Excessive dosage or hypersensitivity to the drug may result in uterine hypertonicity, spasm, titanic contraction or rupture of the uterus. The possibility of increased blood loss and afibrinogenemia should be kept in mind when administering the drug. Severe water intoxication with convulsions and coma has occurred, and is associated with a slow oxytocin infusion over a 24-hour period. Maternal death due to oxytocin-induced water intoxication has been reported.

The following adverse reactions have been reported in the fetus or infant:

Due to induced uterine mobility	Due to use of oxytocin in the mother
Bradycardia	Neonatal retinal hemorrhage
Premature ventricular contractions and other arrhythmias	Low Apgar scores at five minutes
Permanent CNS or brain damage	Neonatal jaundice
Fetal death	

OVERDOSAGE

Overdosage with oxytocin injection (synthetic) depends essentially on uterine hyperactivity whether or not due to hypersensitivity to this agent. Hyperstimulation with strong (hypertonic) or prolonged (tetanic) contractions, or a resting tone of 15 to 20 mm H_2O or more between contractions can lead to tumultuous labor, uterine rupture, cervical and vaginal lacerations, postpartum hemorrhage, uteroplacental hypoperfusion and variable deceleration of fetal heart, fetal hypoxia, hypercapnia or death. Water intoxication with convulsions, which is caused by the inherent antidiuretic effect of oxytocin, is a serious complication that may occur if large doses (40 to 50 milliunits/minute) are infused for long periods. Management consists of immediate discontinuation of oxytocin, and symptomatic and supportive therapy.

DOSAGE AND ADMINISTRATION

Dosage regimens

Induction or augmentation of labor:

Oxytocin should only be administered as an intravenous infusion, preferably by means of a variable speed infusion pump, or by drip infusion. It should not be administered by subcutaneous, intramuscular or intravenous bolus injection.

The initial infusion rate should be set at 1-4 milliunits/min. This rate may be gradually increased at intervals of not shorter than 20 min, until a contraction pattern similar to that of normal labor is established. In pregnancy near term, this can often be achieved with an infusion of less than 10 milliunits/min. The recommended maximum rate is 20 milliunits/min. The increments in infusion rate should not be as high once contractions have been established, as those used to initiate contractions. Once an adequate level of uterine activity is attained, the infusion rate can often be reduced.

The frequency and duration of contractions and foetal heart rate must be carefully monitored during oxytocin administration, the latter preferably by electronic means, and the infusion must be discontinued immediately in the event of uterine hyperactivity, foetal distress or foetal heart abnormalities.

If regular contractions are not established after the infusion of 5 IU oxytocin, the attempt to induce labour should be terminated. It can generally be repeated on the following day, starting again from a rate of 1-4 milliunits/min.

In general, the dose of Oxytocin required for the augmentation of labor is less than that required for induction. Therefore, the initial infusion rate should be at the lower end of the recommended range.

Third stage of labour and puerperium (haemorrhage, subinvolution of the uterus):

5-10 IU by intramuscular injection or 5 IU by slow bolus intravenous injection. In patients given Oxytocin by drip to induce or stimulate labour, the infusion should be continued during the third stage.

Caesarean section:

5 IU by intravenous infusion or slow bolus intravenous injection after delivery of the foetus.

Instructions for use and handling

Infusion fluids:

Compatibility of oxytocin has been demonstrated with 0.9 % saline and 5 % dextrose solutions. Oxytocin is not compatible with solutions containing bisulphites and metabisulphites as preservatives.

Due attention should be paid to the choice of infusion fluid in individual patients. Generally, Oxytocin should be administered in a combination of dextrose and an electrolyte solution (such as 4 % dextrose in N/5 saline), or in an isotonic electrolyte solution. The use of 5% dextrose in water is not recommended.

Due to the absence of compatibility studies, Oxytocin must not be mixed with other medicinal products.

Preparation of infusion solution:

For drip infusion, the preparation of a solution containing 10 IU Oxytocin per 1 litre infusion fluid is recommended. To ensure even mixing of the drip solution, the bottle or bag must be turned upside down several times before use. Using this concentration, the recommended initial infusion rate of 1-4 mU/min corresponds to 0.1-0.4 mL/min, and the recommended maximum rate of 20 mU/min is reached at a rate of 2 mL/min.

When using a mechanical infusion pump which delivers smaller volumes than those given by drip infusion, a more concentrated oxytocin solution will be required. The concentration suitable for infusions within the recommended dosage range (1-20 mU/min) must be calculated according to the specification of the pump used.

Treatment of Incomplete or Inevitable Abortion:

Intravenous infusion with physiologic saline solution, 500 mL, or 5% dextrose in physiologic saline solution to which 10 units of oxytocin have been added should be infused at a rate of 20 to 40 drops/minute.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.

STORAGE

Store at a temperature between 2° and 8°C. Do not freeze.

PRESENTATION

Evatocin® (Oxytocin Injection B.P) is available in a ampoule containing Oxytocic activity 2 I.U. / 2 ml, 5 I.U. / ml & 10 I.U. / ml.

MADE IN INDIA BY:

NEON LABORATORIES LTD.

28, Mahal Ind. Estate, M. Caves Road,
Andheri (East), Mumbai - 400 093.

P31B/7

For the use only of a Registered Medical Practitioners or a Hospital or a Laboratory.

OXYTOCIN INJECTION B.P.

Evatocin®

COMPOSITION:

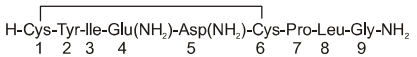
Each 2ml Ampoule contains:
Oxytocin B.P. as
Oxytocin Solution (Synthetic)
equivalent to 2 I.U. (3.33 mcg) Oxytocic units
Chlorobutanol Hemihydrate B.P. 0.5% w/v
(as preservative)
Water for Injections B.P. q.s.

Each ml contains:
Oxytocin B.P. as
Oxytocin Solution (Synthetic)
equivalent to 5 I.U. (8.33 mcg) Oxytocic Units
Chlorobutanol Hemihydrate B.P. 0.5% w/v
(as preservative)
Water for Injections B.P. q.s.

Each ml contains:
Oxytocin B.P. as
Oxytocin Solution (Synthetic)
equivalent to 10 I.U. (16.66 mcg) Oxytocic Units
Chlorobutanol Hemihydrate B.P. 0.5% w/v
(as preservative)
Water for Injections B.P. q.s.

DESCRIPTION

Oxytocin injection (synthetic) is a sterile, clear, colorless solution of oxytocin in Water for Injection, prepared by synthesis. Acetic acid may have been added for pH adjustment (pH 3.0 - 5.0). The structural formula is:



CLINICAL PHARMACOLOGY

Oxytocin injection (synthetic) acts on the smooth muscle of the uterus to stimulate contractions; response depends on the uterine threshold of excitability. It exerts a selective action on the smooth musculature of the uterus, particularly toward the end of pregnancy, during labor and immediately following delivery. Oxytocin stimulates rhythmic contractions of the uterus, increases the frequency of existing contractions and raises the tone of the uterine musculature. Synthetic oxytocin does not possess the cardiovascular effects, such as elevation of blood pressure, as exhibited by vasopressin found in posterior pituitary injection.

Pharmacokinetics

Plasma levels and onset/duration of effect:

Intravenous infusion: When Oxytocin is given by continuous intravenous infusion at doses appropriate for induction or augmentation of labor, the uterine response sets in