

Lymphangitis

Definition

- Inflammation of lymphatic channels
- Infectious or noninfectious causes
- Bacteria, mycobacteria, viruses, fungi, parasites
- Most common after skin wound or distal infection which then inoculates into lymphatic vessels and spreads toward regional lymph nodes

Types

- Acute Lymphangitis
- Nodular Lymphangitis
- Filarial Lymphangitis
- Lymphangitis at a Non-Peripheral Site
- Recurrent Lymphangitis
- Noninfectious Lymphangitis

Acute Lymphangitis

- Skin abrasion with infection at distal site
- Erythematous, tender streaks going proximally
- Can occur with Lymphadenitis
- Usually with systemic symptoms (fever, chills, sweats, ect)

Etiology of Acute Lymphangitis

- Streptococcus pyogenes
- Staph aureus
- Pasteurella Multocida (Cats, Dogs, Fowl, Rabbits, Cattle, Pigs)
- Erysipelothrix (Zoonosis usually from fish and raw meat handling)
- Causes Erysipeloid (not erysipelas)
- Cutaneous Anthrax
- Herpes Simplex virus
- Lymphogranuloma Venereum
- Rickettsiosis

Nodular lymphangitis

- Nodular subcutaneous swellings along lymph channels
- Regional lymphadenopathy
- Incubation period between exposure and lymphangitis can be prolonged
- Subacute with few or no systemic symptoms

Etiology of Nodular Lymphangitis

- Sporothrix Schenckii
- Nocardia (most often N. Brasiliensis)
- Mycobacterial Infections
 - M. Marinum , M. Kansasii , M. Chlonae , M. Fortuitum
- Leishmaniasis

- Francisella Tularensis
- Burkholderia Pseudomallei
- Systemic Mycoses
 - Coccidiomycosis, Blastomycosis, Histoplasmosis
 - More common from Hematogenous dissemination

Filarial Lymphangitis

- Caused by parasites
- Inflammation, dilation, thickening, tortuosity of Lymph channels
- Valvular incompetence
- Retrograde progression
- Lymphedema and thickening of subcutaneous tissue and skin
- Secondary bacterial infections
- Prolonged stay in Endemic Areas
- Wuchereria Bancrofti
- B. Malayi
- B. Timori

Noninfectious causes

- Neoplastic Lymphangitis
 - Breast, Lung, Stomach, Pancreas, Prostate
 - Lymphangitic spread of Lymphoma
- Crohn's Disease
- Sclerosing Lymphangitis of the Penis
- Tuberculin skin testing

Diagnosis

- Historical clues, Clinical features and exam, Epidemiology, and Location.
- Laboratory Analysis
- Blood Cultures
- Swab, aspiration, biopsy
- Primary site or distal nodule
- Gram staining, Fungal, Acid Fast
- Cultures including bacterial, fungal, and mycobacterial
- Prolonged incubation, Special considerations
- Serology (Tularemia, Histoplasma)
- PCR
- Blood Film (filaria)

Treatment

- Etiology Specific
- Start Empiric therapy
- Surgical Debridement