Ureteral Reconstruction: Plan, Prepare, Perform
Case

- 69yF s/p lap sigmoid colectomy for diverticulitis
  » Persistent watery diarrhea postop
Imaging
Imaging
Imaging
Imaging
Imaging
Case

• Summary of findings
  » Complete ureteral duplication on the left
  » Transection of upper pole moiety ureter
    • Uretero-colonic fistula
  » No abscess or fluid collection

• RPG and ureteroscopy
  » Normal lower pole moiety
  » Complete obstruction/discontinuity of upper pole moiety
Plan

• Preop considerations
  » Etiology of injury/obstruction
  » Location
  » Length
  » Prior interventions
    • Urinoma/abscess
    • Drains
    • Prior repair/dilation/stent/nephrostomy
Prepare

• Intraop considerations
  » Equipment
    • Cystoscope, ureteroscope, Firefly robotic lens
    • Open-ended catheter, wires, stents
    • Intra-op access to nephrostomy
  » Positioning
    • Upper or mid ureter
      » Modified flank with low lithotomy
    • Distal ureter
      » Low lithotomy/Trendelenburg
  » Port placement
    • Triangulate location of interest
    • Allow room for proximal/distal access
Perform
Wide Mobilization
Isolate ureter
Inflammatory “rind”
Dense fibrosis
Transect ureter – less is more
Decisions, decisions.
Option #2
Tailor to fit
Options planned
Anastomosis
Use of open-ended catheter
Closure
Final inspection
Case

- 23yF with h/o ruptured sigmoid colon s/p sigmoid colectomy and diverting colostomy

- Colostomy takedown 6 months later

- POD#1 – increase serum Cr (0.6 to 1.2)
  » Renal u/s – new left hydronephrosis
  » Cysto, rpg – blind ending ureter just distal to pelvic brim

- Nephrostomy placed
Imaging
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Imaging
Use of Firefly
Assess Intraop Findings
Proximal Mobilization
Distal Mobilization
Anastomosis
Imaging