



# Case of the Week

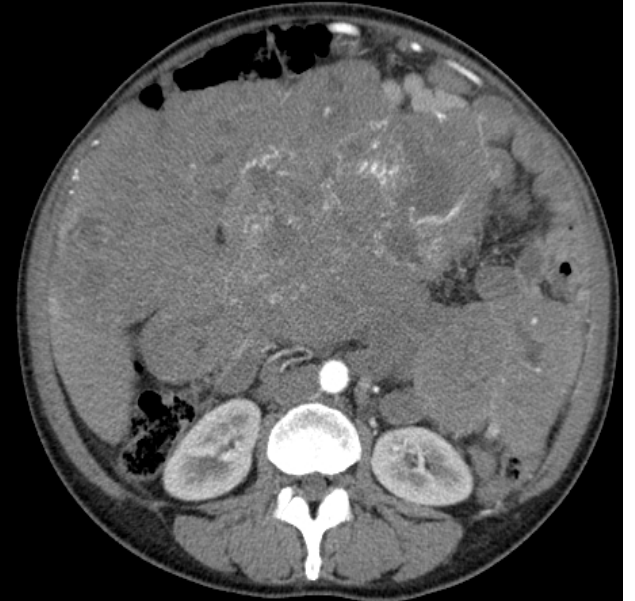
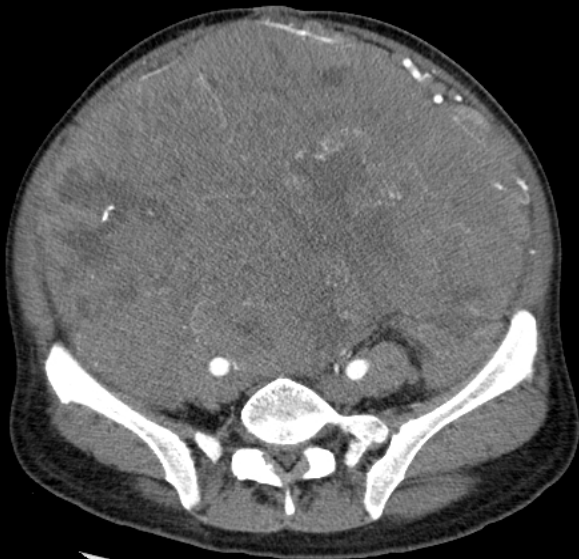
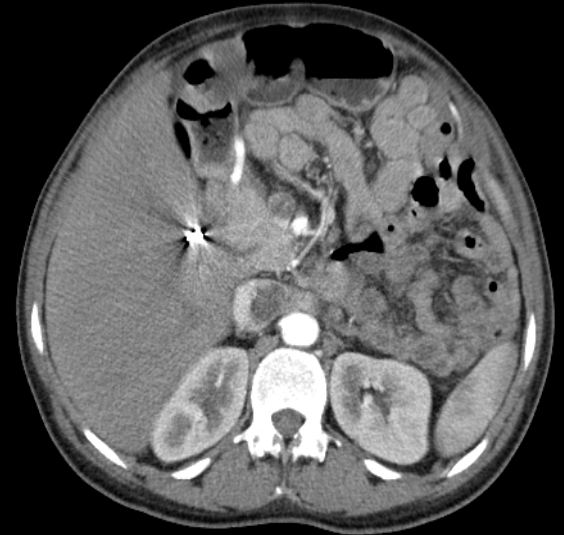
## August 2015

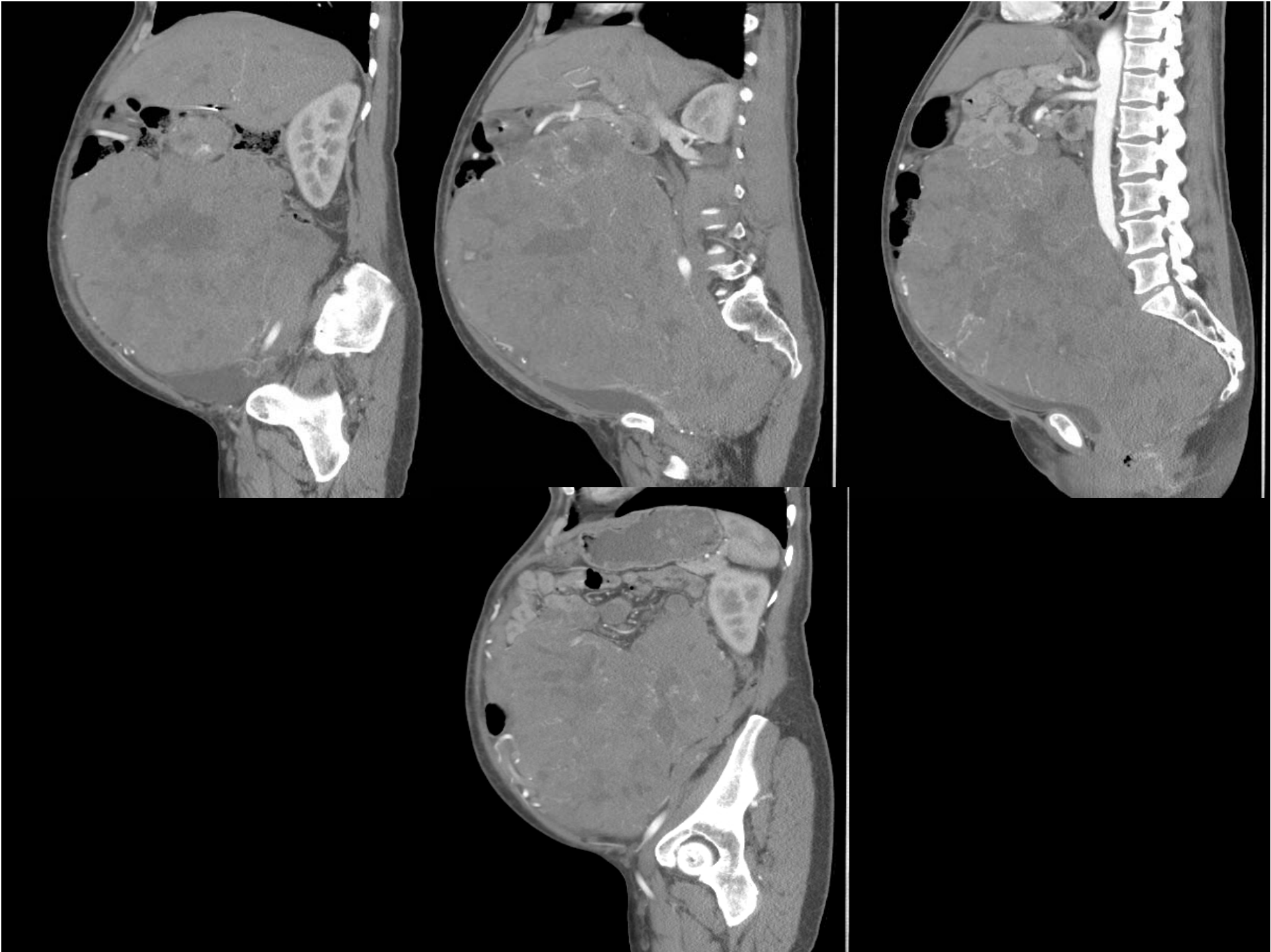
Case courtesy of Drs. Yousof Al Zahrani and  
Amol Mujoomdar  
Western University

# *CASE REPORT*

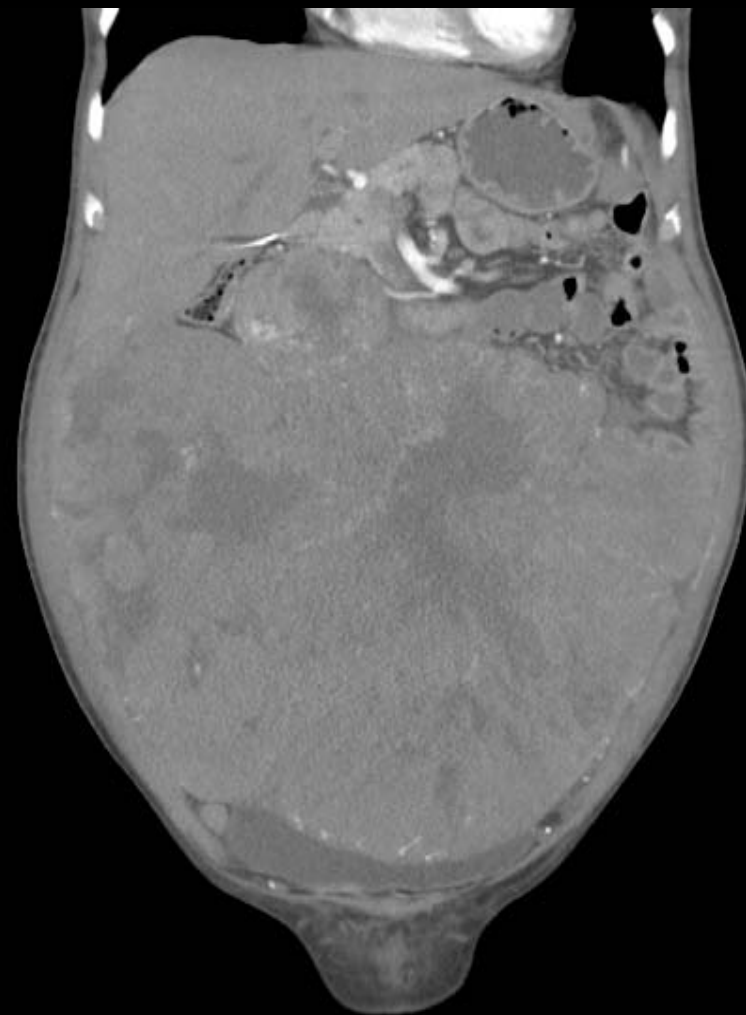
- 60 year old woman
- Pressure and vague discomfort in the pelvis for 2 years
- Past Medical History: unremarkable
- Physical exam: easily palpable hard mass in the pelvis and mid-abdomen

# Initial CT

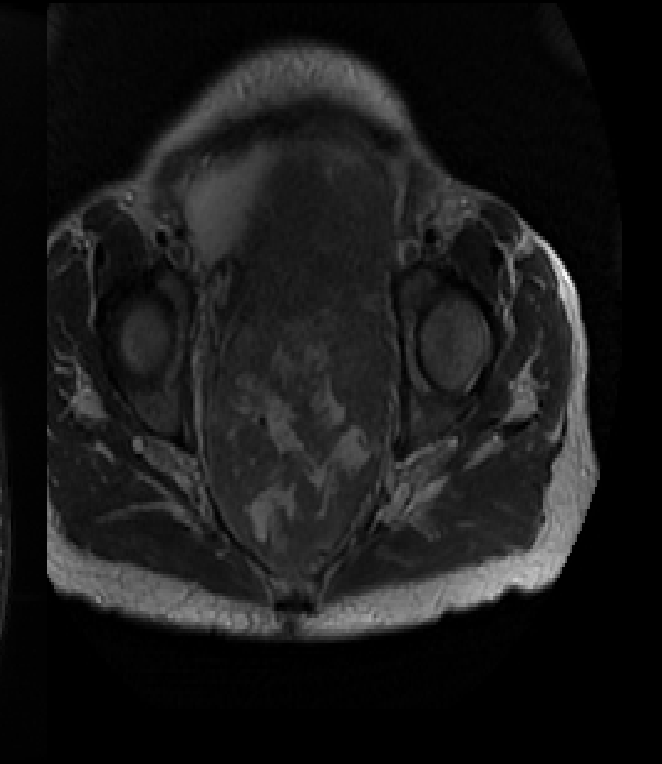
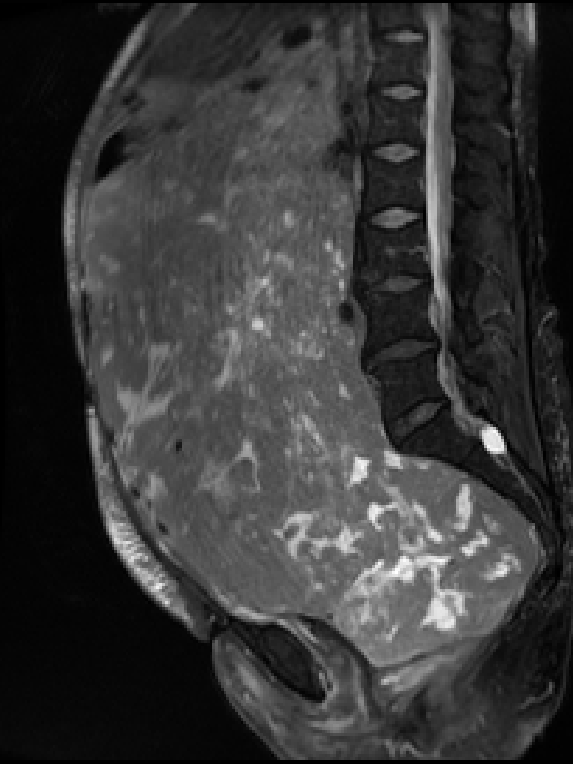
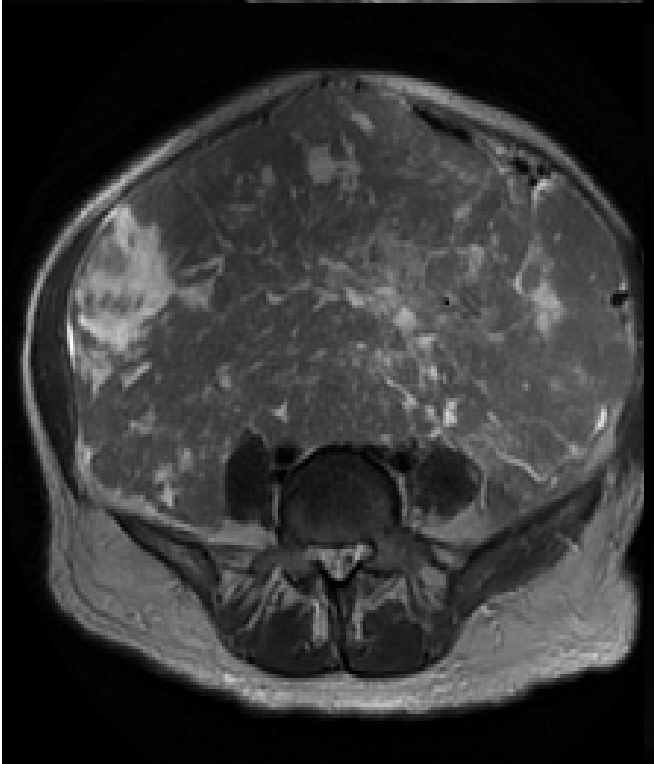
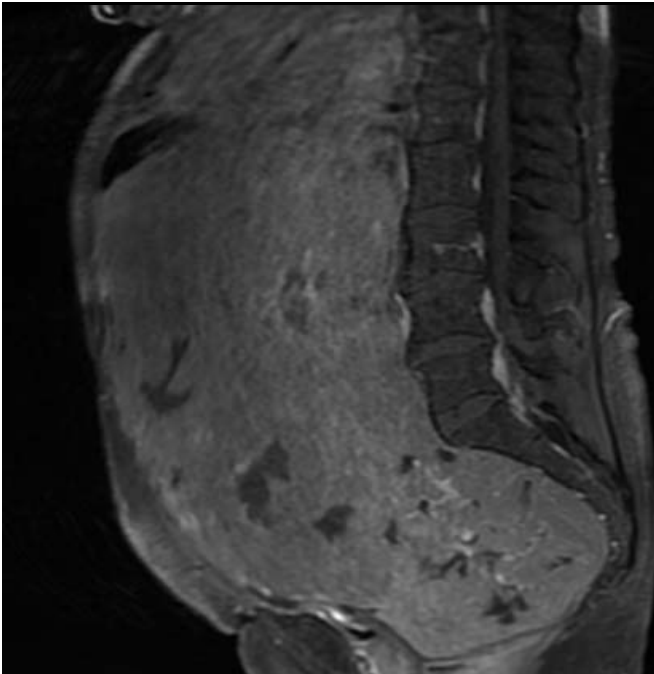




# Initial CT



# MRI



# CT and MRI Findings

- Large abdominal and pelvic mass, predominantly solid with some areas of necrosis
  - Extensive mass effect
  - Likely arising from uterus
- Multiple arterial feeders coming from the gastroduodenal artery, with possible smaller feeders from SMA and internal iliac branches
- Displacing the bowel loops and urinary bladder without evidence of frank invasion





# Investigations and Treatment

- Biopsy at outside hospital demonstrated smooth muscle neoplasm ER/HR positive
  - Round, cigar shaped nuclei with mild atypia
  - Low proliferative index (2/10 mitosis/hpf)
  - Favoured to be low grade leiomyosarcoma
- Deemed inoperable at outside institution
- Systemic therapy with letrozole (tumour doubled in size in 2 months), then gemcitabine-docetaxel x 6 cycles (stable disease)

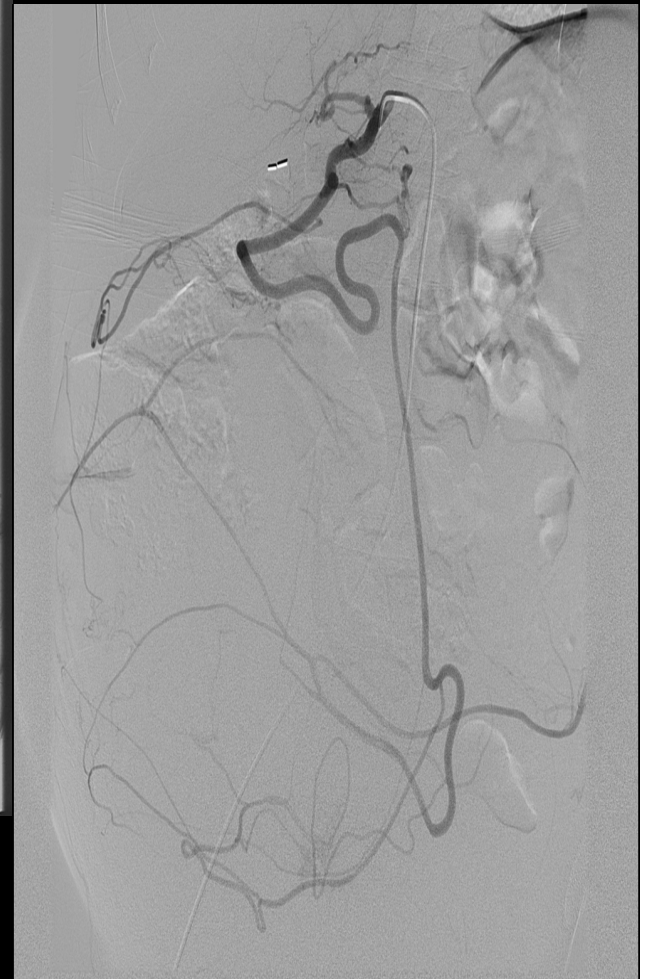
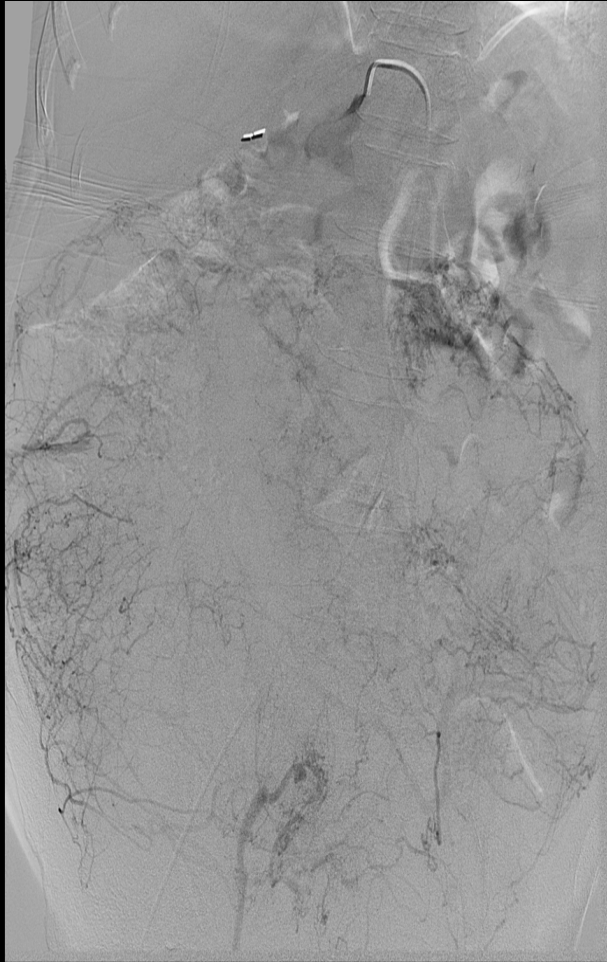
# Following Systemic Therapy

- Patient requested second opinion at our institution (for systemic therapy)
- Discussed at our gyne-onc tumour board
- Surgery....any takers??
  - Apparently!
- Repeat ultrasound guided biopsy:
  - DDx: low grade leiomyosarcoma, leiomyoma versus smooth muscle tumour of uncertain malignant potential (STUMP)
- Can you embolize pre-operatively?

# Preoperative Embolization

- Celiac axis  Cobra C2 catheter
- Dominant tumor supply  GDA 
- Progreat microcatheter
- Embolization  Gelfoam slurry
- No significant tumor blush from both internal iliac arteries

# Angiography



# Angiography: embolization



# Angiography



# Surgery

- Laparotomy, excision of pelvic abdominal mass, bilateral salpingo-oophorectomy and appendectomy
- $\frac{3}{4}$  of the mass of free, and  $\frac{1}{4}$  was adherent to points on mesentery, omentum, liver, bladder and appendix
- ***500 mL of blood loss***

# Pathology

- The resection consists of a smooth muscle neoplasm, however, further classification is difficult
- Definitive diagnosis of leiomyosarcoma cannot be made
- No significant change from pre-operative diagnosis

# Post-operative Course

- Day 34 postop, she presented with small bowel ileus with RLQ collection and imaging findings of right-sided ureteric leak
- RLQ collection drained in community
- Referred to us for nephrostomy/nephroureteral stent insertion
  - Ultimately nephrostomy tube placed and surgical repair of right ureteric injury performed

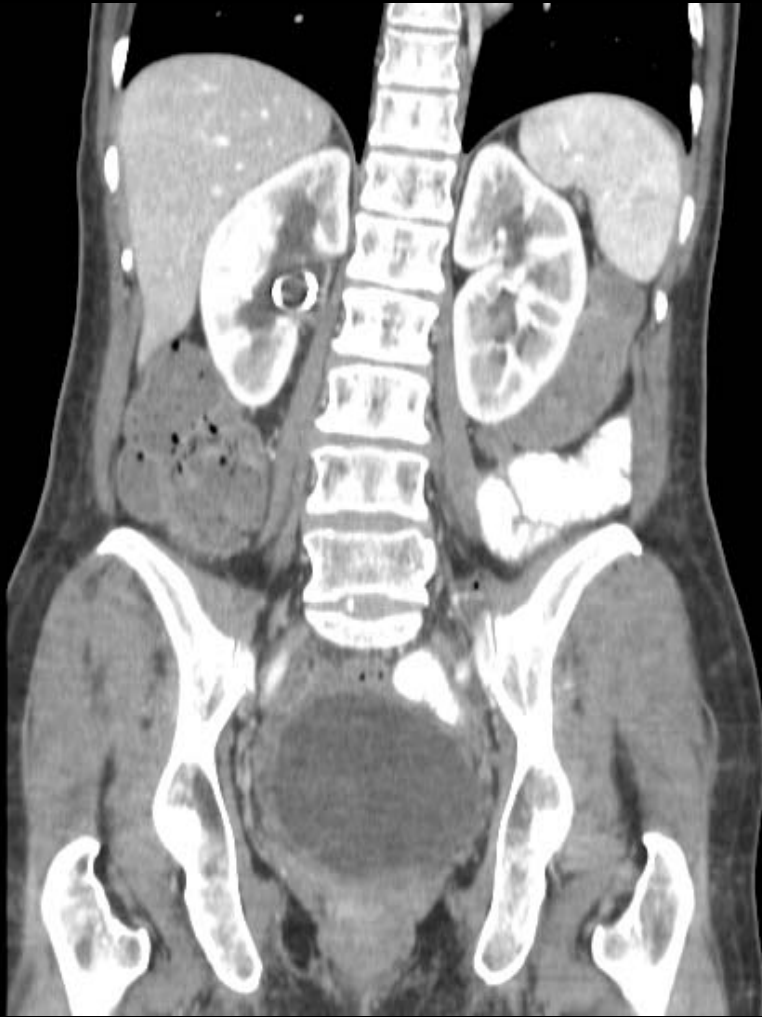
# Nephrostomy



# Abscess Drain Insertion



F/U CT



F/U CT



# Discussion

- Extrauterine blood supply increases with increasing tumour size
- CT or MR angiography are valuable tools for identification of collateral arterial supply
- Surgical removal of giant uterine tumours presents technical difficulties mainly due to massive blood loss
- Use of preoperative embolization with absorbable gelatin sponge is advocated to minimize intraoperative blood loss and reduce the operation time

# References

**Is uterine artery embolization prior to myomectomy for giant fibroids helpful?**

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**Combined Preoperative Angiography With Transient Uterine Artery Embolization Makes Laparoscopic Surgery for Massive Myomatous Uteri a Reasonable Option: Case Reports**

Nadim Hawa, James Robinson III, Britton Elizabeth Chahine

**Interest of uterine artery embolization with gelatin sponge particles prior to myomectomy for large and/or multiple fibroids**

Noemie Butoria, Herve Tixier, Laurence Filipuzzi, William Mutambab, Boris Guiua, Jean-Pierre Cercueil

**Conservative two-step procedure including uterine artery embolization with embosphere and surgical myomectomy for the treatment of multiple fibroids: Preliminary experience**

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