Cutaneous Leishmaniasis (CL)

Patient: N.A., a 50-year-old woman

Duration: 4 years

Distribution: Shins and dorsa of feet

History: Asymptomatic lesions, two of which ulcerated 6 months prior to presentation. The patient used a topical corticosteroid to no avail.
Medical history: Diabetes mellitus II
Social history: Travel to Aleppo on several occasions.

Physical Exam: Two well demarcated ulcerated plaques with granulation tissue in the center, associated with yellowish crust and discharge. Also multiple erythematous dusky nodules and plaques were present.

Histopathology: Diffuse, dense granulomatous infiltrate occupying the whole dermis and subcutaneous tissue composed of macrophages heavily laden with leishman bodies, admixed with mononuclear cells, neutrophils, nuclear debris and foci of necrosis.

Laboratory:
Bacterial culture → Staph coagulase-negative
Tissue culture for deep fungal, typical and atypical mycobacteria → negative

Treatment:
Ospexin 1 gm BID for 2 weeks
Glucantime 20 mg/kg for 28 days

Discussion:
• Leishmaniasis is a protozoal disease whose diverse clinical manifestations are dependent both on the infecting species of leishmania and on the immune response of the host. At a minimum, approximately 400,000 new cases occur each year with almost 400 million people at risk for the disease.
Leishmaniasis in its various forms is present on all continents except Australia and Antarctica.
• Possible modes of transmission are almost exclusively via the bite of an infected sandfly. Other modes have been reported including direct transmission of CL and congenital transmission of
visceral leishmaniasis.

• Current Research is focused on:
1. Methods of definitive diagnosis: immunoperoxidase and PCR methods show promise.
2. Accurate diagnosis of current versus past infection.
3. Advances in treatment (liposomal amphotericin B, and interferon gamma)
4. Analysis of molecular determinants of virulence
5. Determination of molecular basis for genetically susceptible and resistant persons.
6. Effective noninfectious vaccine.

• Vaccine: A practice called leishmanization has been performed with virulent promastigotes (attenuated or killed). Reduced rates of subsequent infection have been noted, but side effects include large nonhealing lesions and hypersensitivity reactions. Furthermore, these trials may produce a new focus for transmission especially in the era of HIV and with the common use of immunosuppressant drugs.

References: