

Osmosol® 20

(Mannitol BP 20% w/v)
Intravenous Infusion BP

Description

Osmosol 20 is a clear, almost colorless and sterile solution of Mannitol. Each 100ml of Osmosol 20 contains Mannitol BP 20g. Administered parenterally, Osmosol 20 raises the osmotic pressure of the plasma, thus drawing water out of body tissues and produces an osmotic diuresis.

Uses

Osmosol 20 is principally used by IV infusion as an osmotic diuretic to preserve renal function in acute renal failure and to reduce raised intracranial and intraocular pressure. Osmosol 20 is also used as an irrigating solution to prevent hemolysis and hemoglobin buildup during transurethral prostatic resection. It is useful in the management of acute drug poisoning where a route of elimination is through kidney. Besides these, it is also used in symptomatic relief of edema, reperfusion injury, termination of pregnancy, and bowel preparation. So, Osmosol 20 is indicated in

- Renal insufficiency
- Reperfusion injury
- Raised intracranial pressure
- Bladder irrigation
- Raised intraocular pressure
- Bowel preparation
- Edematous status
- As a prophylactic in renal failure
- Management of poisoning
- Termination of Pregnancy

Dose

The adult dose of Mannitol ranges from 50 to 100g by IV infusion. The rate of administration is usually adjusted to maintain a urine flow of at least 30 to 50ml/hr. Total dosage, concentration and the rate of administration depends on fluid requirement, urinary output and the severity of the condition being treated.

Indications	Adults	Children
Renal insufficiency	50 to 100 g of Osmosol-20 administered at a rate adjusted to maintain a urine flow of at least 30 to 50 ml/hr.	2 g/kg body wt. or 60 g/sq. meter of body surface area administered over a period of 2 to 6 hrs.
Cerebral edema, elevated intracranial pressure, elevated intraocular pressure, Glaucoma	1.5 to 2 g/kg of body wt. administered over a period of 30 to 60 minutes.	1 to 2 g/kg body wt. or 30 to 60 g/sq. meter of body surface area administered over a period of 30 to 60 mins.
Adjunctive therapy for removal of toxic substances	50 to 200 g of Osmosol-20 administered at a rate adjust to maintain a urine flow of at least 100 to 500 ml/hr.	2 g/kg body wt. or 60 g/sq. meter of body surface area

For termination of pregnancy 50g of Mannitol (250ml of Osmosol 20) is instilled into the amniotic cavity which induces abortion in a high proportion of pregnancies.

Precautions

Careful monitoring of rate of administration of Osmosol 20 is necessary to avoid fluid and electrolyte imbalance and circulatory overloading. The infusion should be discontinued if the patient develops signs of progressive renal dysfunction, heart failure or pulmonary congestion. Mannitol should not be administered with whole blood.

Warning

Infusion of fluid should be immediately discontinued if rigor arises from any reason during the process. Do not use if the solution is cloudy, contains particles or after expiry date.

Adverse Effects

The most common side effects associated with Mannitol intravenous infusion is fluid and electrolytes imbalance including circulatory overload and acidosis at high doses. Other side effects include nausea, vomiting, thirst, headache, dizziness, fever, tachycardia, chest pain, hyponatraemia, dehydration, blurred vision, urticaria, and hypertension or hypotension.

Contraindications

Mannitol intravenous infusion is contraindicated in patients with pulmonary edema or congestive heart failure. It is also contraindicated during inadequate urine flow, dehydration or acidosis, intracranial

bleeding and in patients with renal failure unless a test dose has produced a diuretic response.

Pregnancy and Lactation

Safety of Mannitol intravenous infusion in pregnancy has not been established yet. No information is available on the excretion of mannitol in breast milk and should be administered after careful consideration of risk-benefit ratio.

Storage

Osmosol 20 should be stored at a temperature of 20° to 30 °c. Exposure to lower temperatures may cause deposition of crystals, which should be dissolved by warming the bottle in hot water for about 30 minutes. Cool to body temperature before using. If all crystals can not be dissolved, the solution should not be used. The content of open containers should be used promptly. Unused contents should be discarded.

Packaging

Osmosol 20 is available in 500ml disposable polyethylene bottle containing 20% w/v of Mannitol.



Manufactured by

BEXIMCO PHARMACEUTICALS LTD.

TONGI, BANGLADESH

® REGISTERED TRADEMARK 190705