

44-year-old woman with 3 month  
history of lower abdominal pain  
and recurrent urinary tract  
infections

Grace Nichols, MS3

# CT with IV contrast



# CT with IV contrast



# CT with IV contrast



# CT with IV contrast





# CT with IV contrast



# CT with IV contrast



# CT with IV contrast





# CT with IV contrast



# CT with IV contrast



# CT with IV contrast





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# Colovesical Fistula



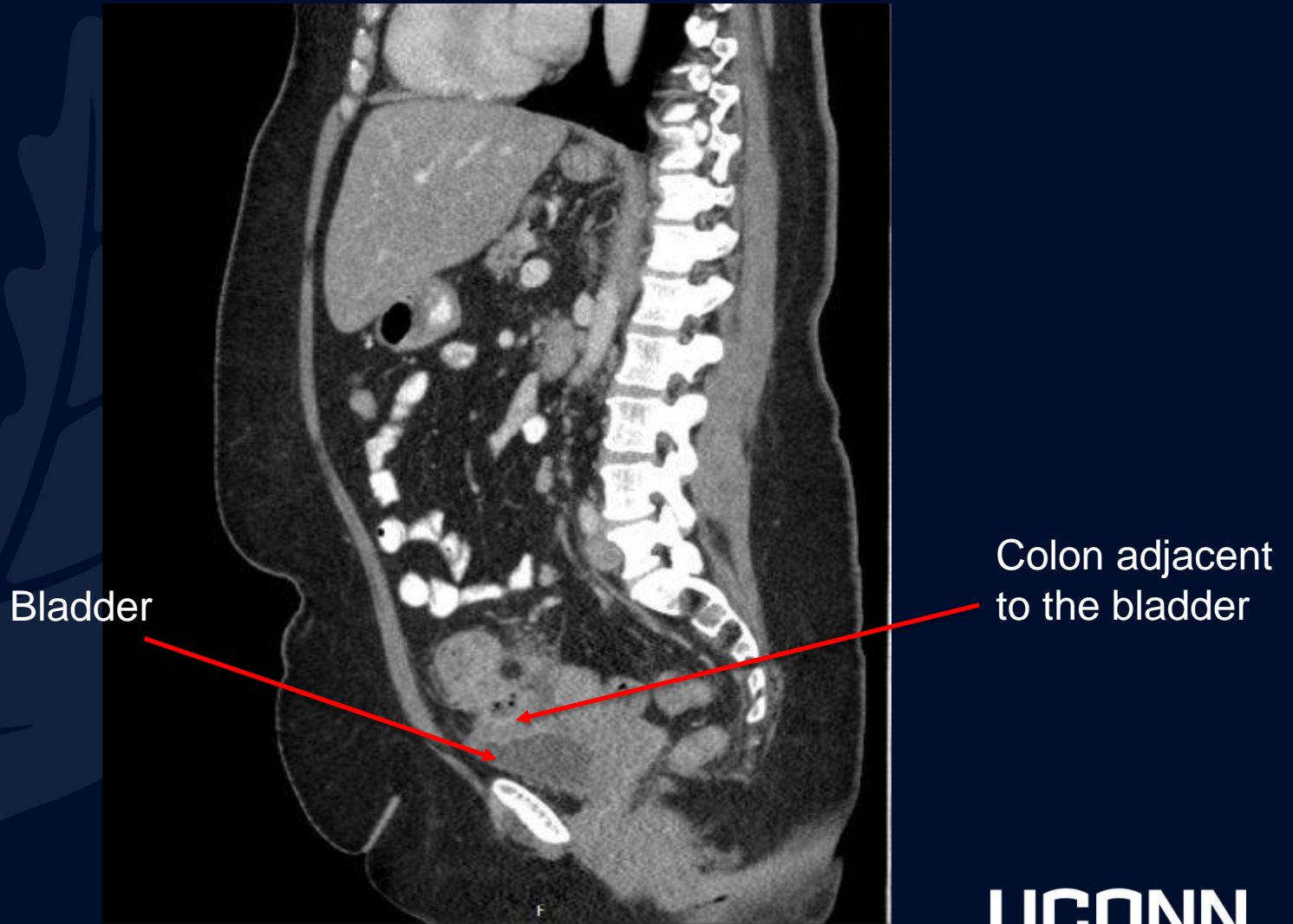
# CT with IV contrast



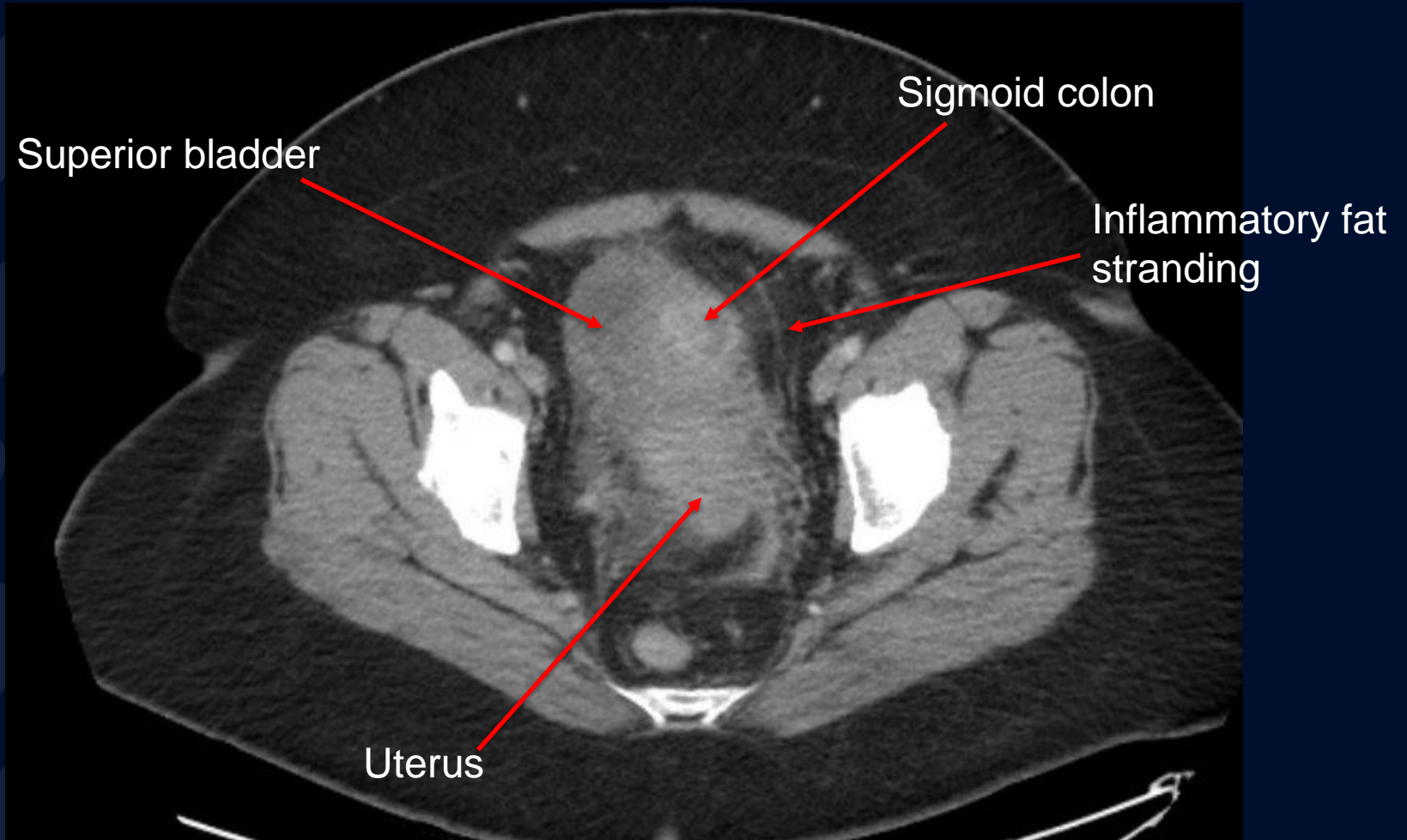
Bladder

Inflammatory fat stranding

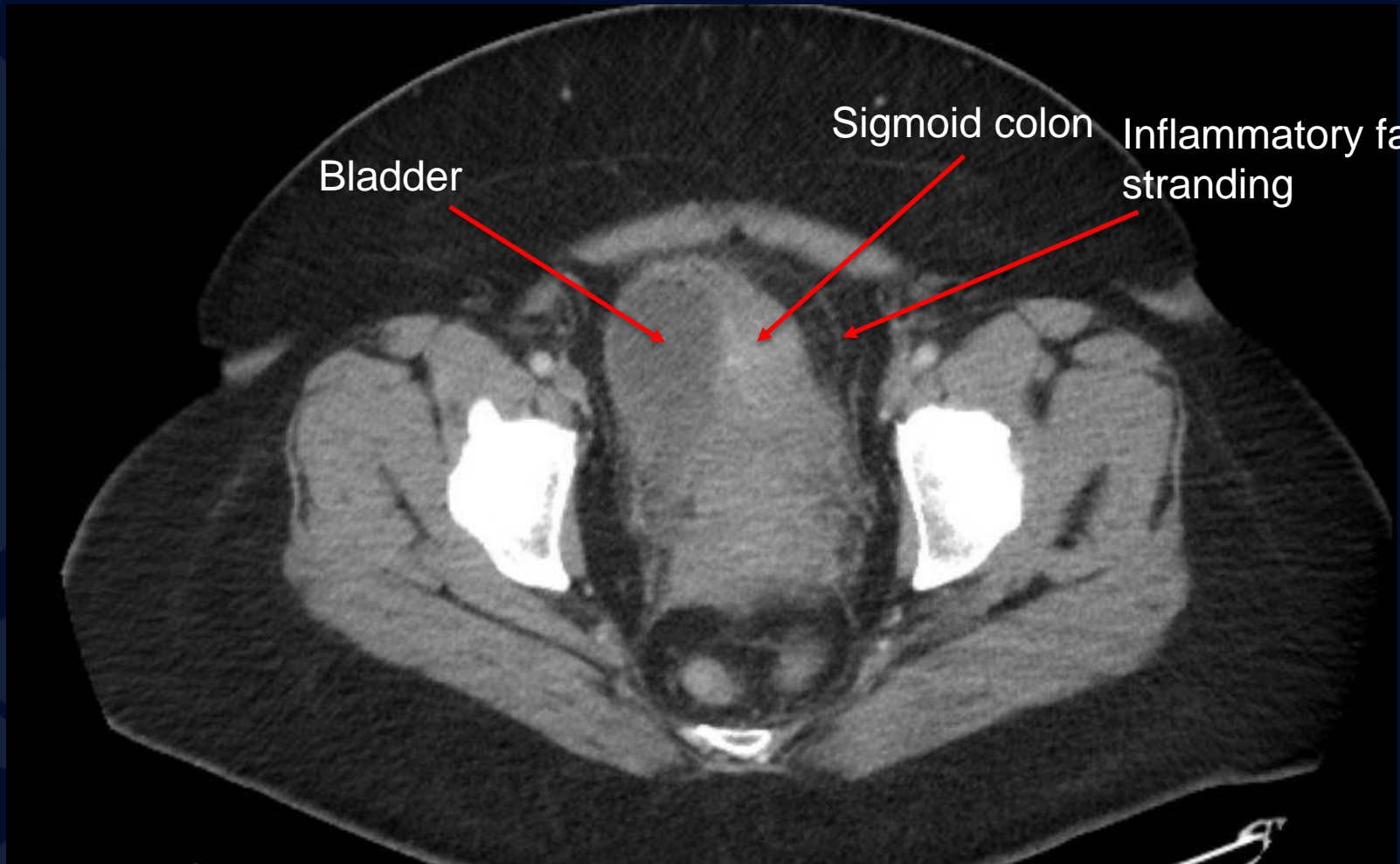
# CT with IV contrast



# CT with IV contrast



# CT with IV contrast

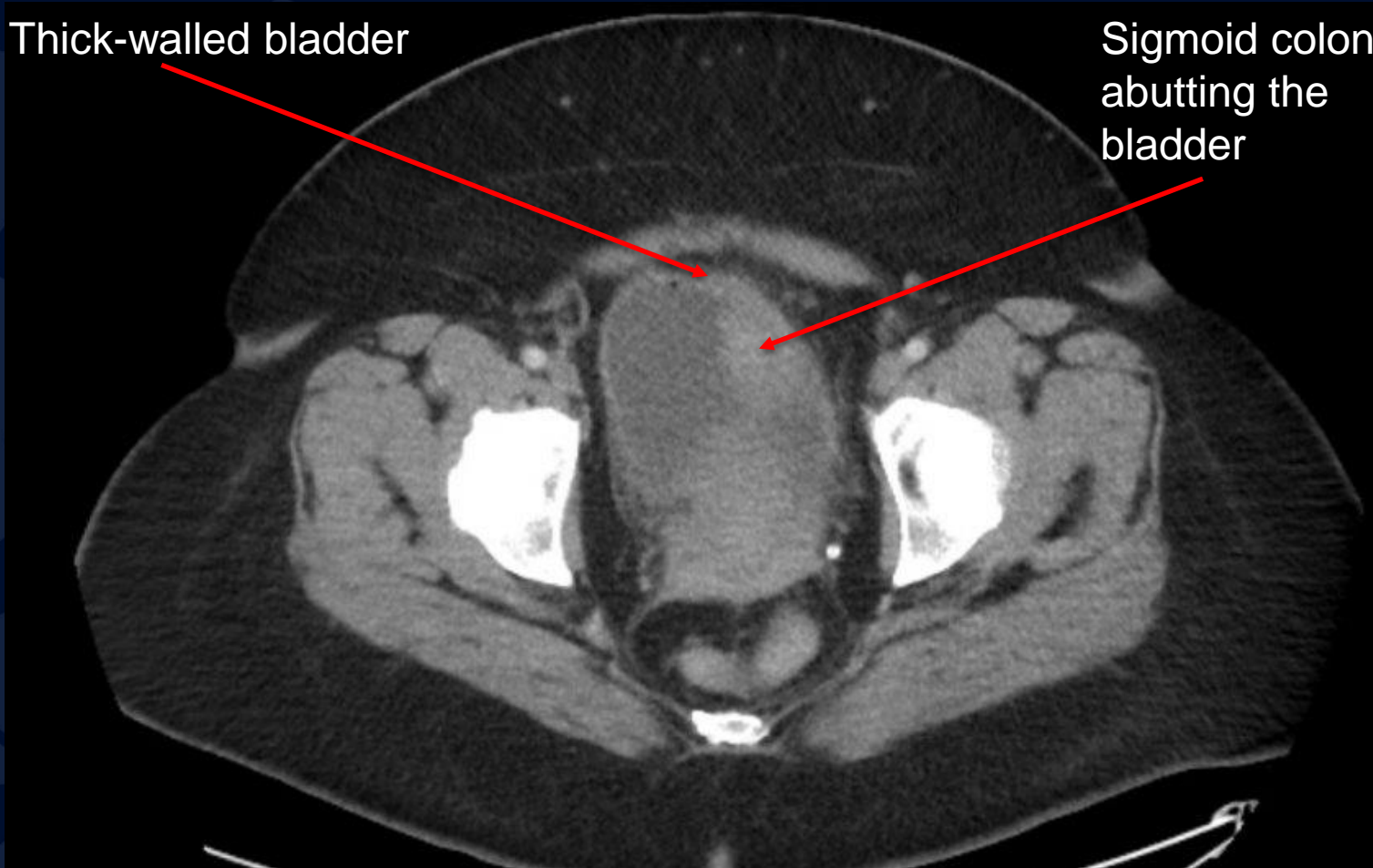




## CT with IV contrast

Thick-walled bladder

Sigmoid colon  
abutting the  
bladder





# Colovesical fistula

- An abnormal connection between the colon and the bladder, often due to chronic inflammation
- Incidence largely unknown, but found in 1 in 3,000 hospital admissions
- More common in men than women (2:1 – 3:1 ratio)
- Most common causes include:
  - Diverticulitis (65-79%)
  - Malignancy (10-20%)
  - Crohn's disease (5-7%)
- Common symptoms include pneumaturia, fecaluria, dysuria, and suprapubic pain

# Colovesical fistula

## Imaging

- CT scan with oral or rectal contrast
  - IV contrast not preferred as it is excreted renally which may make it difficult to determine the origin of contrast found within the bladder

## Work-up

- Colonoscopy to determine underlying etiology of fistula
- If malignancy is suspected, cystoscopy performed to rule out bladder invasion or mass

# Colovesical fistula

## Treatment

- Surgical repair
  - If malignancy suspected or confirmed, en block resection with regional lymphadenectomy is completed
- If infection present, treat with antibiotics
  - Metronidazole, amoxicillin-clavulanic acid
- Urinary catheter inserted at the time of surgery, and removed around post-op day 7

# References

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