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# LETTER TO THE EDITOR

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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.**

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**Figures 1–4: Sporotrichosis lesions in the left arm of a 74-year-old man**

### 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.

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### Cutaneous sporotrichosis is an occupational disease of gardeners, farmers, horticulturists, nursery workers and florists

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- **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 6<sup>th</sup> edition

Mandell GL, Gordon DR, Bennett JE, Dolin R

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#### **Sporothrix schenckii**

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