

Metronidazole

Antibiotic, Antiprotozoal
(Systemic Drug)



Prescriber Highlights

- Injectable and oral antibacterial and antiprotozoal agent
- Main side effects include neurologic disorders, lethargy, weakness, hepatotoxicity
- Bitter tasting; may be more palatable when compounded

Information about this drug was adapted from Plumb's Veterinary Drugs. Further details and more therapeutics can be found with a subscription at plumbsveterinarydrugs.com

Uses, Indications

- Used for treatment of *Giardia* spp in both dogs and cats, in addition to several other parasitic infections (eg, trichomonads, *Balantidium coli*) and anaerobic enteric and systemic infections
- Commonly used for peri-operative surgical prophylaxis when anaerobic infections (eg, colon, periodontal) are likely
- Has some inhibitory actions on cell-mediated immunity that may play a role in its use for treatment of inflammatory bowel disease

Contraindications, Precautions, Warnings

- **Contraindications**
Patients with a history of hypersensitivity to metronidazole or nitroimidazole derivatives
- **Precautions**
Not recommended for use in severely debilitated, pregnant, or nursing patients; use with caution in patients with hepatic dysfunction
- **Warnings**
Total daily dose should not exceed 65 mg/kg because of risk for neurotoxicity

Side Effects

- Neurologic disorders, lethargy, weakness, neutropenia, hepatotoxicity, hematuria, nausea, anorexia, vomiting, and diarrhea have been reported in dogs
- Neurologic toxicity in dogs may occur with acute high

doses but is more common with chronic moderate- to high-dose therapy

- Vomiting, inappetence, and hepatotoxicity can occur in cats undergoing metronidazole therapy
- Central nervous toxicity, although rare, can also occur in cats

Drug Interactions

- Cimetidine may decrease the metabolism of metronidazole, increasing the possibility of dose-related side effects
- Cyclosporine levels may increase when combined with metronidazole therapy
- Fluorouracil (5-FU) may result in increased 5-FU levels and possible toxicity
- Phenobarbital or phenytoin may increase the metabolism of metronidazole, decreasing blood levels
- Metronidazole may prolong prothrombin time in patients receiving warfarin or other coumarin anticoagulants

Monitoring

- Clinical efficacy, side effects

Client Information

- Clients should pay close attention to any neurologic abnormalities

Dosage Forms

- Metronidazole oral tablets: 250 mg, 500 mg
- Metronidazole oral solution: 5 mg/mL

—Compiled and summarized from Plumb's Veterinary Drugs by Shannon Palermo, VMD