Case presentation

- Male patient
- 30 years old
- Presented to ER by acute intestinal obstruction for 3 days
- Bp 110 / 60, Pulse 100/ min, Temp 37.3
Plain x-ray erect
Showed multiple air fluid levels

CT scan
Dilated small and large bowel loops
CT scan
Mural thickening of the sigmoid colon

The initial management

• Laparotomy was done which revealed locally advanced large sigmoid mass infiltrating the lateral and posterior abdominal wall & fixed to the surrounding structures

• The operation was done late at night at the emergency theater and unfortunately there was no available senior colorectal surgeon on call, hence a decision was made to do a simple loop colostomy to relieve the obstruction
Further management

• The patient was then referred to the colorectal unit for reassessment and further management

• Clinical and radiological reassessment were done together with a metastatic work up

Post contrast CT scan

• Marked mural thickening with marked luminal attenuation involving the sigmoid colon with congested adjacent fat planes
• Moderate dilatation of left renal collecting system
Metastatic work-up
No liver metastases

Metastatic work-up
No pulmonary Metastasis
Reassessment

- A multidisciplinary team headed by Prof Hany Tawfik, and included a vascular surgeon and a urology surgeon worked on the plan of management...

  Data revision

- Young male patient (30 years old), good general condition
- Locally advanced tumor involving the sigmoid colon with probable invasion of large pelvic vs. and the left ureter
- No metastasis
- Just had simple loop colostomy to relieve AIO

Further management

- The decision made was re-exploration and trial resection followed by adjuvant Radio-Chemotherapy as necessary

- The plan was to involve the vascular team and the urology team together with the colorectal team in a multidisciplinary surgical resection procedure.
The surgical procedure

- The operation was done 5 days after the previous surgery & colostomy
- After induction of anesthesia the urologist failed to insert a ureteric catheter through the obstructed left ureter prior to the laparotomy
- The re-exploration revealed that the tumor was infiltrating the psoas muscle, anterolateral abdominal wall, Left common iliac artery and lower third of left ureter
- The decision was made to carry on resection aiming at free resection margins.

The surgical procedure

First, the vascular team was allowed to do extra-anatomical femro-femoral bypass graft and to make sure of an intact blood flow to both lower limbs
The surgical procedure

• Then the colorectal surgery team performed a wide surgical resection of the sigmoid colon with a 2cm safety margin all around the infiltrated tissue.

• This resection included ligation and division of the left common iliac artery above the tumor and the left internal and external iliac arteries below the tumor. Fortunately, the iliac veins were not infiltrated.

The surgical procedure

• The resection involved large part of the psoas muscle, parts of the antero-lateral abdominal wall and the lower third ureter.

• After the resection was completed, the urology team was allowed to reconstruct the divided left ureter. They used Boari flap technique in this reconstruction.
The surgical procedure

- Then the colorectal surgery team restored the bowel continuity by a colorectal anastomosis.
- The proximal loop colostomy was preserved to work as a diverting stoma protecting the anastomosis.
- The area resected from the abdominal wall was marked by radioopaque clips for subsequent radiotherapy.

Histopathology reveals

- Sigmoidectomy, adenocarcinoma grade 2 infiltrating covering serosa, abdominal wall, ureter and left common iliac artery.
- Free surgical, ureteric and arterial margins.
- No nodal metastasis LN 0/11.
- T4b N0.
Post operative CTA reveals

- Rt to Lt Femoro-Femoral by pass graft showed good filling with contrast till level of Popliteal region with no Stenotic changes or aneurysmal dilatation

Thank you