I was recently confronted by a 74-year-old gentleman who presented with the history of a 4-week-old lesion on his right index finger. He had been working in his garden and thought that a spider might have bitten him.

Debridement in theatre revealed necrotic tissue and mild tenosynovitis. The wound was unresponsive to standard anti-microbial agents and in time several nodules developed along the patient’s forearm. These lesions eventually ulcerated and drained serous fluid (Figures 1-4).

The diagnosis of sporotrichosis was made after consultation with our local microbiologist and subsequent histology revealed yeast cells and the diagnosis was confirmed on culture of the Sporothrix schenckii organism.

Sporothrix schenckii is a saprophytic fungus found widely in nature. Infection due to S. schenckii generally is limited to the skin and regional lymphatics, although systemic and disseminated disease occasionally occurs.

I. **Growth and identification characteristics:** S. schenckii is a dimorphous fungus. The mycelial phase can be grown and identified on routine culture media in 3-5 days.

II. **Epidemiologic features:** S. schenckii is found worldwide. The organism is found in the soil and on rose and barberry bushes, sphagnum moss, tree bark, and other vegetation. **Infection usually occurs following inoculation injury after contact with thorny plants.**

Infection due to S. schenckii generally is limited to the skin and regional lymphatics.
III. Clinical aspects:

- **Cutaneous disease** accounts for 75-80% of cases of sporotrichosis. Transmission to humans typically occurs through a break in the skin, often after minor or unrecognised injuries. Cutaneous sporotrichosis is therefore an **occupational disease** of gardeners, farmers, horticulturists, nursery workers and florists.
  - **Manifestations**. The fungus usually gains entry in the fingers or hands, where a small papule or raised, erythematous, subcutaneous nodule develops. The lesion may be evident at any time from 1 week to 6 months after inoculation. Spread to regional lymphatics results in progression of secondary nodules up the arm, which often ulcerate and drain but do not produce significant pain or disability.
  - **Diagnoses**. Although the clinical appearance may be very suggestive of sporotrichosis, other infectious entities may cause identical lesions, including non-tuberculous Mycobacteria, cutaneous nocardiosis, syphilis, pyoderma gangrenosum and leishmaniasis. **Culture of drainage or aspirated material** should reveal the causative organism and is **diagnostic**.
  - **Therapy**. Recent studies have shown that treatment with **itraconazole** results in response rates of greater than 90%. Itraconazole is well tolerated and is thus a reasonable alternative to potassium iodide.

- **Extracutaneous disease** represents approximately 20% of cases of sporotrichosis.
  - **Pulmonary sporotrichosis** is uncommon.
  - **Osteoarticular sporotrichosis** is an extremely indolent infection that primarily involves the joints and bones. Involvement of a single joint, particularly the knee, is typical.
  - **Disseminated sporotrichosis** is rare. Involvement of multiple sites including the skin, lungs, joints, bones and CNS has been reported.

The patient responded well to a course of oral Sporanox (Itraconazole) in combination with continued wound care.

Further reading
Principles and practice of infectious diseases 6th edition
Mandell GL, Gordon DR, Bennett JE, Dolin R
Publication date: October 2004
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Sporothrix schenckii
Chapter 258
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