# Terbutaline sulphate Intravenous for Adults



### Who can administer

May be administered by registered competent doctor or nurse/midwife

# Important information

- See monitoring requirements
- In situations where the inhaled route is not appropriate for bronchodilation, the preferred route is the intramuscular or subcutaneous route

# Available preparations

Bricanyl 2,500 microgram per **5mL** ampoule (2.5mg in 5mL)

Bricanyl 500 microgram per 1mL ampoule

### Reconstitution

Already in solution

- Must be further diluted before use diluent depends on indication
- Draw up using a 5 micron filter needle

## Infusion fluids

- Bronchodilator: can use either Glucose 5% or Sodium chloride 0.9%
- Management of premature labour: Glucose 5% ONLY
  - Sodium chloride should be avoided during pregnancy due to increased risk of pulmonary oedema. If it must be used, patients should be carefully monitored

## Methods of intravenous administration

#### **Bronchodilator dose**

- Slow intravenous injection (ref 1)
  - Dilute to 10mL with infusion fluid and administer required dose over 3 to 5 minutes
- Continuous intravenous infusion (administer using an electronically controlled infusion device)
  - Add 1.5 to 2.5mg to 500mL infusion fluid and administer over several hours (see 'dose')

#### **Premature labour**

- Continuous intravenous infusion (administer using an electronically controlled infusion device)
  - Use a small volume of infusion, with a syringe driver to avoid the risk of maternal pulmonary oedema e.g. add 5mg (5,000 micrograms) to 40mL Glucose 5% to produce a concentration of 100 micrograms/mL
  - Dose as per schedule below
  - Rate does not usually exceed 10 micrograms/minute, with a maximum rate of 20

### Dose in adults

### **Bronchodilator dose**

- Slow intravenous injection dose: 0.25 to 0.5mg up to four times daily
- Infusion dose: Add 1.5 to 2.5mg to 500mL infusion fluid and administer at 30 to 60mL/hour for 8 to 10 hours (more than one bag may be required depending on each patients individual requirements)

### **Premature labour dose**

- Prepare a concentration of 100 micrograms/ml as above
- Initial dose 5 micrograms per minute for the first 20 minutes, increasing by 2.5 micrograms per minute at 20 minute intervals until the contractions stop
- Rate does not usually exceed 10 micrograms/minute, with a maximum rate of 20 micrograms/minute
- The infusion should be stopped if labour progresses despite treatment at the maximum dose
- If successful, the infusion should continue for 1 hour at the chosen rate and then be decreased by 2.5 micrograms per minute, every 20 minutes to the lowest dose that produces suppression of contractions
- Duration of treatment should not exceed 48 hours
- A maximum maternal heart rate of 120 beats per min should not be exceeded

## Monitoring

- Patients at risk of hypokalaemia should have serum potassium levels monitored
- Diabetic patients should have additional blood glucose measurements performed when therapy is initiated
- Lactic acidosis has been reported with high doses of intravenous terbutaline, particularly in patients being treated for acute asthma exacerbation

#### • Premature labour

- The amount of IV fluids administered and rate of administration should be monitored to avoid fluid overload
- A maternal heart rate of more than 120bpm should be avoided
- Dose should be individually titrated with reference to suppression of contractions, increases in pulse rate and changes in blood pressure, which are limiting factors
- To minimise the risk of hypotension, keep patient in left or right lateral position throughout the infusion (ref 1)

# Storage

Store below 25°C

## References

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1: Injectable medicines guide, downloaded from Medusa 28th Oct 2021

## Therapeutic classification

Selective beta2-adrenoreceptor agonist