

## **Metsina**

### **Metronidazole**

### **IV infusion**

**Composition:** Metsina IV infusion: Each 100 ml solution contains Metronidazole BP 500 mg. (5 mg/ ml).

**Description:** Metsina (Metronidazole) is a nitroimidazole with antiprotozoal and antibacterial actions. It is highly effective against *Trichomonas vaginalis*, *Entamoeba histolytica* and *Giardia lamblia*. It has a bactericidal action against a wide range of pathogenic anaerobic microorganisms particularly species of *Bacteroides*, *Fusobacteria*, *Clostridia*, *Eubacteria*, Anaerobic Cocci and *Gardnerella vaginalis*.

#### **Indication:**

Metsina is indicated in the prophylaxis and treatment of infections in which anaerobic bacteria have been identified or are suspected to be the causes. It is particularly suited for patients who cannot retain oral medication and for patients in whom desired serum concentration have to be attained rapidly and reliably. Metsina is indicated:

1. In the prevention of post operative infections due to anaerobic bacteria
2. In the treatment of –
  - a). Intra abdominal infections - Appendicitis, Cholecystitis, Peritonitis, liver abscess and post operative wound infections;
  - b). Gynaecological and obstetrical infections - Puerperal sepsis, Pelvic cellulitis, Pelvic peritonitis;
  - c). Respiratory infections - Necrotizing pneumonia, Empyema and lung abscess;
  - d). Central Nervous System infections - Meningitis, Brain abscess;
  - e). Miscellaneous infections - Septicaemia, Bacteremia, Osteomyelitis, Gas gangrene.

#### **Dosage and Administration:**

Metsina may be diluted with appropriate volumes of normal saline, Dextrose - saline, Dextrose 5% w/v or potassium chloride (20 and 40 mmol) infusions.

For prophylaxis & treatment of anaerobic infection	Adult	Children
Dose	100 ml (500 mg) immediately before, during or after operation, repeated 8 hourly.	1.5 ml (7.5 mg) per kg body weight every 8 hourly.
Duration	Treatment for 7 days should be satisfactory for most patients but depending on clinical and bacteriological assessment the physician may decide to prolong the treatment.	
Infusion rate	Metsina should be infused at an approximate rate of 5 ml/minute.	

#### **Side Effects:**

Serious adverse reactions occur very rarely with standard recommended regimens. Unpleasant tastes in the mouth, furred tongue, nausea, vomiting or other gastro- intestinal disturbances have been reported.

**Precautions & Warning:**

Regular clinical and laboratory monitoring are advised if administration of Metronidazole for more than 10 days is considered to be necessary. Metronidazole should be administered with caution to patients with hepatic encephalopathy. Caution is advised in patients with active disease of the central nervous system other than brain abscess. Infusion of fluid should be immediately discontinued if rigor arises for any reason during the process. Do not use if the solution is cloudy, contains particles or after expiry date.

**Contraindications:**

Metronidazole is contraindicated in patients with a history of hypersensitivity to Metronidazole or other Nitroimidazole derivatives.

**Pregnancy and Lactation:** Metronidazole is pregnancy category B. Metronidazole has not been shown to cause birth defects in animal studies; however, use is not recommended during the first trimester of pregnancy. Use is not recommended in nursing mothers since metronidazole passes into the breast milk.

**Drug Interactions:**

**Alcohol:** Metronidazole taken in combination with alcohol may produce abdominal cramps, nausea, vomiting, headaches and flushing. **Warfarin:** Metronidazole inhibits the breakdown of the more potent S-isomer of warfarin. Therefore, the activity of warfarin is enhanced by metronidazole. **Phenobarbitone:** Decreases the effect of metronidazole probably due to increased metabolism. **Cyclophosphamide and BCNU (Carmustine):** Metronidazole should be used with caution in patients who are receiving BCNU or cyclophosphamide as a drug interaction shown in mice, leads to increased toxicity.

**Overdosage:**

*Symptoms:* Overdosage with metronidazole appears to be associated with very few abnormal signs or symptoms. Disorientation and vomiting may occur, especially after ingestion of large amounts.

*Treatment:* Early gastric lavage is recommended, where metronidazole has been taken orally. **Storage:** Store between 15°-25°C. Protect from light, avoid excessive heat and protect from freezing. This infusion is not intended for multi-dose use.

**Presentation:**

**Metsina IV Infusion:** Each box contains 1 bottle of 100 ml solution of Metronidazole for intravenous infusion.

**Manufactured by:**

The IBN SINA Pharmaceutical Industry Ltd.  
Shafipur, Gazipur, Bangladesh.