

Necrotizing Fasciitis

Necrotizing fasciitis is an infection of the deep soft tissues that results in progressive destruction of the muscle fascia and overlying subcutaneous fat. It can progress rapidly, resulting in death if not addressed emergently. It is considered to be a clinical diagnosis, and treatment should not be delayed for further lab or imaging evaluations.

Causative Pathogens	<ul style="list-style-type: none">● Group A Streptococci● Staphylococcus aureus● E. Coli● Klebsiella● Enterobacter● Bacteroides● Fusobacterium● Clostridium
Risk Factors	<ul style="list-style-type: none">● Diabetes● Immunocompromised● recent trauma or surgery● injury to the skin (insect bite, IV drug use, varicella lesion, etc.)
Physical Exam Findings	<p>** Initially, overlying tissue can appear to be unaffected</p> <ul style="list-style-type: none">● acute onset skin changes with rapid progression<ul style="list-style-type: none">○ erythema○ severe pain out of proportion to exam○ crepitus○ Bullae● Systemic toxicity<ul style="list-style-type: none">○ fever, tachycardia, tachypnea, hypotension, etc.
Labs	<ul style="list-style-type: none">● CBC (leukocytosis)● Lactic acid elevation● CRP/ESR elevated● CMP (hyponatremia)● Blood Cultures
Imaging	<ul style="list-style-type: none">● CT scan without contrast of the affected area<ul style="list-style-type: none">○ looking for subcutaneous emphysema
Treatment	<ul style="list-style-type: none">● <u>Emergent surgical debridement</u>● Broad Spectrum antibiotic coverage<ul style="list-style-type: none">○ Zosyn 4.5 g x 1, then 3.375 g q 8 hours○ Vancomycin 20-25mg/kg x 1 (Max 2 G)<ul style="list-style-type: none">■ Add pharmacist to dose order○ Clindamycin 900mg q 8 hours● Hemodynamic support<ul style="list-style-type: none">○ Fluid resuscitation +/- vasopressors

Primary Operative Team

If at any point, another specialty requests ACS assistance in the OR, attending should be notified.

Our SICU team will often manage the critical care of these patients post-operatively

Acute Care Surgery	Infection proximal to the knees and elbows, most commonly including the groin, thigh, abdomen, glute and chest.
Ortho Surgery	Infection isolated distal to the knee
Hand Surgery	Infection isolated distal to the elbow
Urology	Infection isolated to the scrotum
ENT	Infection involving the head or neck

LRINEC Score is a calculated predictor tool based on lab findings and should never be used to rule out necrotizing soft tissue infection.