



Mayo Clinic Locations: [Arizona](#) | [Florida](#) | [Minnesota](#)

[Rochester, Minn.](#)

[Mayo Clinic](#) » [Rochester](#) » [Medical Services](#) » [Medical Specialties](#) » [Otorhinolaryngology Department](#)

Otorhinolaryngology Department

[Overview](#)

[Patient Stories](#)

[Diseases, Treatments and Services](#)

[Appointments](#)

[List of Doctors](#)

► [Research](#)

[For Medical Professionals](#)

[Otorhinolaryngology - Jacksonville](#)

[Otorhinolaryngology - Arizona](#)

[Other Specialties - Rochester](#)

Research on Chronic Sinusitis

Mayo Clinic researchers have proposed that most chronic sinus infections may be caused by an immune system response to fungi.

- [Article in Mayo Clinic Proceedings](#)

Many studies at Mayo Clinic have added evidence to the thinking that chronic rhinosinusitis is caused by an immune reaction to fungi in the nose. Our original study linking chronic rhinosinusitis to fungi in the nose, which was published in the Mayo Clinic Proceedings in September 1999, has been reproduced and confirmed by a sinus center in Europe (ENT University Hospital in Graz, Austria).

There are currently 16 studies at Mayo Clinic Rochester to further investigate the role of fungi in inflammatory diseases of the respiratory tract.

In addition, researchers from the Allergic Diseases Research Laboratory at the Mayo Clinic in Rochester found that certain white blood cells called T-Lymphocytes are reacting to the fungi and were producing the kind of inflammation we see in the sinuses, and that healthy people did not react in that way. This work was presented at the 2001 Annual Meeting of the American Academy of Allergy, Asthma and Immunology and will be published soon.

The evidence was so convincing that the National Institute of Health (NIH) has given Mayo Clinic a \$2.5 million grant to further investigate the mechanisms behind this immunologic response to the fungi.

If you have chronic sinusitis -- that is, a sinus inflammation that persists for three months or longer -- we recommend that you see your personal physician or an ear, nose and throat specialist (otorhinolaryngologist) for the appropriate treatment for this disease. Many times the disease is associated with asthma or allergies and treatment of those associated problems tends to help the chronic sinusitis.

Antibiotics do not help chronic sinusitis in the long run because they target bacteria, which are not usually the cause of chronic sinusitis. Anti-histamines, nasal steroid sprays and systemic steroids are the mainstays of treatment today, depending on the symptoms of the patient.

Over-the-counter medications, including salt-water nasal washes and mist sprays, are useful in treating the symptoms of chronic sinusitis, but do not eliminate the inflammation.

Dept of Otorhinolaryngology
Mayo Clinic
Rochester, Minnesota

Keep Me Updated

If you would like to receive information about any significant developments in the progress of this research, send an e-mail with a blank subject line to rcf-lists@mayo.edu and write **subscribe sinusitis** in the body of the message. You will be automatically added to an e-mail list.