

## AN INFECTIOUS DISEASE OF NURSERYMEN

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Introductory note:

During the past year, nine tree seedling nursery workers have become infected with a fungus identified as sporotrichum. This is the first time such injury has come to our attention. However, there is evidence that several people in years past may have been infected but the disease was not identified as sporotrichosis.

The Public Health Service has prepared the attached summary of the disease for distribution to all who handle forest tree seedlings. Note that the fungus is very widespread and is quite common among agricultural workers. Cure for the condition is not difficult after proper diagnosis.

As will be pointed out, infection takes place through an abrasion in the skin. After an incubation period of 1 to 4 weeks the infection becomes evident. All too frequently, the scratch heals and is forgotten, which makes it somewhat difficult to connect the cause and effect.

Preventive measures can be taken by treating all breaks in the skin, regardless of size. Washing the hands and arms with warm water and soap helps to keep them free of infection. Gloves and other protective clothing are not recommended; they may promote infection through minor abrasions unless the skin is kept dry. Lotions may help but have not been investigated thoroughly.

Forest workers developing a persistent infection should be taken to a doctor. It would be well to remind the physician of the unusual exposure to the fungus.

(U. S. Forest Service)

It has come to our attention that a fungus disease known as sporotrichosis has occurred with unusual frequency in nurserymen. In these cases the disease had not been properly diagnosed or treated, and ugly and deforming scars developed, usually on the forearms. We urge that you consult your doctor if you are a nurseryman and suffer from sores which will not heal. When you do this, remind him of your unusual exposure to this fungus. For your information the following summary of this disease has been prepared.

### Sporotrichosis

Sporotrichosis is a disease of man, plants, and animals, caused by the fungus, Sporotrichum schenckii. In most cases of human infection, only the skin and lymph channels beneath the skin are infected. The fungus is widespread in nature, and has been found in the soil, as well as on flowers, vegetables, shrubbery, and bark. It survives extremes of temperature and altitude and, although it is found in all sections of the U. S., most infections are reported from the Midwest. Although anyone may be infected, the disease occurs most often in gardeners and farmers and it may be considered an occupational disease. It probably cannot be transmitted from person to person.

The typical infection follows an abrasion, scratch, prick, or bite, through which the spores of the fungus are introduced beneath the skin. In 1 to 4 weeks following exposure, a small, painless, pus-containing blister is formed, which may open, become raw, and slowly enlarge. Areas distant from the point of contact are infected as the fungus spreads through the lymph vessels, which may become visibly reddened and hard. Nodules may form along the infected lymph channels, which lead away from the point of initial infection.

Lymph glands in the armpit or elbow may become enlarged and sore. The disease is slowly progressive if untreated, and through the bloodstream fungi may be carried to the bones, abdominal organs, and the uninvolved skin. Since the disease may be simply and adequately treated, it is rarely fatal.

The diagnosis is made by growing and identifying the fungus in the laboratory. Material obtained from the initial ulcer or one of the small opened nodules is placed on a special growth medium (Sabouraud's agar) and the characteristic macroscopic and microscopic appearances of the fungus are noted. A special skin test may be used to confirm infection, or an animal may be injected with infected pus and the organism demonstrated microscopically after autopsy.

Iodides given by mouth specifically cure this infection. They are usually given in the form of potassium iodide solution, five drops three times daily, the dose being increased by one drop to a final dose of 35-50 drops three times daily. Penicillin and other antibiotics are not helpful or curative, but occasionally localized radiation to an ulcer may aid healing. Stilbamidine may be tried if the iodides cannot be prescribed.

Healing with only a scar remaining may be expected within 1-4 months after iodide therapy is started. Such scars may be large and disfiguring, however, if infected sores are allowed to progress and enlarge for a long period before being treated. To assure total healing, iodides should be continued for one month after healing is considered complete.

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