***no patient handout*

Erysipeloid

Synopsis

Erysipeloid is an infection with the gram-positive bacillus *Erysipelothrix rhusiopathiae*, which is also an agent of disease in animals, especially swine. The bacterium is transmitted when traumatized human skin comes into contact with an infected animal or animal meat; therefore, farmers, cooks, butchers, and fisherman are most at risk.

Erysipeloid is predominantly a self-limiting disease affecting the skin in either a localized or diffuse form, but occasionally may cause a serious systemic illness in which the most common manifestation is endocarditis. Skin lesions consist of violaceous plaques and are most often confined to the hands. There is often associated pain and pruritus.

The lesions of localized cutaneous erysipeloid often resolve without treatment in 3-4 weeks but may recur. Therefore, treatment with antibiotics is indicated in all forms of erysipeloid.

Erysipeloid can be differentiated from **cellulitis** on the basis of location (fingers and hands), animal exposure, and more violaceous appearance.

Codes

ICD10CM:
A26.0 – Cutaneous erysipeloid

SNOMEDCT:
400105005 – Erysipeloid

Look For

Localized cutaneous form: well-demarcated violaceous plaques, most frequently on the fingers and hands. Hemorrhagic vesicles may appear, and the patient may complain of pain, swelling, pruritus, or burning paresthesias. The lesions will often develop a central clearing as they progress.

Diffuse cutaneous form: similar lesions are found at sites remote from the site of inoculation. Systemic symptoms such as fever and arthralgia are more commonly seen in the diffuse form.

Systemic form: there may be no skin findings. If present, lesions resemble the characteristic lesions of erysipeloid but may have a necrotic center. Occasionally, follicular papules can be seen.

Diagnostic Pearls

Lesions generally appear approximately one week after inoculation. Take a careful history, including occupation and other possible animal exposures.

Differential Diagnosis & Pitfalls

- **Cellulitis** or **erysipelas**
- "Seal finger" – etiologic agent likely *Mycoplasma* spp.
- **Orf**
- **Insect bite**
- **Fixed drug eruption**
- **Herpetic whitlow**
- **Tinea**
- **Gout**
- **Urticaria**
- **Angioedema**
- Herpes virus infections (**herpes simplex virus** or **varicella zoster virus**) with associated lymphangitic erythema
- ***Mycobacterium marinum***
- **Cat-scratch disease**
- **Sporotrichosis**
- **Sweet syndrome**
- **Cryptococcal cellulitis**
- ***Pasteurella multocida* infection**
- ***Vibrio vulnificus* infection**
- **Necrotizing fasciitis**

Best Tests

Culture of an aspirate and/or biopsy of the lesion establishes the diagnosis. Gram stain of the scrapings from a skin lesion **may** demonstrate gram-positive rods.

Blood cultures are rarely positive.

Imaging studies may be warranted based on clinical impression of organ involvement. Such

studies may include echocardiography (endocarditis), CT or MRI of the brain (abscess or infarct), plain film or CT of the chest (pleural effusion), or bone scan or MRI (osseous necrosis).

Management Pearls

The best way to prevent this disease is to use gloves when preparing fish or meat. The bacterium can be eradicated from fomites by cleansing the area with a disinfecting agent.

Erysipelothrix rhusiopathiae is resistant to vancomycin, teicoplanin, and daptomycin.

Therapy

Localized Cutaneous Infection
Localized cutaneous erysipeloid typically resolves over 3-4 weeks without treatment, but antibiotic treatment is appropriate, as it hastens resolution and may reduce systemic complications.

Children:

- Penicillin – 25-50 mg/kg p.o. every 24 hours for 7-10 days.

Adults:

- Penicillin 500 mg p.o. 4 times daily for 7-10 days, or
- Amoxicillin 500 mg p.o. 3 times daily for 7-10 days.

Penicillin-allergic patients may be treated with cephalosporins, clindamycin, or fluoroquinolones.

Adults:

- Ciprofloxacin 250 mg p.o. every 12 hours daily for 7-10 days, or
- Clindamycin 300 mg p.o. every 8 hours for 7-10 days, or
- Erythromycin 500 mg p.o. every 6 hours for 7-10 days.

Diffuse Cutaneous or Systemic Infection
Parenteral administration and a longer duration of therapy are indicated for systemic disease. Some experts recommend a duration of 4 weeks or more.

Adults:

- Penicillin G 2-4 million units IV every 4 hours, or

- Ceftriaxone 2 g IV every 24 hours, or
- Imipenem 500 mg IV every 6 hours, or
- Ciprofloxacin 400 mg IV every 12 hours, or
- Levofloxacin 750 mg IV every 24 hours.