

BASIC INFORMATION

Description

Rhinitis is inflammation of the nasal cavity, and sinusitis involves the sinuses. The inflammation can affect just one area or both (rhinosinusitis) and can be either acute or chronic.

Causes

Bacterial infection of the nose or sinuses seldom occurs as a primary disease. It is usually associated with viral, fungal, or parasitic diseases. A number of viral infections can infect kittens between 6 and 12 weeks of age. Cryptococcosis is the most common fungal cause of rhinosinusitis in the cat.

Allergic conditions rarely cause rhinosinusitis in the cat. Trauma to the nasal cavity or bones of the forehead over the sinuses is a potential cause. Rarely, blades of grass that are ingested may migrate into the nasal cavity, but other nasal foreign bodies are uncommon. Dental or gum disease may be associated with nasal infections. Sometimes the source of the inflammation is never identified (idiopathic).

Clinical Signs

Sneezing and nasal discharge are common. Sometimes gagging occurs from postnasal drainage. Acute onset of episodes of violent sneezing is often associated with inhalation of a foreign object. Chronic, periodic sneezing is associated with most other nasal diseases.

Discharge may be seen from one or both sides of the nose. The type of discharge sometimes helps determine the cause. For example, yellow-green discharge is common with viral, bacterial, or fungal infections, whereas a bloody discharge is more likely with trauma, foreign bodies, or a bleeding disorder.

Facial deformity can be seen with tumors, trauma, or secondary infections. A swelling below one of the eyes may indicate that a tooth root abscess has extended into the nasal cavity. Occasionally, discharge from one or both eyes may be seen. Open-mouth breathing may occur if one or both of the nasal cavities are obstructed.

Diagnostic Tests

A thorough examination of the head and mouth is usually done to identify any abnormalities in the bones, teeth, and nearby structures. Routine laboratory tests and special fungal assays may be recommended. Blood clotting tests may be done if the discharge is bloody.

X-rays are often helpful in detecting abnormalities within the nasal cavity and frontal sinuses, such as increased fluid density or destruction of the overlying bones or bony tissue. Advanced imaging with computed tomography (CT scan) or magnetic resonance imaging (MRI) is generally considered superior to x-rays for defining the extent of involvement.

Occasionally examination of cells in the nasal discharge is helpful, but usually a biopsy is necessary to obtain a diagnosis. Samples may be retrieved by forceful flushing of the nasal cavity with saline or by several biopsy techniques. Rhinoscopy (examination of the nose using a fiberoptic viewing scope) allows the veterinarian to directly examine the nasal cavity and obtain biopsy samples. Cultures may also be submitted for bacterial and fungal testing.

TREATMENT AND FOLLOW-UP

Treatment Options

Treatment of rhinitis or sinusitis depends on the underlying cause:

- When bacteria are identified by culturing methods, an appropriate antibiotic may be prescribed.
- Medical management of chronic, recurrent bacterial rhinosinusitis usually provides only temporarily relief, because clinical signs often return when therapy is stopped. In addition, chronic infections of the nasal cavity sometimes extend to the frontal sinuses. Because frontal sinus infections do not respond well to medical therapy, surgical removal of the lining of the frontal sinus, followed by insertion of fat into the sinus, may be necessary.
- Viral rhinitis is often self-limited and may run its course in several weeks. An exception is infection with herpesvirus, which can become chronic or recur throughout much of the cat's life. Antiviral medications may be tried in these cases. Secondary bacterial infection may require antibiotics.
- Fungal causes (cryptococcosis) are treated with systemic antifungal drugs.
- Any infected teeth are extracted.
- Tumors may require surgery.
- Displaced or badly injured pieces of bone (from trauma) may be removed.
- Foreign bodies can often be successfully removed using rhinoscopy, and antibiotics may be started afterward.

Follow-up Care

Many infections resolve within 2 weeks with therapy. Periodic recheck visits and repeated testing may be needed for signs that persist. Notify your veterinarian if any signs recur after treatment is stopped.

Prognosis

Chronic infections can be very difficult to treat successfully and may require an indefinite period of continuous or intermittent antibiotic or antiviral medications. If significant destruction of tissue is present, nasal discharge may persist indefinitely.