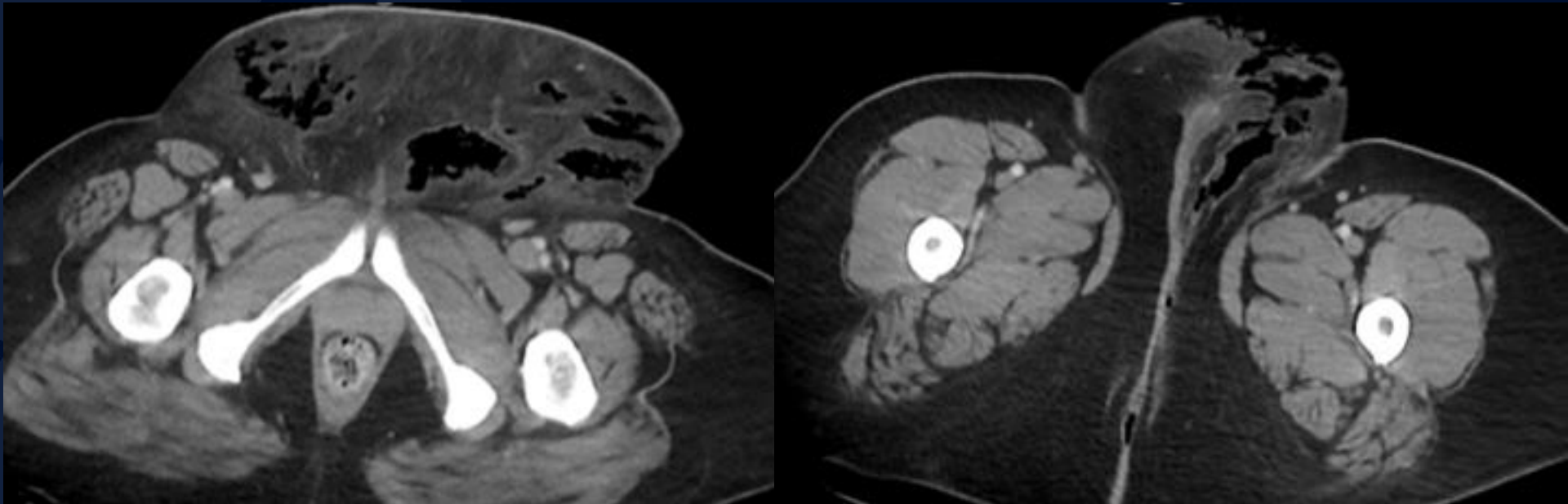


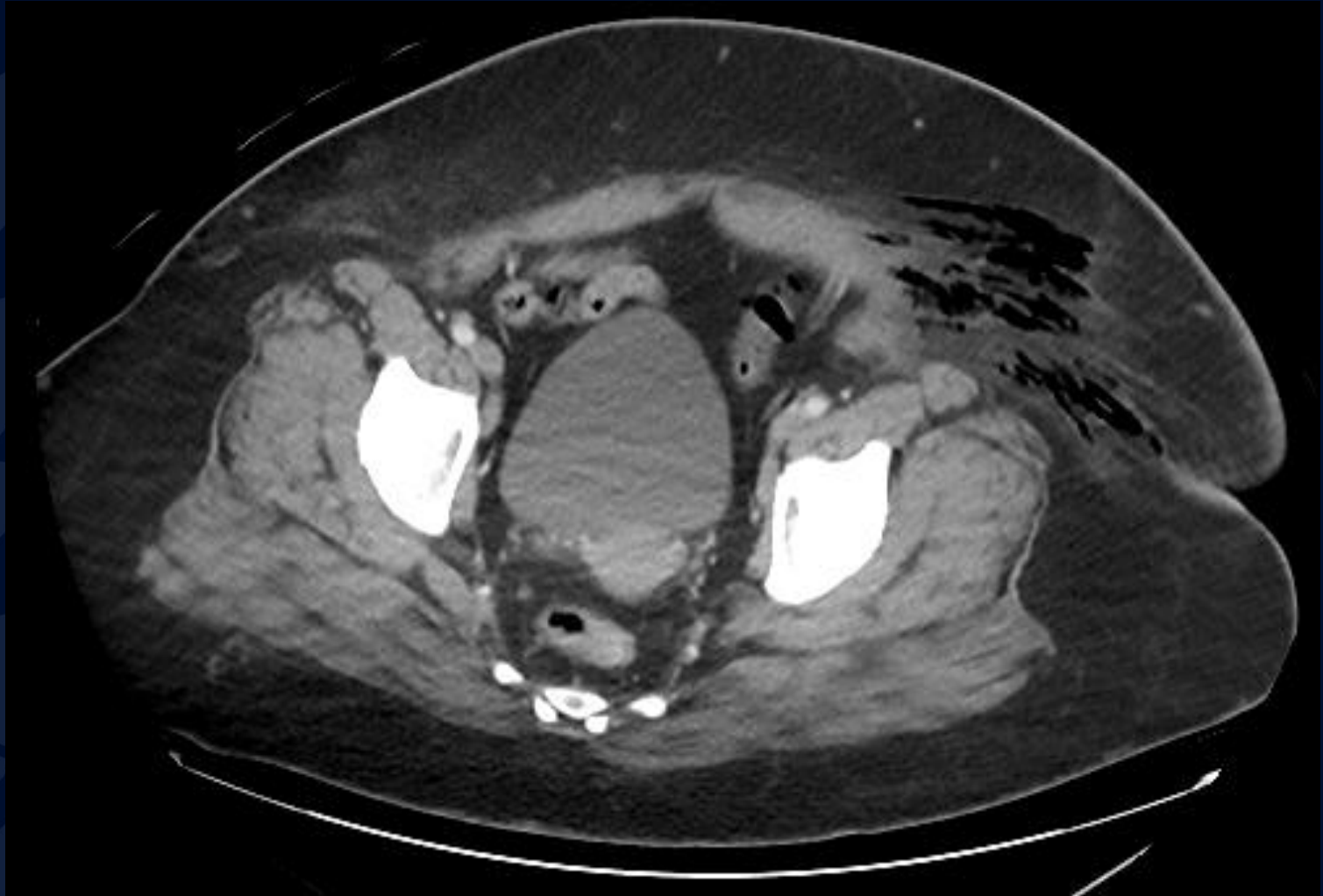
51-year-old female with recurrent Bartholin gland cysts presenting with 8 days of vulvar pain

Maitreyee Kale, MS3

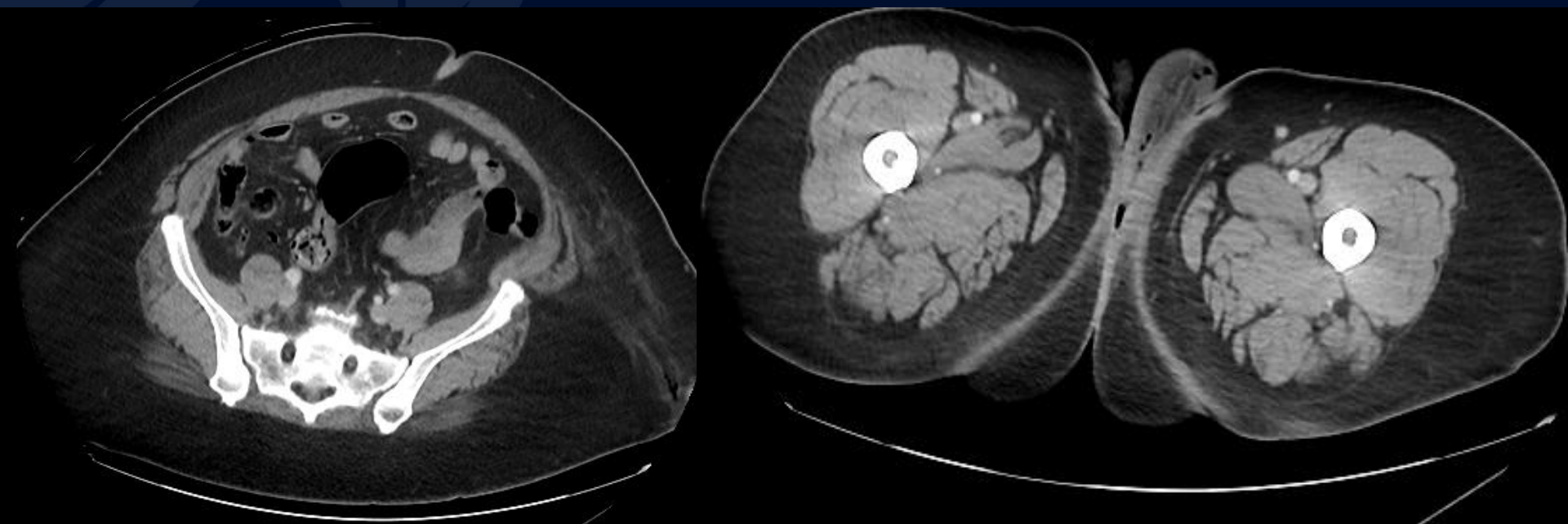
Axial Contrast CT



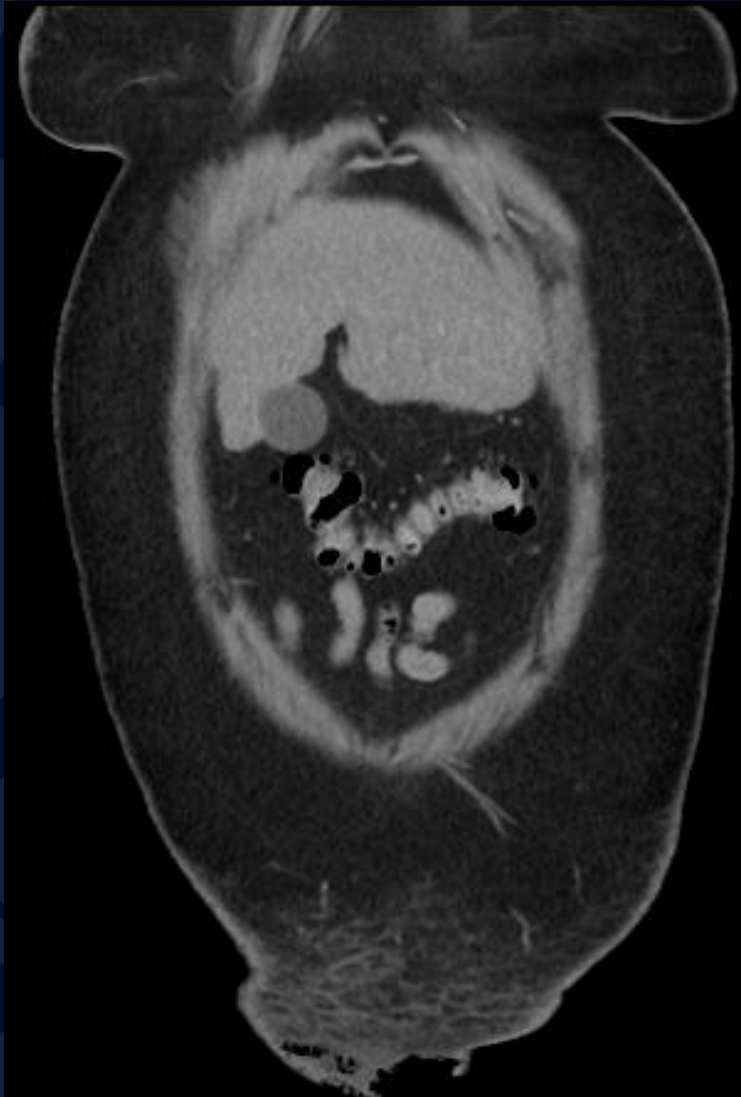
CT Contrast



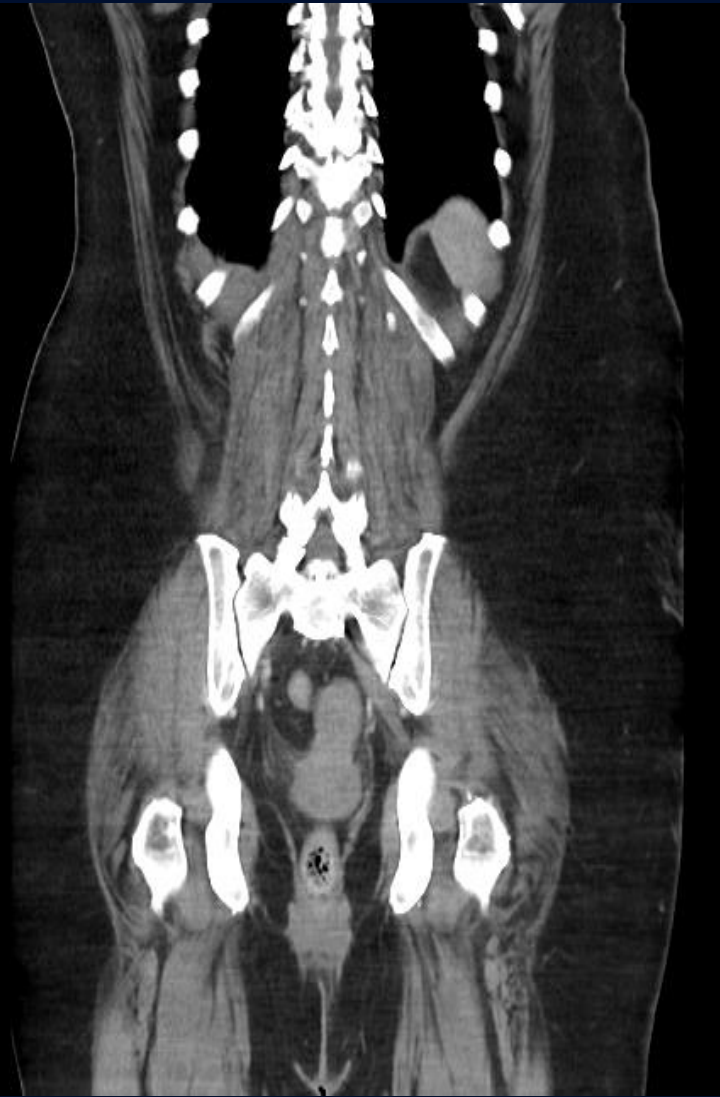
Axial Contrast CT



Coronal Contrast CT



Anterior



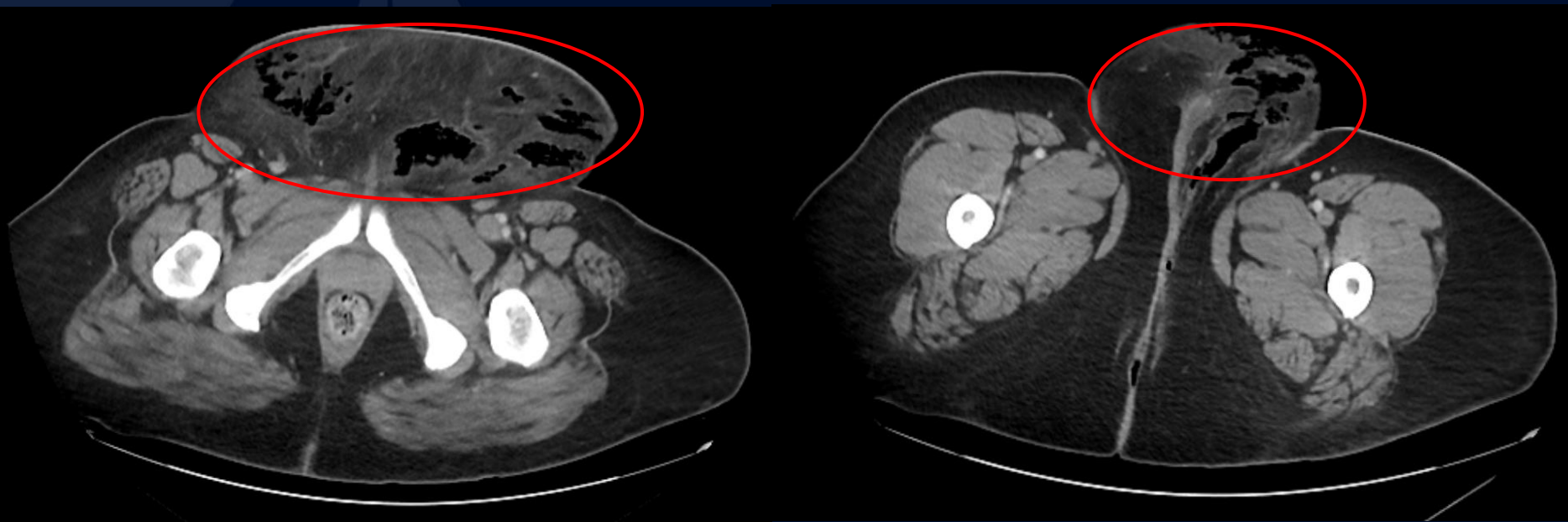
Posterior

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide.

?

Necrotizing Fasciitis

Axial Contrast CT



Subcutaneous gas and fat stranding

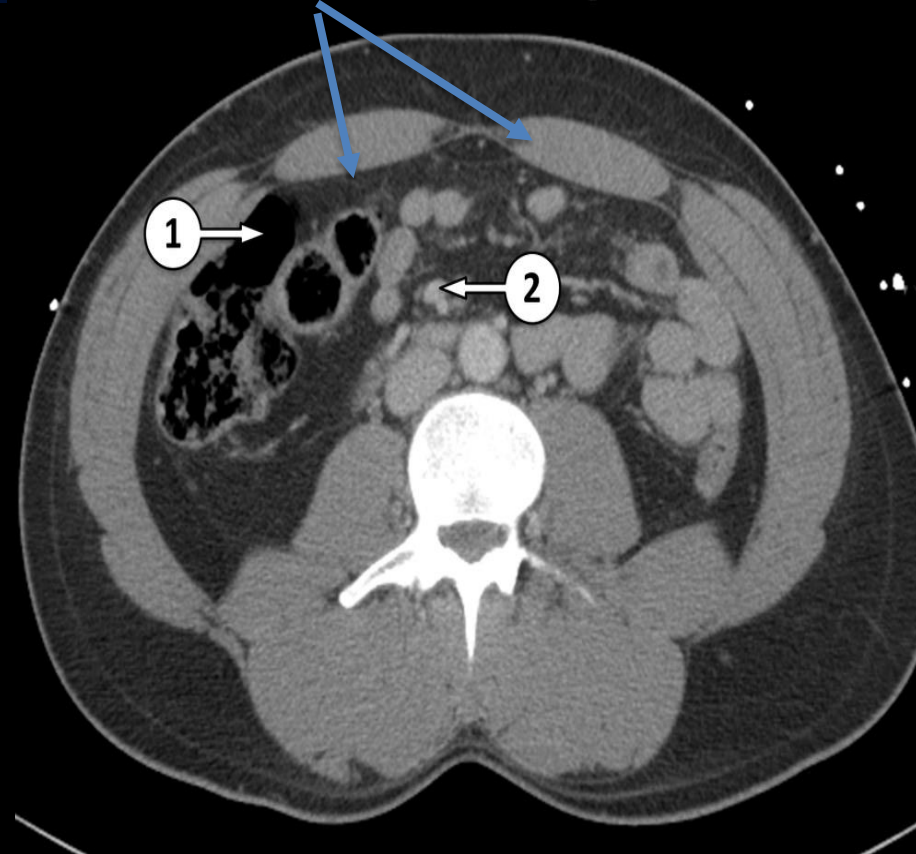
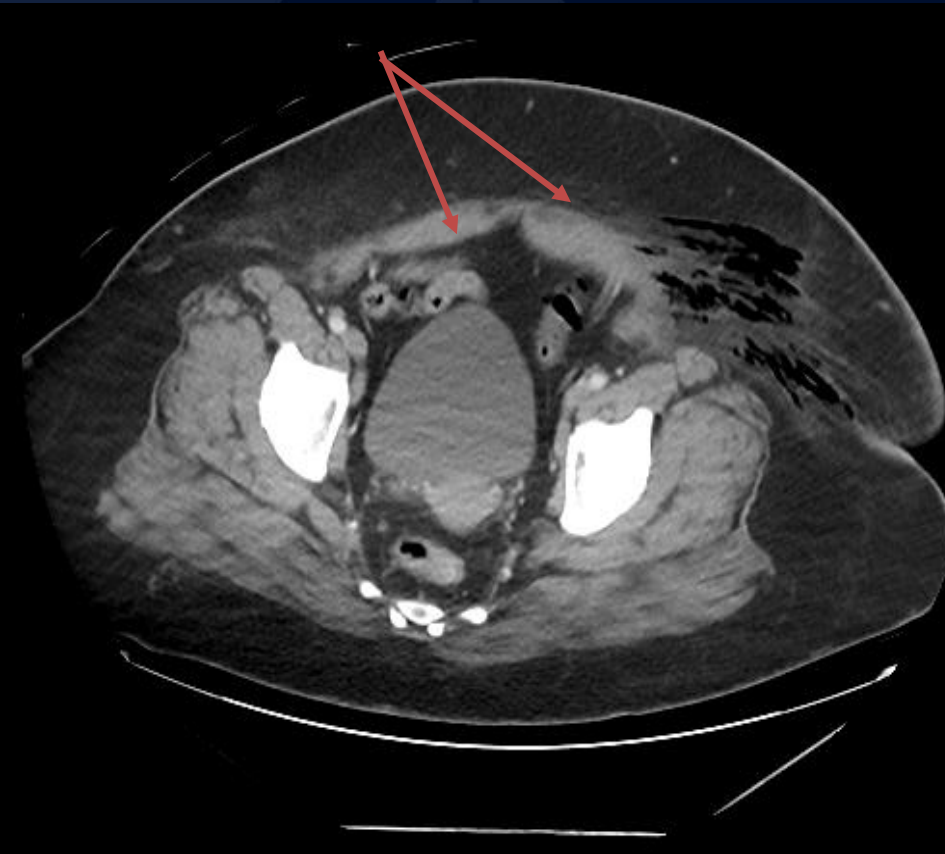
Features (cont.)

Patient

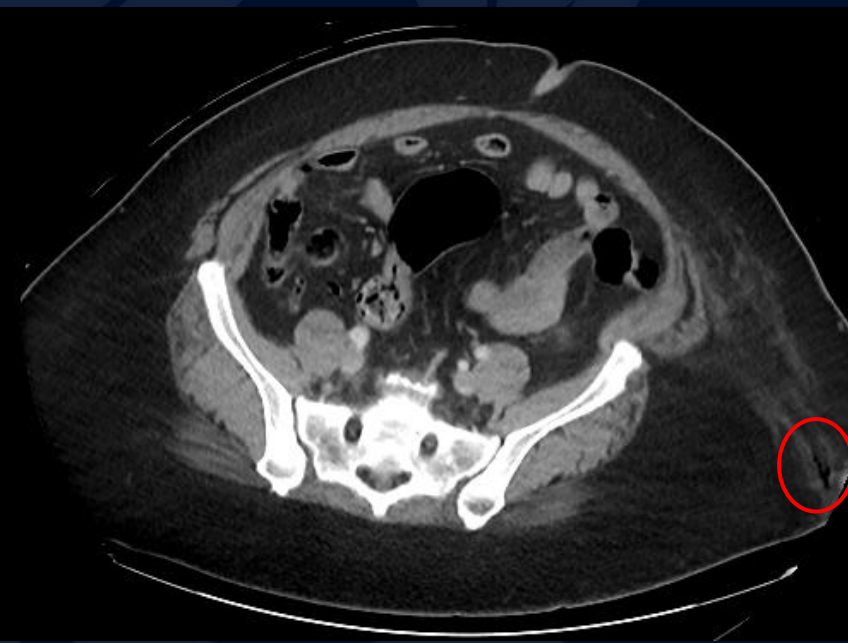
Normal

Fascial thickening = edges are hazy/not well defined

Clear fascial borders



CT Contrast

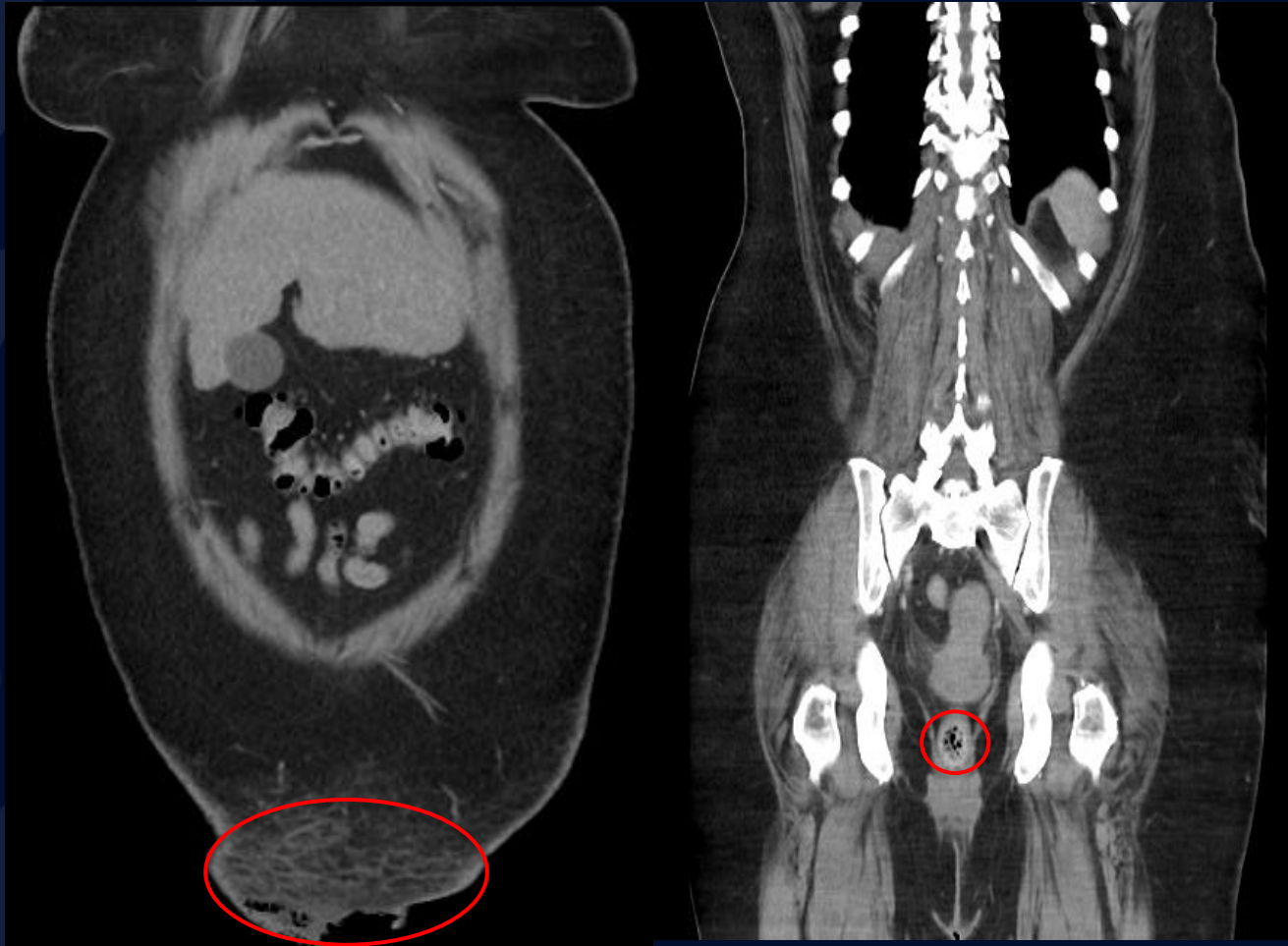


Most superior area of
emphysema at sacral level



Most inferior area of
emphysema at labia

CT Coronal Contrast



Anterior

Posterior

Most anterior and posterior areas of emphysema and fat stranding

Necrotizing Fasciitis

- Pathophysiology: bacteria enters skin through break in the barrier, such as a cut -> bacteria spread deep into tissues and through fascial planes -> vascular occlusion and thrombosis leads to ischemia -> necrotic tissue
- Clinical presentation
 - Initial stages present similar to cellulitis
 - Patient's pain may seem “out of proportion” to symptoms
 - Late-stage infection presents with fever, tachycardia, and sepsis
 - May palpate crepitus in area of infection due to subcutaneous emphysema
- Treatment
 - Antibiotics and surgical debridement

Imaging Findings

- MRI is the gold-standard with 93% sensitivity
- CT
 - Most specific finding: presence of emphysema in the tissue
 - Other findings: fat stranding, fascial thickening, and fluid collections along fascial planes
 - Less specific findings: increased soft-tissue attenuation and edema
- Radiograph findings
 - Soft-tissue thickness and opacity and in late stages, subcutaneous gas
- Ultrasound may not always show changes early in infection
 - Findings: subcutaneous emphysema along the fascia, edema, and hyperechoic fat tissue

References

- <https://www.ajronline.org/doi/10.2214/AJR.14.12676#:~:text=CT%20shows%20soft%2Dtissue%20thickening,to%20necrotizing%20fasciitis%20%5B6%5D.>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6209465/>
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