

# SINUS INFECTION

(Sinusitis)

## BASIC INFORMATION

### DESCRIPTION

Inflammation of the sinuses (air-filled cavities) adjacent to the nose. Sinusitis commonly affects the ethmoidal sinuses, located between the eyes; and the maxillary sinuses, located in the cheekbone. Germs that cause sinusitis are contagious.

### FREQUENT SIGNS AND SYMPTOMS

Early stages:

- Nasal congestion with green-yellow (sometimes blood-tinged) discharge.
- Feeling of pressure inside the head.
- Eye pain.
- Headache that is worse in the morning or when bending forward.
- Cheek pain that may resemble a toothache.
- Post-nasal drip.
- Cough (sometimes) that is usually non-productive.
- Disturbed sleep (sometimes).
- Fever (sometimes).

Late stages:

- Complete blockage of the sinus openings, blocking the discharge and increasing pain.

### CAUSES

- Infection (usually initiated by a cold or other upper-respiratory infection). The infection may be complicated by a bacterial invasion of organisms that normally inhabit the nose and throat.
- Irritation of the nasal passages from allergies, smoking, harsh sneezes with the mouth closed, chilling, swimming (especially jumping into the water without holding the nose) and fatigue.

### RISK INCREASES WITH

- Illness that has lowered resistance.
- Smoking.
- Exposure to cold, damp weather outdoors and dry heat indoors.
- Exposure to others in public places.
- Immunosuppression due to illness or drugs.
- Swimming in contaminated water.

### PREVENTIVE MEASURES

Prompt treatment of respiratory infections.

### EXPECTED OUTCOMES

Usually curable with intense treatment. Recurrence is common.

### POSSIBLE COMPLICATIONS

- Meningitis or brain abscess (rare).
- Infection of bone or bone marrow (rare).

## TREATMENT

### GENERAL MEASURES

- Diagnostic tests (depending on severity of infection and chronicity) may include laboratory blood studies, culture of mucus, endoscopy, x-rays or CT scan of the sinuses.

- Treatment at home is aimed at improving drainage and control of infection.
- Use a cool-mist, ultrasonic humidifier to help thin secretions so they will drain more easily. Clean humidifier daily.
- For infants and young children who cannot blow the nose, use a nasal aspirator to suction each nostril gently before applying nose drops. Suction again 10 minutes after using nose drops.
- Apply moist heat to relieve pain in the sinuses and nose.
- Don't allow other persons to use your nose drops. They will be contaminated by the infection. Discard them after treatment.
- Avoid non-prescription nose drops or sprays. Use prescribed drops only for the recommended time. They can interfere with normal nasal and sinus function and become addictive, causing a rebound phenomenon.
- Sinusitis not responding to other treatment may require surgery to drain blocked sinuses. Numerous techniques are available depending on the site of the infection.
- If the infection is severe, stay indoors in an even temperature.

### MEDICATIONS

- Nasal sprays, nose drops or decongestant medicine to reduce congestion may be prescribed.
- Antibiotics to fight infection.
- For minor pain, you may use non-prescription drugs such as acetaminophen.

### ACTIVITY

Resume your normal activities gradually. Exercise can help to clear your head.

### DIET

No special diet, but drink extra fluids to help thin secretions.

## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of sinusitis.
- The following occur during treatment:  
Fever; bleeding from the nose; severe headache. Swelling of the face (forehead, eyes, side of the nose or cheek).

Adapted from Instructions for Patients, Sixth Edition, H. Winter Griffith, M.D., W.B Saunders Company.