



Medical Directors' Grand Rounds

Cellulitis — by Judi Shaw- Rice MD

What is it?

A common infection(due to bacteria or fungus) or inflammation of the skin

Due to

- ☐ damaged and infected skin (eg tears, cuts, post-surgery wounds, skin conditions – psoriasis, eczema),
- ☐ poor circulation (eg. PVD, PAD),
- ☐ bone infection under the skin(osteomyelitis),
- ☐ foreign body under the skin esp when swelling is there from other causes (liver, heart failure, joint rheumatologic ds, meds – NSAIDS, BP meds: calcium channel blockers)

NOTE difference between inflammation and infection with MRSA or Strep (most common)

How is it diagnosed?

By exam - skin is swollen, red, painful and warm to touch, maybe red streaks, fever , blisters, skin dimpling ; in severe cases may have (sepsis) chills, shaking , muscle aches; rarely need labs/tests;



What labs/tests are needed?

Labs:

WBC – infection count; **Chemistries** – check liver, kidney function

Tests:-

Ultrasound – to rule out blood clot or rarely bone fracture

CAT scan – to check for compartmental syndrome, necrotizing fasciitis

What is the treatment?

- **Treatment:-**
 - Most cases of inflammation resolve within days or weeks without intervention .
 - For infections:- Antibiotics- oral or IV if severe,
 - Elevation of legs /arms (or other part of body) to allow drainage away,
 - Pain meds (Tylenol etc),
 - Surgery (rare) or procedure for Necrotizing fasciitis, abscess drainage

Risks & Behavioral changes needed

Impacted by cleanliness/habits

- ☐ **Between toes/ feet/- ?** barefoot , moisture between toes, dirty feet - causes breaks in the skin and entry point for bacteria
- ☐ **Home conditions-** poor hygiene, dirty conditions
- ☐ **Shaving** - causes skin breakdown, dirty razors
- ☐ **Pets** – can contaminate and impact cleanliness of area
- ☐ **Legs dependent** – causes fluid to accumulate and feet/legs to swell
- ☐ **Weight** – increases pressure and makes it harder for fluid to return from the leg, thus swelling

Risks & Behavioral changes needed

Signs of Disease states worsening

- ☐ **DM controlled** – BS can increase due to infection and poorly controlled DM with high sugars and increase chances for an infection
- ☐ **CHF controlled** – if not controlled can increase swelling and lead to infection due to risks in section (b- how is it dx?)
- ☐ **ESRD /HD controlled** - could increase swelling due to protein loss, and fluid overload due to missed dialysis
- ☐ **Pulm HTN** – can lead to swelling due to ‘back’ up
- ☐ **Liver failure** – swelling due to low protein/cirrhosis
- ☐ **Obesity** – swelling due to increased weight on the legs and lack of fluid return
- ☐ **PVD/PAD** – worsening circulation (numbness, weakness),

THANK YOU!!

