Clinical Meet – Dept of Urology

RARE CASE OF - COMPLETE URINARY BLADDER WALL NECROSIS POST NORMAL VAGINAL DELIVERY

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- G J , 29 yrs female

- Underwent Normal Vaginal Delivery at an outside hospital on 11/09/21 with prolonged second stage of labour and discharged on 16/09/21 without any complaints.

- She developed abdominal pain with fever on 18/09/21 and was referred to higher centre.

- Patient was in sepsis, needed ventilator & ICU management at Ruby Hall Clinic.

- Intubated patient was shifted to DYPMCH due to financial issues on 21/09/21 under obstetrics & gynaecology dept

- She was managed as a case of Post NVD sepsis by the dept of OBGY.

- Patient recovered out of sepsis, was extubated and shifted to the ward.

- Patient foley cathetar was removed on 04/10/21.

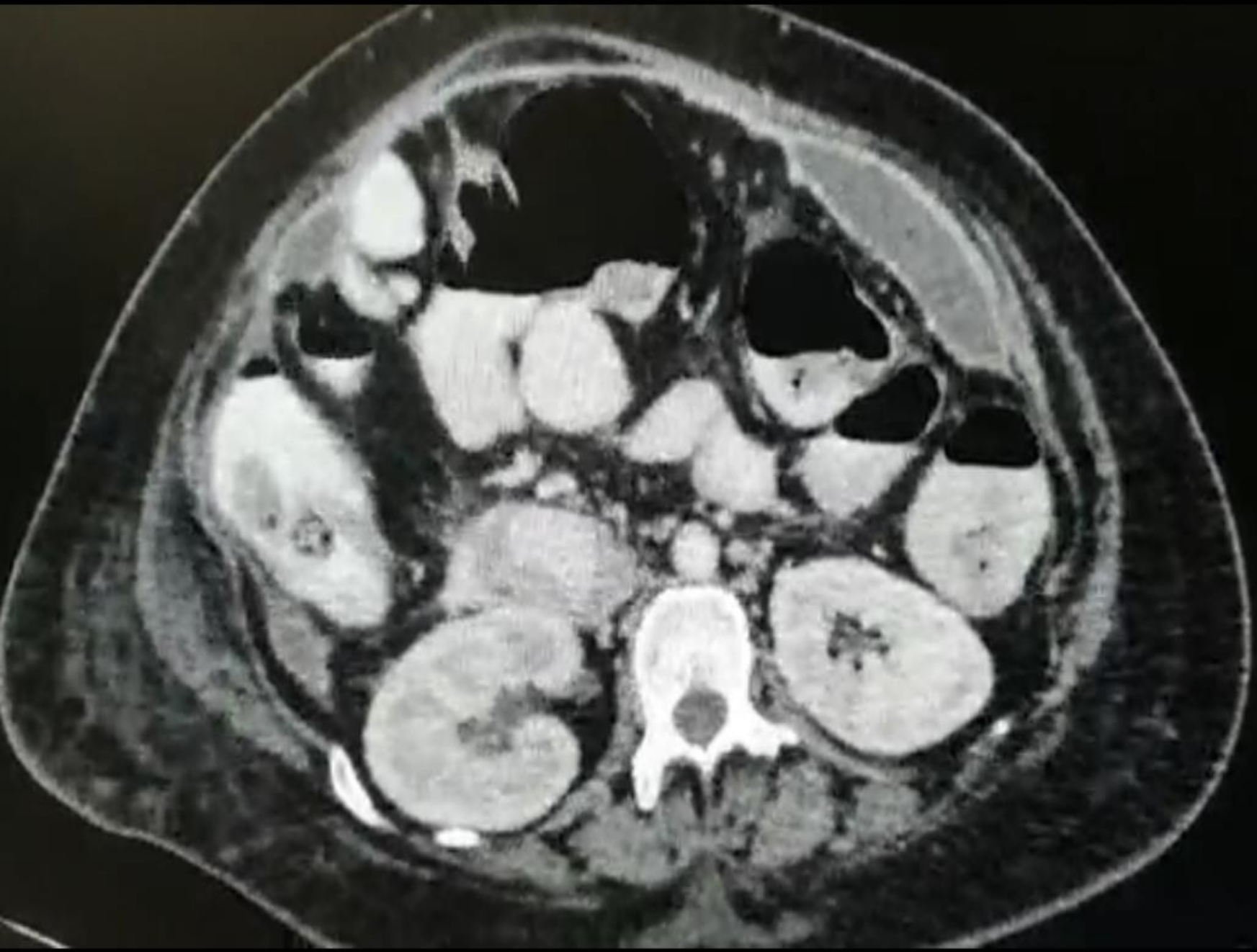
- Patient developed retention with abdominal distension and wound leak the very next day.

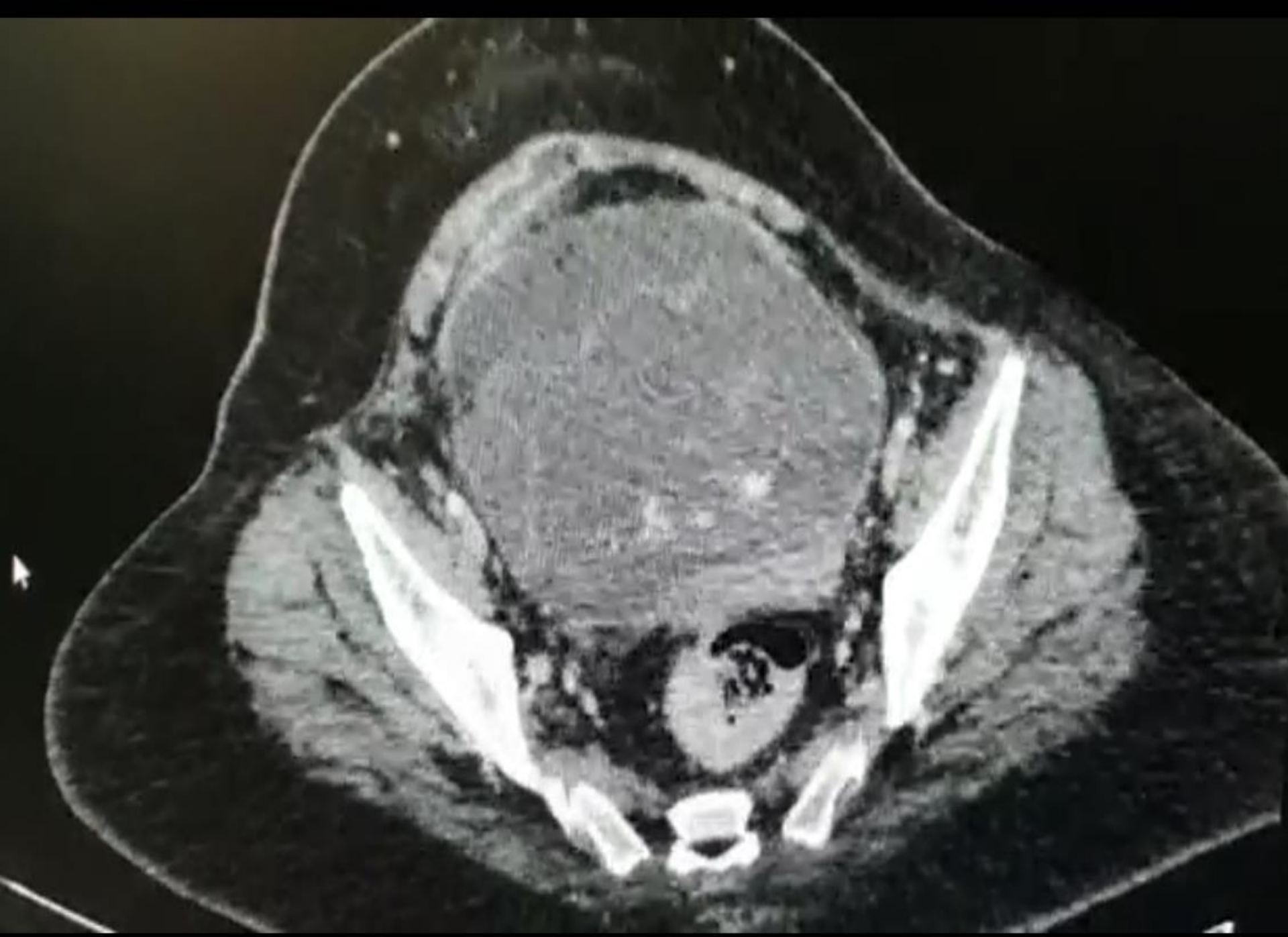
USG A+P :

- B/L renal concretions with mild pyelonephritis (L>R)
- UB was empty
- Moderate ascites

CECT (A+ P):

- Infective loculated collections in peritoneum with peritonitis
- **UB outline could not be made out**
- Status of bladder continuity cannot be commented upon as **UB lumen is not filled with contrast**





- In view of CT report showing collection with sepsis patient was taken for exploratory laparotomy on 06/10/21.

- Intra-operatively dept of Gen Surgery and Urology were consulted.

- That is how we came into picture.

- Intra-op findings :

- Complete necrosis and sloughing-off of bladder wall was seen with only trigone and ureteric orifices present.

- Adhesions of bowel loops seen covered with flakes.

- Omentum covered with phlegmon.

Intra-op this was unique situation to face.

Problems infront of us :

- Unstable patient
- Completely sloughed bladder
- Adherent bowel

Available options :

- Urinary diversion – ileal conduit / ureterosigmoidostomy
- Orthotopic bladder reconstruction
- Per cutaneous diversion – B/L PCN
- B/L ureteric catheterisation

- This was unheard, unprecedented situation.
- With sepsis and adherent bowel, utilization of bowel for diversion not possible as chances of faecal fistula, non-healing of GI anastomosis were likely.
- Thorough lavage was given.
- Simplest procedure : B/L ureteric catheterisation with placement of foley catheter was done.

Post-op

- GC : improved

- Output in foley catheter improved for few days followed by pericatheter leak and leakage of urine through the wound.

21/10/21 POD – 15th

- Patient stable, no sepsis

- Exploratory Laparotomy for possible bladder closure

- Intra-op findings :
- No residual bladder
- Only trigone and ureter orifices seen
- Small bowel adhesions
- No free omentum available

- Only ureteric catheters replaced by DJ Stents

- B/L PCN insertion done under fluoroscopy guidance by Intervention Radiologist on 03/11/21.
- PCNs draining well.
- Urine output improved.
- Laboratory parameters (Hb, urine r/m) settled.
- Soakage through main wound ceased.
- Urethroscopy with B/L DJ Stents removed on 16/11/21

- Patient by now lost 30 kgs of weight.

- Discharged with advise of nutritional support, protein supplements and regular follow up.

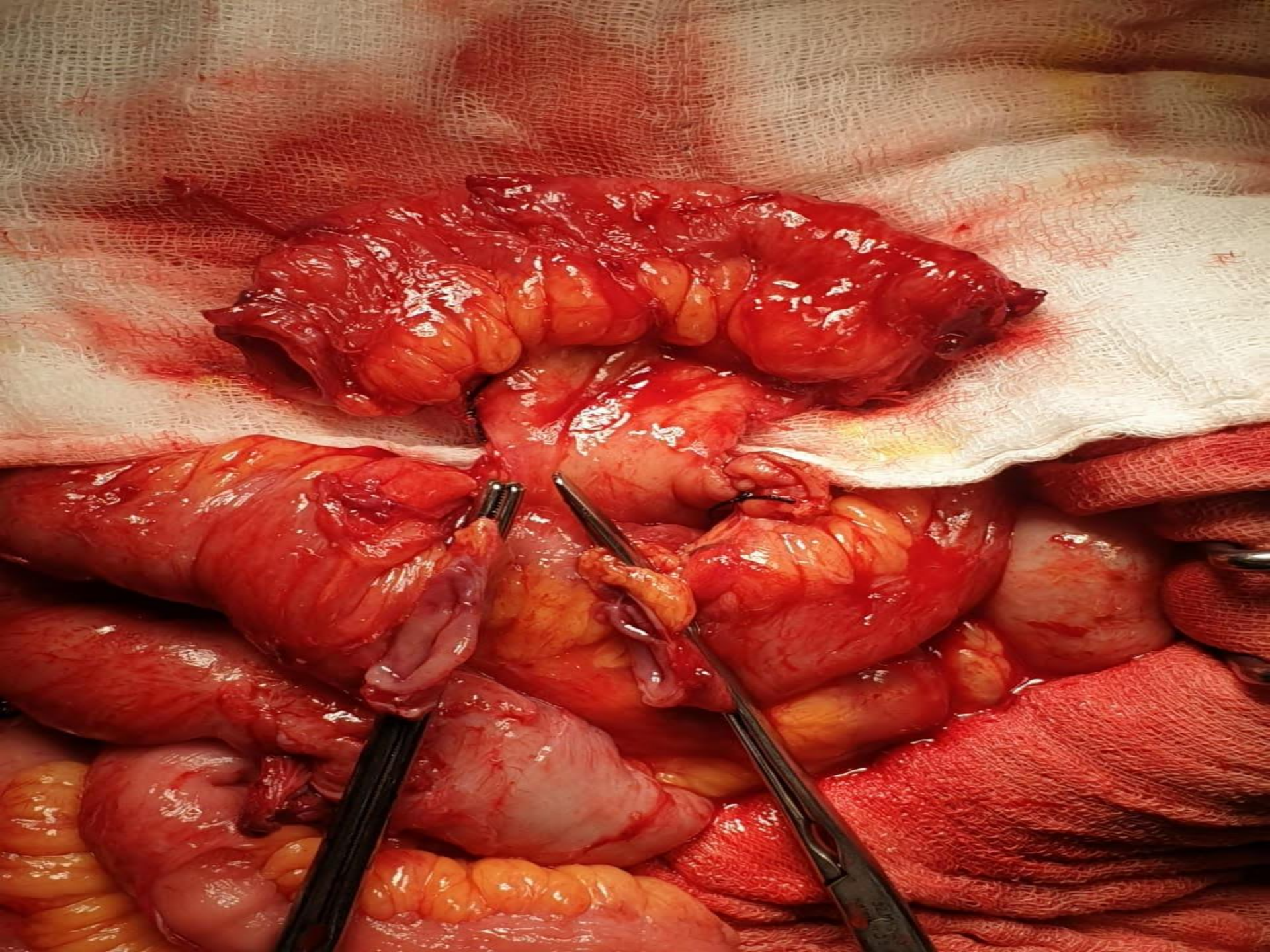
- Plan : Diversion after 3 months.

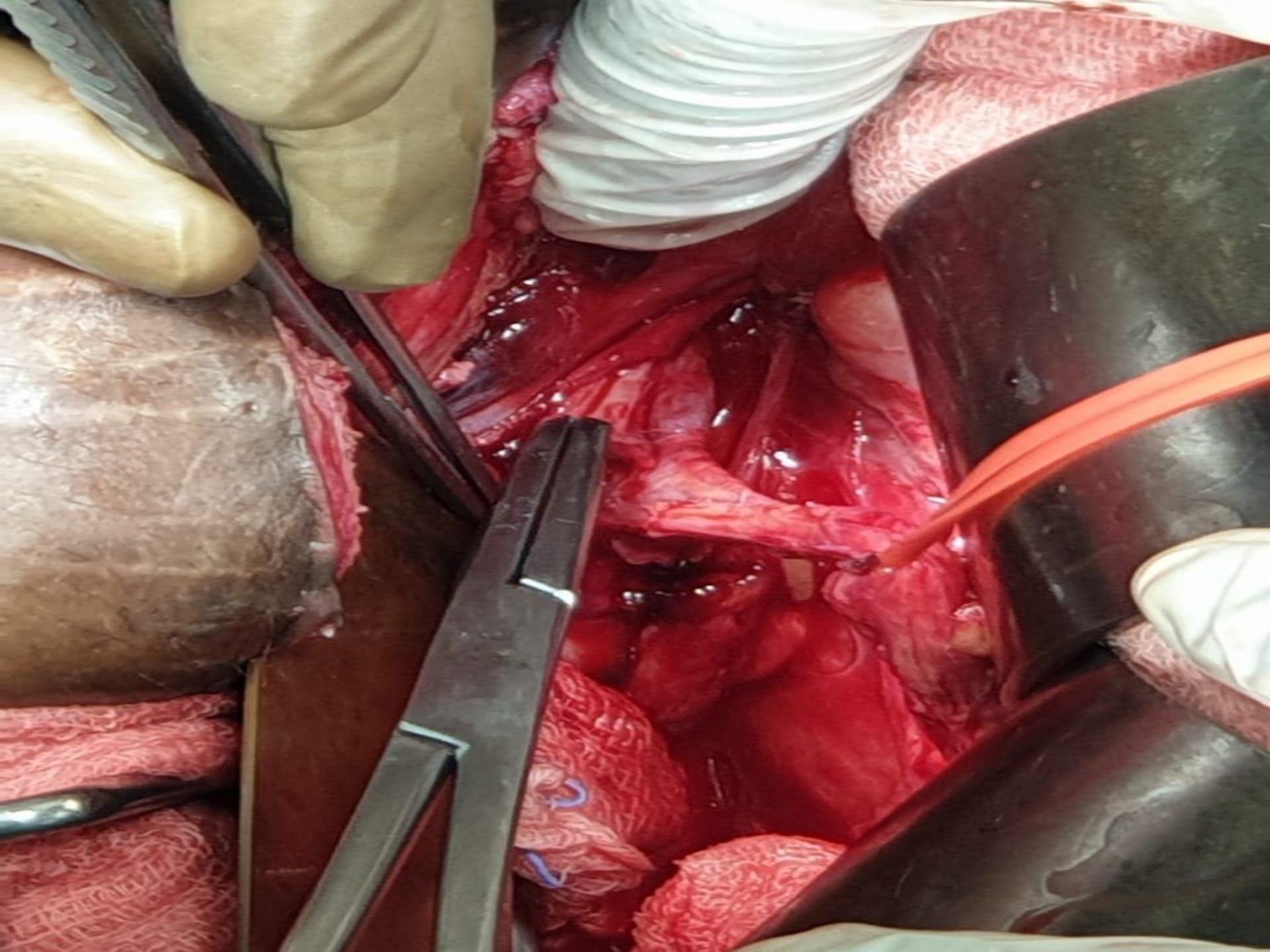
16/05/22

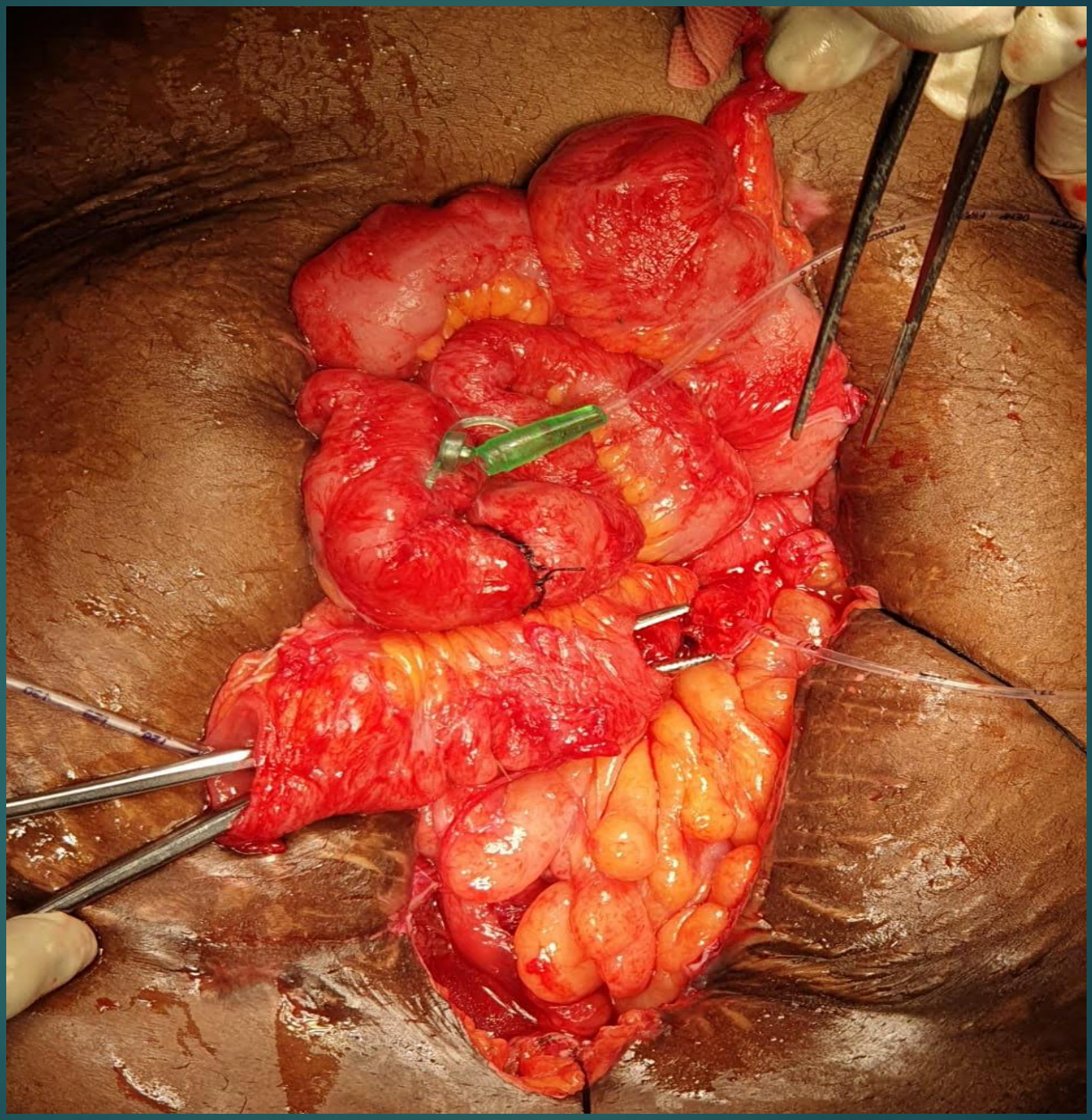
- Re-admitted, stable patient.
- Urine leakage from lower part of wound with B/L PCNs blocked.
- PCNs replaced.
- Local wound care.

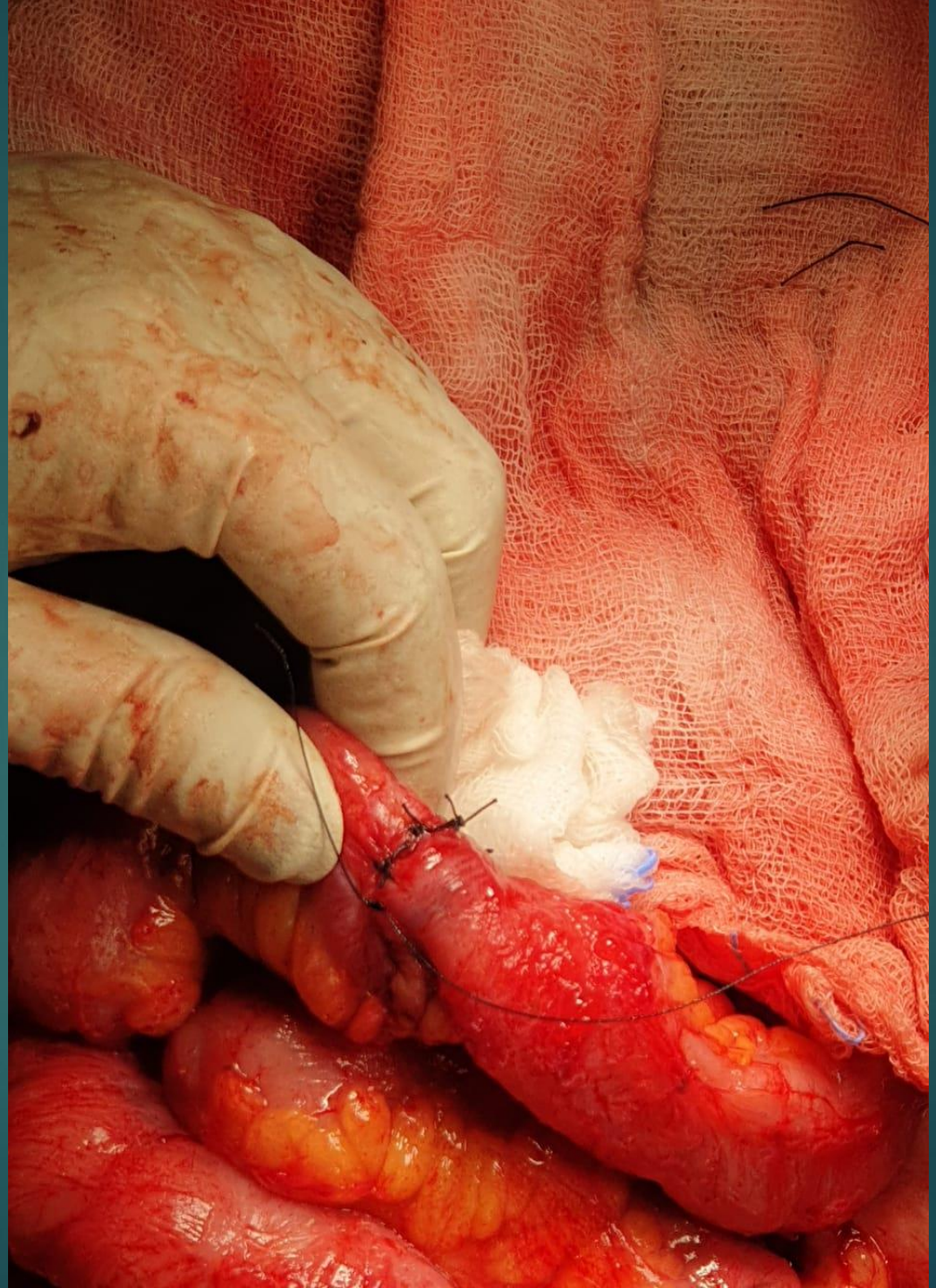
09/06/22 – Definitive Procedure

- Exploratory laparotomy with ileal conduit with B/L ureteroileal anastomosis with end to end ileoileal anastomosis.



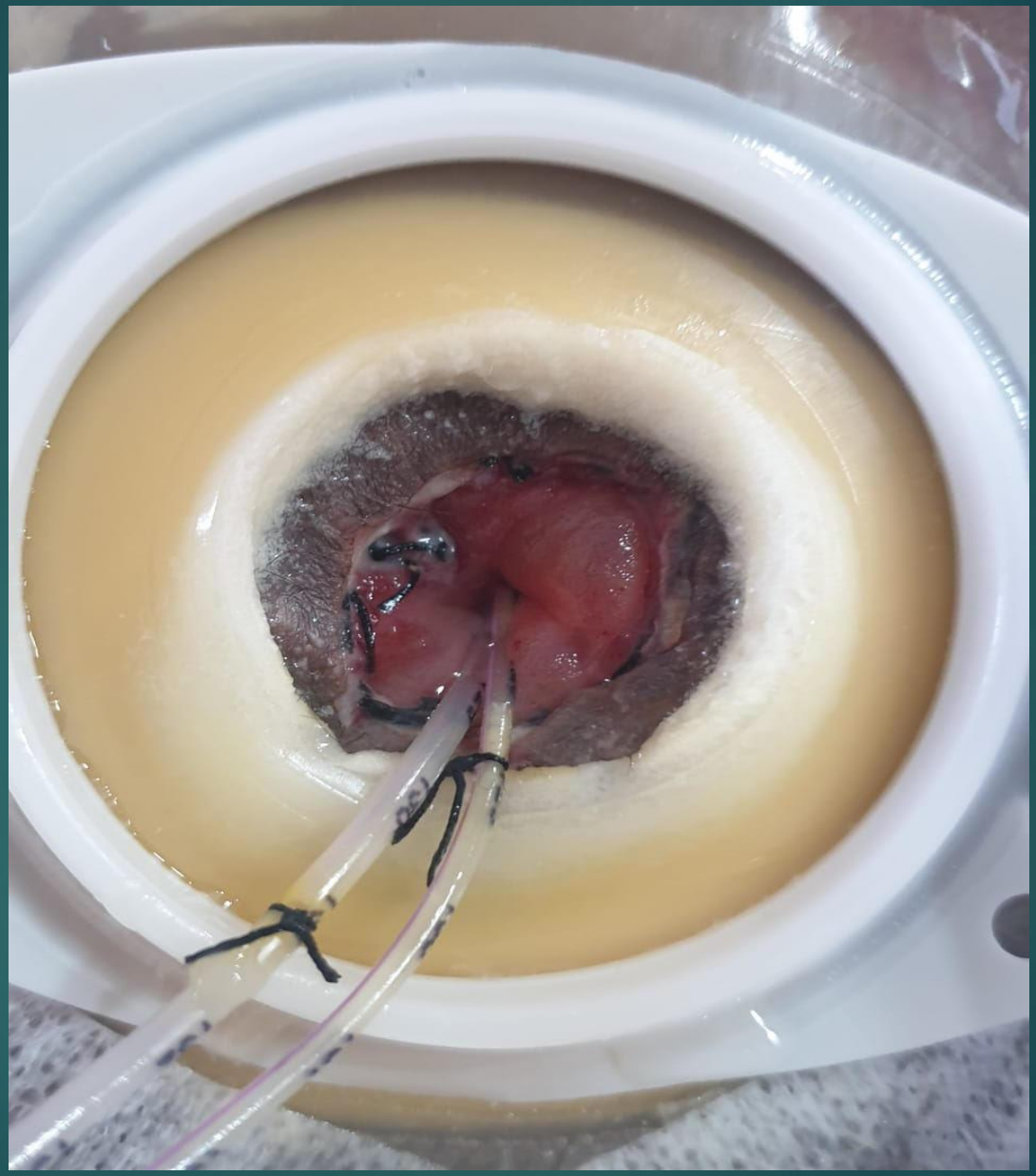


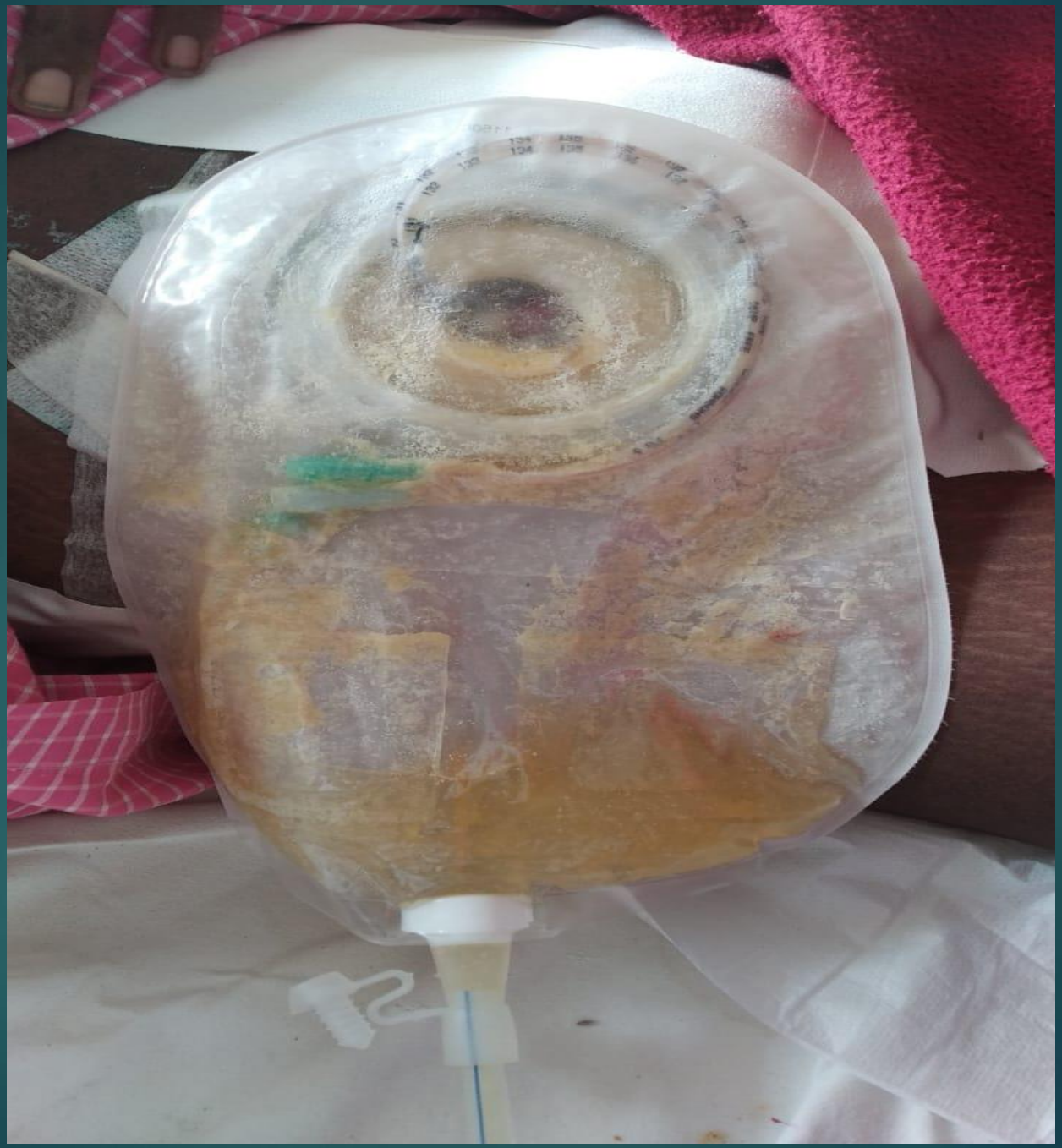




- Post-op patient was shifted to ICU.
- Shifted to ward on POD-3.
- Orally sips were started on POD-5.
- Passed flatus on POD-6 and gradually diet was increased.

- Patient passed stool on POD-8.
- B/L PCN were removed on POD-10.
- Abdominal drain was removed on POD-11.
- Discharged on POD-14.





DISCUSSION

- Non-diabetic patient with necrosed bladder is not mentioned in the literature.
- Previously, ruptured blaader has been reported.
- Spontaneous bladder rupture : Incidence is 1 in 126000 .
- Available data is detected during labour and in post-delievery period, making our case more rare.

- Pathophysiology of the bladder rupture in puerperium includes sustained pressure from the fetal head against the bladder during forceful uterine contractions which may lead to pressure necrosis of the bladder dome.

- Other contributory factors include **prolonged second stage** and macrosomic babies.

- The anatomic proximity of lower urinary tract and reproductive tract predisposes them to iatrogenic injury during Obstetric and Gynecological procedures.

- Commonly involved organs are bladder and ureter.

- Patient usually presents with acute abdomen complaining of supra pubic pain, anuria, haematuria.

- It is a surgical emergency and needs immediate diagnosis and treatment to decrease morbidity and mortality associated with this condition.

- A high index of clinical suspicion and retrograde cystography, CT cystogram, cystoscopy confirm the diagnosis.

ACKNOWLEDGEMENT

- Dept of OBGY, Dr Ms Padwalkar ma,am and unit.
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- Medical Supridendent.
- And higher hospital authorities for providing significant support.

Baby is healthy and so is the mother

Thank You

Team Urology