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
  o Coccidiomycosis, Blastomycosis, Histoplasmosis
  o 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
  o Breast, Lung, Stomach, Pancreas, Prostate
  o 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