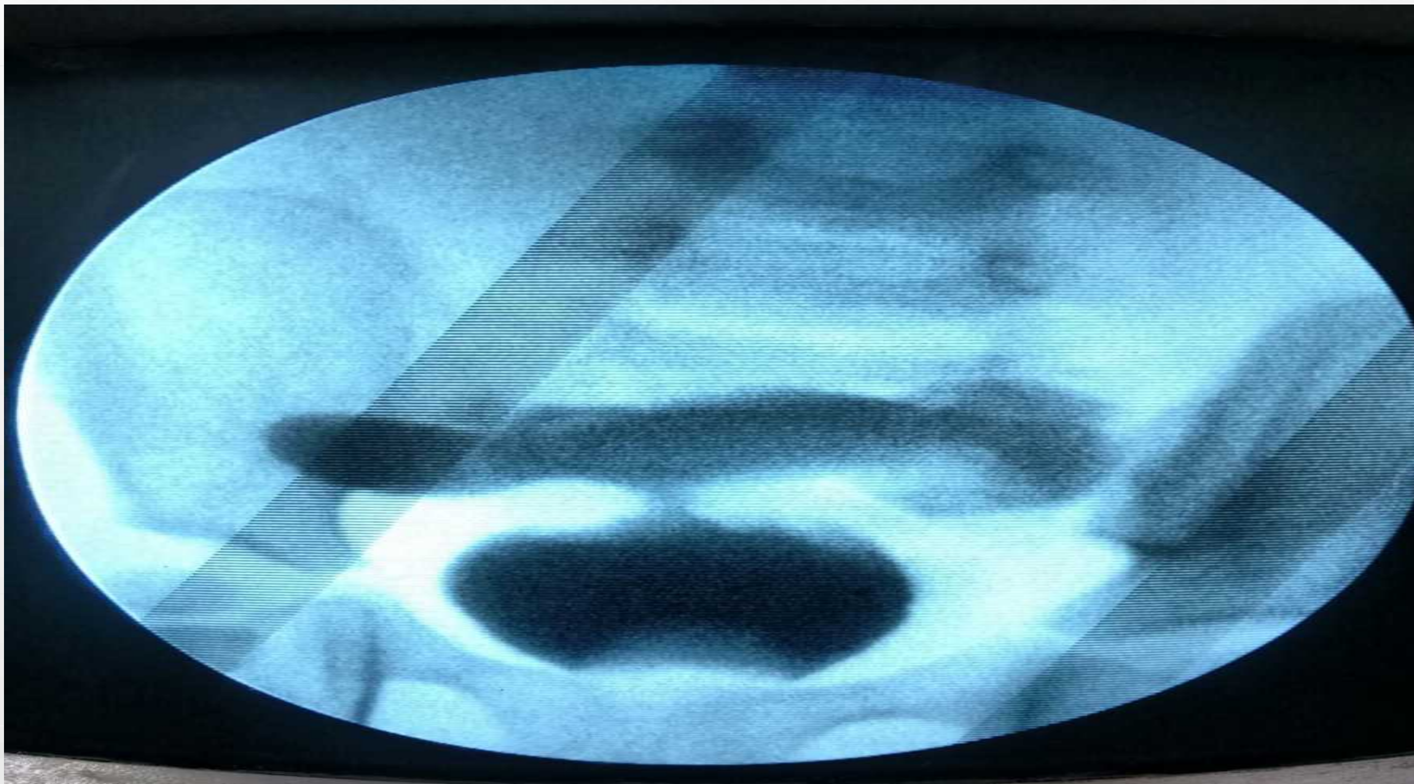
MRI abdomen

Ascitic fluid analysis

Cystoscopy

- Flimsy adhesions in urethra
- ?perforation in dome of bladder

Cystography



Laparotomy

- 2 perforations in the dome of bladder
- Perforation closure done

- Catheter in situ for 2 weeks & then removed

Follow up

- Micturition normal
- Renal function test – N
- USG Abdomen – N

ETIOLOGY

- Trauma
- Spontaneous
- Iatrogenic

LITERATURE REVIEW

- ORIGINAL ARTICLE
- Year : 2015 | Volume : 18 | Issue : 4 | Page : 483-488
- Bladder perforations in children
- U Bakal, M Sarac, T Tartar, F Ersoz, A Kazez
- Department of Pediatric Surgery, Firat University Medical Faculty, Elazig, Turkey

- Ped Urol Case Rep 2015; 2(1):7-11
- Acute abdomen caused by spontaneous perforation of the urinary
- bladder in childhood: Report of one case
- Erol Basuguy, Serkan Arslan, Hikmet Zeytun, Mehmet Serif Arslan, Mehmet Hanifi Okur, Bahattin Aydogdu, Ibrahim Uygun
- Department of Pediatric Surgery, Faculty of Medicine, Dicle University, Diyarbakir, Turkey.

- Br J Urol. 1987 Sep;60(3):217-22.
- Intraperitoneal rupture of the bladder causing the biochemical features of renal failure

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