PUNCTURE OF PROLAPSED URETEROCELE AT BEDSIDE WITHOUT ANESTHESIA OR SEDATION

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PROLAPSED URETEROCELE

Presentation:
1) Rare but an emergency
2) Midline introital mass
3) Fluid filled
4) Urethral meatus is superior/crescent shape
5) Possible urinary retention
6) Possible ureteral obstruction

Treatment options:
1) Foley placement
2) OR for incision, unroofing
3) Definitive surgical repair
Puncture of prolapsed ureterocele at bedside
Baby #1 - postnatal work up

1) VCUG - No reflux, ureterocele
2) US - from outside hospital
   right hydronephrosis of UP,
   right ureterocele
Baby #1 – puncture of prolapsed ureterocele at 4 weeks old

Postnatal procedures:

1) puncture of ureterocele at bed side
2) right upper pole heminephrectomy
3) right lower pole UPJ repair
Baby #1 - at follow up
Baby #2 - postnatal work up - renal/bladder US and VCUG
Baby #2 - post puncture of ureterocele
Follow up at 54 months - no other procedures
Baby #3

At age 4 weeks

Renal/bladder US at age 2 days

US of prolapsed ureterocele
Baby #3 - at follow up 9 months

**pre puncture**

**post puncture**

[Images of ultrasound scans]
Results - post puncture

1) All patients have normal external genital exam 2 weeks post op
2) No post puncture VUR was observed with long term follow up
3) 2 pts are potty trained and have normal bladder configuration
4) Only 1 pt required additional upper tract operations (upper pole heminephrectomy and lower pole UPJ repair on the same right side)
5) All patients show improved or collapsed ureterocele
6) Follow of 58, 54 and 9 month
Conclusions

1) Puncture with hot temp device at beside is easy, quick, and safe
2) Ureterocele wall “appears” to have
   • no sensory receptors
   • blunted sensory receptors
3) Puncture site should be small and finite
4) Puncture site ideally 1-1.5 cm from the true meatus
5) Prolapsed ureterocele - a “special opportunity”
   • to restore the integrity of the bladder base/urethra
   • to preserve and avoid upper tract surgery
6) Voiding phase of VCUG may predict potential for prolapse