

66 yo F with bilateral lower leg edema
and pain and a remote hx of right leg
injury

Alexandria Meyers, MS4

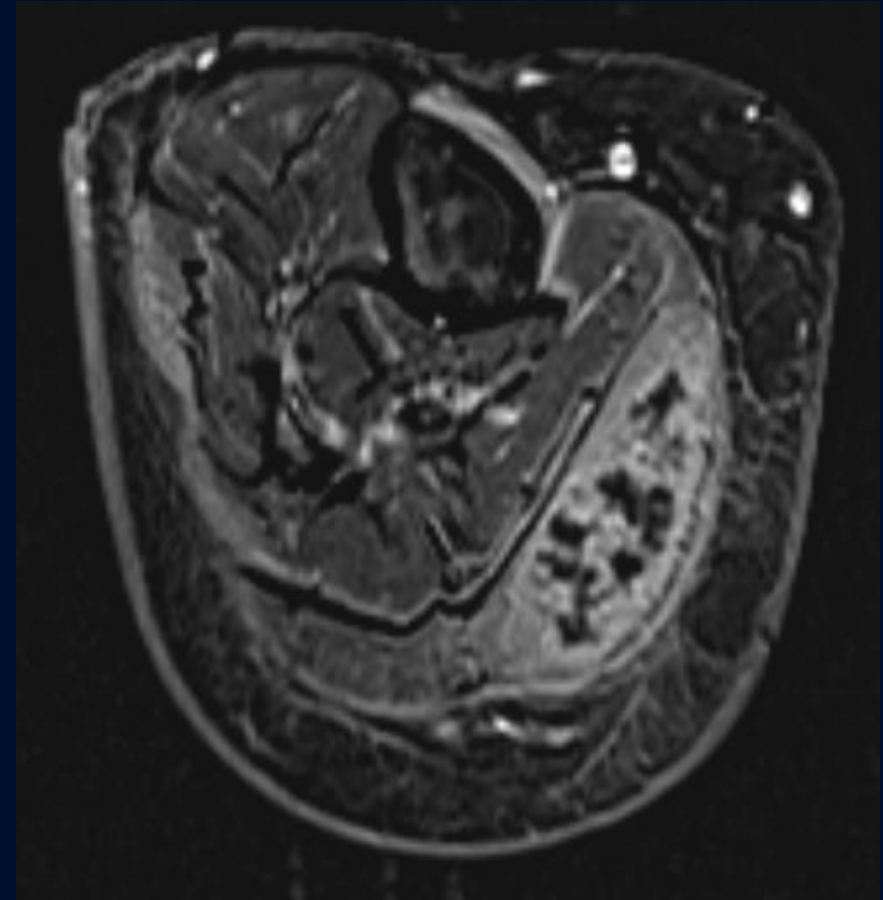
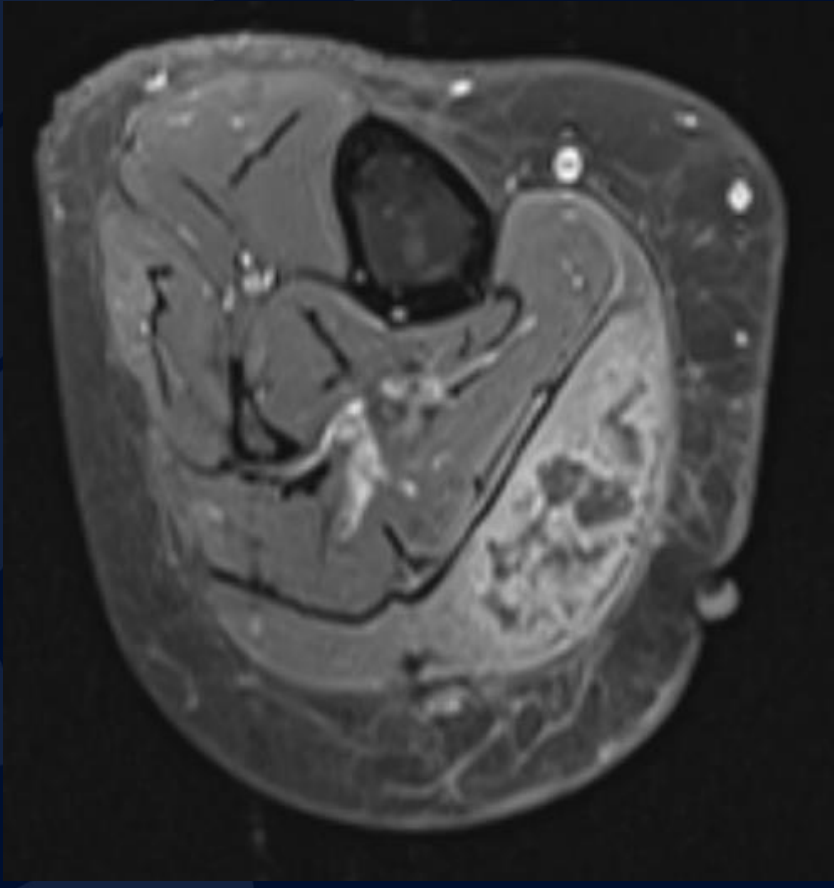
Edward Gillis, D.O.

Aladdin Tarakji, M.D.

Right calf



Right Calf 3 days later

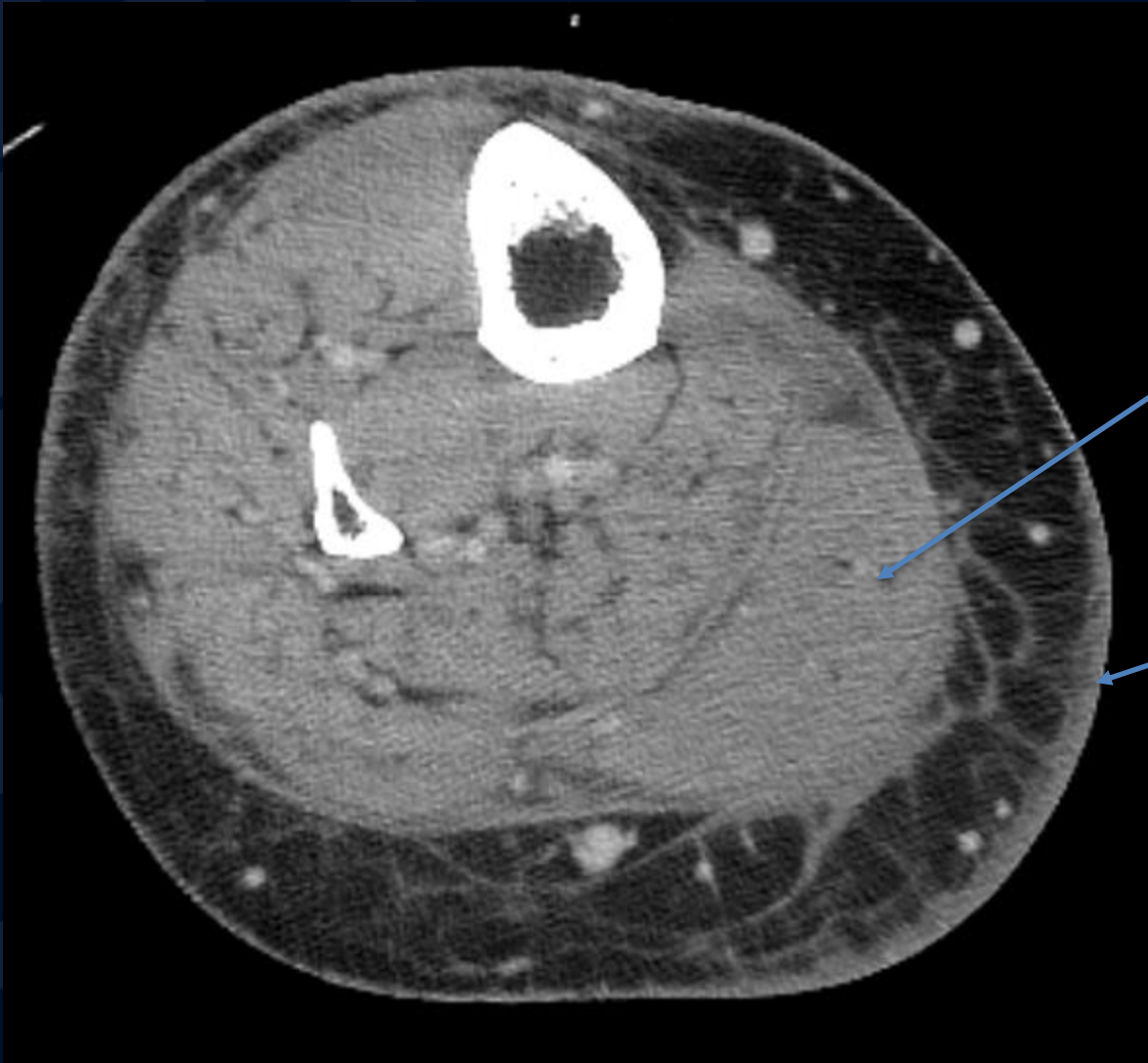




A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the title text.

Necrotizing Fasciitis with Myonecrosis

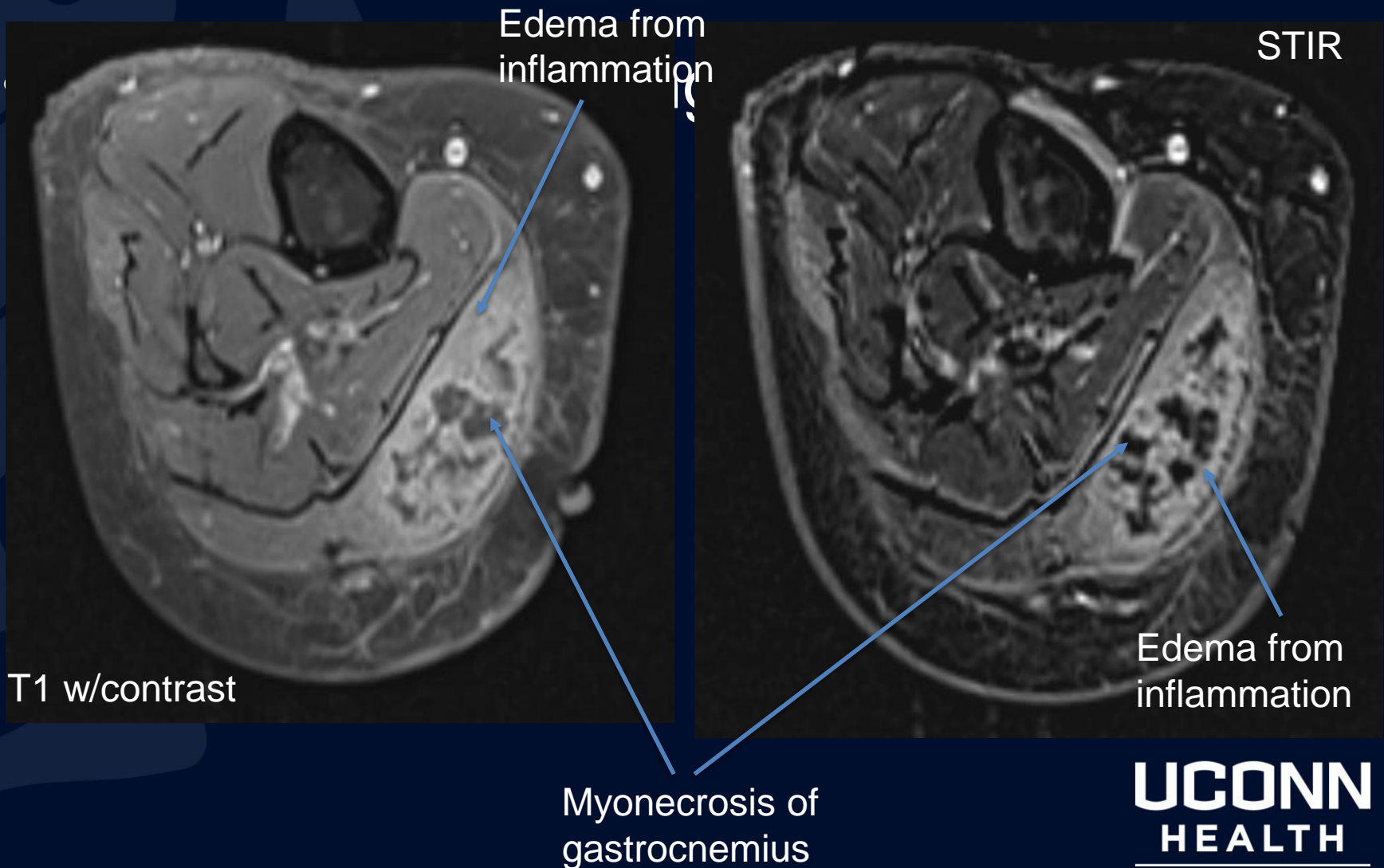
Initial Right lower leg CT scan



gastrocnemius

Increase skin thickening with trace superficial perifascial fluid suggestive of cellulitis

3 days later, Right leg MRI



Necrotizing Fasciitis

- Infection of deeper tissues progressing to muscle fascia destruction & overlying subcutaneous fat
 - Type 1: polymicrobial, aerobic & anaerobic bacteria:
 - Clostridium, Proteus, E. coli, Bacteroides, Enterobacteriaceae
 - Type 2: monomicrobial
 - usually Group A Strep or other beta hemolytic strep
 - Classically the “flesh-eating bacteria”

Necrotizing Fasciitis

- Risk factors:
 - DM, peripheral vascular disease, drug use, obesity, immunosuppression, recent surgery, traumatic wounds
- Most cases involve single infection site
- May progress to compartment syndrome & myonecrosis
 - Requires fasciotomy

Also consider Necrotizing myositis

- Aggressive, necrotizing infection of skeletal muscle
- Caused by Group A Strep or other beta hemolytic strep
- Risk factors: skin abrasion, blunt trauma, heavy exercise
- Clinical manifestations:
 - initially fever, exquisite pain, edema with induration over affected muscle.
 - Progression to erythema, warmth, petechiae, bullae, and vesicles

Diagnosis of Necrotizing Fasciitis

- Considered in patients with clinical manifestations:
 - Skin inflammation, fever, toxicity, soft tissue involvement with pain out of proportion to exam, crepitus, rapid progression, elevated CK, induration, bullous lesions, skin necrosis, ecchymosis
- Dx confirmed via surgery
 - Exploration of tissue
 - Surgical debridement
 - Tissue cultures
- Radiologic imaging useful, but not required & should not delay surgical intervention
 - May or may not see gas in tissue

References

1. Stevens, Dennis L MD, Phd & Baddour, Larry M MD, FIDSA, FAHA. "Necrotizing soft tissue infections." *Uptodate*.
2. Meyers A., Gillis E., Tarakji A. Necrotizing Fasciitis. Radiology Online. (2020)