

Histoplasmosis

Definition

Histoplasmosis is a systemic fungal infection. It is primary respiratory disease with dissemination to liver, spleen, intestine, lymph node, CNS dan bone.

Etiology

Histoplasmosis is caused by the dimorphic fungus *Histoplasma capsulatum*. Infective conidia are either inhaled or ingested.

Pathophysiology

Dissemination can be to any organ, resulting in a granulomatous inflammatory response. Typically, spread occurs to organs such as the lungs, GI tract, liver, bone marrow and eyes. The choroid appears to be a target region in the eye.

Clinical presentation/signs

Ocular signs in dogs and cats include granulomatous chorioretinitis, optic neuritis and retinal detachment, with some sign of anterior uveitis.

Differential Diagnosis

Cats

- Dyspnea from fungal pneumonia, differentiate from heart failure, feline asthma, lymphosarcoma, pneumonia, pyothorax, and other fungal pneumonias.
- Lameness, differentiate from trauma.
- Ocular changes, differentiate from lymphosarcoma, toxoplasmosis, and feline infectious peritonitis .Dogs

- Severe chronic diarrhea and weight loss, consider lymphocytic plasmacytic enteritis, eosinophilic enteritis, lymphosarcoma, chronic parasitism, and pancreatic exocrine insufficiency.

- Diarrhea and anemia, consider severe hookworm infection.
- Hepatosplenomegaly and peripheral lymphadenopathy, consistent with lymphosarcoma
- Respiratory signs: distemper, bacterial pneumonia, and heart disease

Diagnosis

The organism is found in endemic areas. Normocytic, normochromic, nonregenerative anemia is the most common hematologic abnormality. The organism may occasionally be seen in circulating mononuclear cells and eosinophils. The definitive diagnosis is based on identification of the organisms, usually by cytology, biosopsy and culture. Serologic test are available.

Treatment

Ketoconazole or Itraconazole

- Drug of choice if adequate intestinal function for drug absorption exists.
- Dogs and cats—5mg/kg PO q12h; give with a high-fat meal.
- Minimum treatment is 90 days.
- Combined treatment with amphotericin B and ketoconazole or itraconazole is preferred in patients with severe or fulminating disease. Fluconazole
- Use for dogs that cannot be given amphotericin B.
- Usual dose (intravenous form), 5 mg/kg IV q12h until intestinal absorption allows oral itraconazole treatment