

Overview**Useful For**

Aiding in the diagnosis of extracutaneous sporotrichosis

Method Name

Latex Agglutination

NY State Available

Yes

Specimen**Specimen Type**

Serum

Specimen Required**Container/Tube:**

Preferred: Serum gel

Acceptable: Red top

Specimen Volume: 1 mL

Collection Instructions: Do not collect from a line.

Forms

If not ordering electronically, complete, print, and send a [Microbiology Test Request](#) (T244) with the specimen.

Reject Due To

Gross hemolysis Reject

Gross lipemia Reject

Specimen Minimum Volume

0.15 mL

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Frozen (preferred)	14 days	

Clinical & Interpretive**Clinical Information**

Sporotrichosis is an endemic fungal infection caused by the dimorphic fungus *Sporothrix schenckii*. Most cases of sporotrichosis have been reported from the subtropical and tropical regions of the Americas, but a global distribution is likely. The organism is often isolated from soil, plants, or plant products (wood), and occupational or recreational exposure to these materials is often implicated in infected individuals.

Infections due to *S schenckii* can be differentiated into several distinct syndromes:

-The cutaneous form of the disease is most common, often arising from sites of minor skin trauma. The primary erythematous, papulonodular lesion may range from several millimeters to 4 cm in size. Secondary lesions develop proximally along lymphatic channels. These generally painless lesions usually do not involve lymph nodes, although lymphadenopathy may develop.

-Extracutaneous sporotrichosis can be manifested as osteoarticular involvement of a single joint. Major joints of the extremities (ankle, knee, elbow, hand) are most often involved. The affected joint is swollen and painful, with an attendant effusion. Systemic symptoms are minimal.

-Pulmonary sporotrichosis with cavitory lesions also has been described.

-A multifocal extracutaneous syndrome has been described, consisting of multijoint involvement, or widely scattered cutaneous lesions. Constitutional symptoms (fever, weight loss) are often noted, and spread to bone and central nervous system may occur. Underlying immune system suppression is often a contributing factor. Untreated infection is ultimately fatal.(1)

Reference Values

Negative

Reference values apply to all ages.

Interpretation

Extracutaneous infections, including disseminated and articular infections, produce positive tests. The test should be positive in approximately 90% to 95% of all primary sporotrichosis infections. Specimens from these patients may become positive by 2 weeks after infection and are not expected to remain positive for more than 7 months after the original primary infection.

Agglutination titers of 1:8 and higher indicate presumptive evidence of sporotrichosis. Titers of 1:4 to 1:8 are commonly seen in normal persons.

Some cutaneous infections are associated with negative serologic results.

Cautions

A negative test does not exclude the possibility of sporothrix infection since the test is only positive in the early stages of infection.

The presence of high titers of rheumatoid factor in the patient specimen may cause false-positive reactions.

Clinical Reference

1. Rex JH, Okhuysen PC: *Sporothrix schenckii*. In: Bennett JE, Dolin R, Blaser MJ, eds. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 9th ed. Elsevier; 2020: 3131-3136
2. Barros MB, de Almeida Paes R, Schubach AO: Sporothrix schenckii and Sporotrichosis. Clin Micro Rev. 2011 Oct;24(4):633-654
3. Blumer SO, Kaufman L, Kaplan W, et al: Comparative evaluation for 5 serological methods for the diagnosis of sporotrichosis. Appl Microbiol. 1973 July;26[1]:4-8

Performance**Method Description**

The test is based upon the principle that latex particles sensitized with sporothrix antigens are agglutinated by antibodies that are specific for those antigens. Antibodies against sporothrix of the IgM class are most effective as agglutinins. Results of the latex agglutination test are available within minutes, as compared to 24 to 48 hours for other serological procedures. Due to the type of test procedure (slide agglutination), immunoglobulins other than IgM are not efficiently detected because of the minimum interparticle distance in the suspension and the molecular dimensions of the other immunoglobulins (IgG, IgA, etc) are not sufficiently large to span the distance efficiently. (Package insert: LA-SPORO Antibody System, Immuno-Mycologics, Inc; 10/17/2018)

PDF Report

No

Specimen Retention Time

14 days

Performing Laboratory Location

Rochester

Fees & Codes**Test Classification**

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information

86671

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
SSP	Sporothrix Ab, S	13273-8

Result ID	Reporting Name	LOINC®
9673	Sporothrix Ab, S	13273-8