Sinusitis Fungal Infection

A Sinusitis fungal infection, also known as mycosis, is the condition caused by the presence of fungi. Mycosis takes place when the fungi pass the resistance barriers in humans and animals and establish infections. Fungi can develop due to hot climate and humidity or overcrowded living conditions. Fungi can exist as airborne spores resulting in the fungi originating in the lungs or on the skin. Fungi exist on the body surface at all times, like bacteria, and are usually not problematic. In fact, fungi also reside in the sinus and nasal passages as well. There are three known types of sinus fungal infections: fungus ball sinusitis, allergic fungal sinusitis and invasive sinusitis. Like bacteria, a fungus can multiply and cause a sinusitis infection.

- Fungal spores are in the environment and we breathe in different kinds of fungal spores everyday into our nasal passages and sinuses. Some people are more susceptible to fungal infections such as those with compromised immune systems, those receiving chemotherapy, and diabetics. Fungal infections tend to afflict the very young and very old as well as those who have been taking a strong course of antibiotics for an extended period of time. There are those that have a reaction to the fungi, and a fungal infection begins after contact and this can lead to a sinusitis fungal infection.

Sinusitis can be classified into three categories:

- Acute lasting less than four weeks
- Sub-acute lasting four to eight weeks
- Chronic with a duration of eight weeks or more

During the course of a chronic sinus infection there may be additional symptoms that develop such as fatigue, dental pain, loss of smell and loss of taste. All sinusitis classifications share similar symptoms, which make it difficult to distinguish between the three classes. An acute sinusitis is the most common classification experienced with approximately 90% of adults experiencing sinusitis at some point in their life. There are many conditions that contribute to the onset of a sinusitis infection such as the common cold, allergic rhinitis, nasal polyps as well as a deviated septum.

The standard treatment options for a sinusitis fungal infection typically include oral antifungal medication and a nasal spray. Physicians will prescribe or recommend over the counter nasal spray for irrigation in the treatment of a sinusitis fungal infection. A nasal spray is a treatment method that is widely utilized for sinusitis infections and can provide some sinus relief. Nasal sprays are obtained over the counter or prescribed by a physician but due to the design of the nasal spray bottle, a nasal spray emits a large particle size that cannot effectively treat the tiny sinus cavity openings. The large particle cannot reach the inflamed openings of the sinus cavities nor remove the pathogens caught inside the upper sinus cavities. Nasal sprays only treat the lower nasal passages and
remove pathogens in the lower sinus regions.

**Oral medications**

Oral antifungal medication and oral antibiotics are commonly prescribed for the treatment of a fungal sinusitis infection. Oral antifungal and oral antibiotic are the most common form of treatment prescribed by physicians for fungal sinusitis infection sinusitis at this time although they are known to be marginally effective in treating sinus infections. Oral medications rely on the blood stream to deliver medication to the sinus cavity through the blood vessels in the nasal cavity. However, the sinus cavity is anatomically characterized by a lack of blood vessels in the sinus cavity that which results in the sinus cavity not receiving a proper dose of medication. The small amount of blood vessels results in an ineffective method for delivering oral medications to the sinus cavity. It is the lack of blood vessels in the sinus cavity which make it difficult for the antibiotic and antifungal to get to the site of the infection in the sinus area. Hence, the antifungal and antibiotic cannot fight the infection to the extent it is intended.

When nasal sprays, oral anti-fungals and oral antibiotics fail, the patient may be informed by their physician to consider sinus surgery. In sinus surgery, only part of the inflammation and infection is cleaned out. Unfortunately, statistically those who receive sinus surgery experience a reoccurrence of the infection and the patient may often require another surgery.

**Topical sinus therapy**

Premier topical treatment approach of using nebulized medication to treat sinusitis is a treatment method that is preferred by ENT’s treating sinusitis infections, according to the “Harvard Medical School Guide to Healing Your Sinuses” 2005. Premier offers the most innovative treatment for sinusitis infection currently on the market with custom compounded antibiotics, anti-fungals, and anti-inflammatories that are delivered directly into the sinus cavities with a state of the art nebulizer that produces a pressurized aerosolized mist. Premier nebulizer emits a fine medicated mist with 3.2-micron particle size that can rapidly enter the inflamed sinus cavities, depositing medication and making contact with the infection directly. The aerosolized medicated mist is sent up into nasal passages reaching the actual site of the sinusitis infection, fighting the infection on contact. Premier treatment approach is painless and effective in treating chronic sinusitis. Premier’s topical approach to treating sinusitis is particularly effective as medications that are topically applied result in little to no side effects and ensure a low systemic absorption rate as well as reaching the site of infection unlike the other treatment methods prescribed.