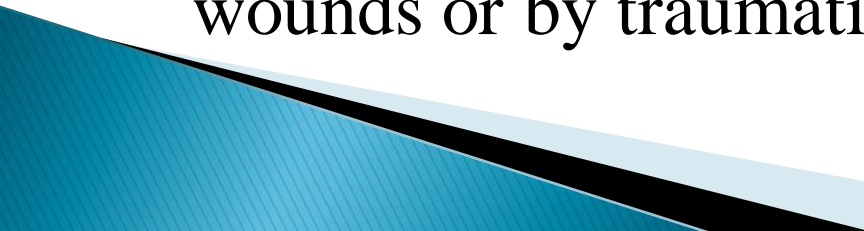


SPOROTRICHUM

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INTRODUCTION

- ▶ Sporotrichosis is caused by the dimorphic fungus *Sporothrix schenckii*.
 - ▶ The disease is characterized by nodular lesions that suppurate, ulcerate, drain, and involve the cutaneous and subcutaneous tissues and the adjacent lymphatics.
 - ▶ The fungus is widespread in nature, found in soil, on wood, and on other vegetation.
 - ▶ The organism gains entrance to the skin through wounds or by traumatic implantation.
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- ▶ Occasionally (especially in dogs), the infection may spread to involve bone, muscle, the central nervous system, lungs, or the genitourinary tract.
- ▶ Infections are common, particularly in horses and dogs. In dogs, the disease is more likely to disseminate and result in a fatal infection.
- ▶ In horses, the disease must be differentiated from epizootic lymphangitis (caused by *Histoplasma farciminosum*).
- ▶ The lymphocutaneous form may be nonsuppurative, or may result in ulcerations and pus that discharge at several sites along the lymphatic channel, which serves as a means of transmission for the organism within the animal.
- ▶ Laboratory rodents are highly susceptible to experimental infection, indicating the virulence of this organism is greater than that of the opportunistic fungi.
- ▶ The disease is infectious, but not contagious, and is chronic.

- ▶ This dimorphic fungus can be isolated from lesions on brain heart infusion agar, blood agar, or Sabouraud agar with cycloheximide and chloramphenicol.
- ▶ The mold is white when young, then turns brown to black.
- ▶ The hyphae are septate and fine, and the microconidia form in clusters at the hyphal tips or as sessile forms at the sides of the hyphae.
- ▶ Differentiation from similar looking fungi is by conversion of the mold to the yeast phase.

- ▶ Single-celled, cigar-shaped yeasts may or may not be seen in pus from lesions.
- ▶ Fluorescent antibody enhances visualization and confirmation of the disease.
- ▶ Serological diagnosis can be made by demonstration of a rise in complement-fixing antibody.
- ▶ Potassium iodide, Amphotericin B, ketoconazole and micoconazole are effective for treatment.