**Product Name:**  Oxytocin Injection, USP  
**Part Number:**  Y29-003-35A  
**Catalog Number:**  6271-01  
**Labeling Component:**  Vial Label  
**Drawing Specification Number:**  C-PK-LBL-2327, Rev. 1

**Comments:**  
Create labeling for new product.

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<tr>
<th>Initiated By:</th>
<th>Robert Herndon</th>
<th>Department: Regulatory Affairs</th>
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**Supercedes part number:** New Label

**Labeling Approvals**  
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<tr>
<td>Minebelle Fao</td>
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<tr>
<td>Pete Montalvo</td>
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<tr>
<td>Kristina McIntyre</td>
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Oxytocin Injection, USP Synthetic

Each mL contains: Oxytocin activity equivalent to 10 USP Oxytocin Units; 5.25 mg Chlorobutanol, NF (hemihydrate); Water for Injection q.s. Acetic acid may have been added for pH adjustment.

Usual Dosage: See Package Insert.

Store at controlled room temperature 15°-30°C (59°-86°F). Do not permit to freeze.
Product Name: Oxytocin Injection, USP
Part Number: Y29-003-36A  Catalog Number: 6275-01
Labeling Component: Vial Label
Drawing Specification Number: C-PK-LBL-2322, Rev. 1

Comments:
Revised Temp pee FDA letter.

Initiated By: Robert Herndon  Department: Regulatory Affairs

Supersedes part number: New Label

Labeling Approvals

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Oxytocin injection (1 USP unit/mL) is generally considered primary therapy. In second or inevitable abortion. In the first trimester, curettage may be required in such cases. Oxytocin injection (synthetic) is 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:

\[ \text{H-Cys-Tyr-Ile-Glu (NH}_2\text{-Cys-Pro-Leu-Gly-NH}_2\text{)} \]

1 2 3 4 5 6 7 8 9

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 the 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.

INDICATIONS AND USAGE

Postpartum
Oxytocin injection (synthetic) is indicated to produce uterine contractions during the third stage of labor and to control postpartum bleeding or hemorrhage.

CONTRAINDICATIONS

Oxytocin injection (synthetic) is contraindicated in any of the following conditions:

- Significant cephalopelvic disproportion;
- Unfavorable fetal positions or presentations which are undeliverable without conversion prior to delivery, i.e., transverse lie;
- In obstetrical emergencies where the benefit-to-risk ratio for either the fetus or the mother favors surgical intervention;
- In cases of fetal distress where delivery is not imminent;
- Prolonged use in uterine inertia or severe toxemia;
- Hypertonic uterine patterns;
- Patients with hypersensitivity to the drug;
- Induction or augmentation of labor in those cases where vaginal delivery is contraindicated, such as cord presentation or prolapse, total placenta previa, and vasa previa.

WARNINGS

Oxytocin injection (synthetic), when given for induction of labor or stimulation of labor, must be administered only by the intravenous route and with adequate medical supervision in a hospital.

PRECAUTIONS

General
All patients receiving intravenous oxytocin must be under continuous observation by trained personnel with a thorough knowledge of the drug and qualified to identify complications. A physician qualified to manage any complications should be immediately available.

When properly administered, oxytocin should stimulate uterine contractions similar to those seen in normal labor. Overstimulation of the uterus by improper administration can be hazardous to both mother and fetus. Even with proper administration and adequate supervision, hyper tonic contractions can occur in patients whose uteri are hypersensitive to oxytocin. Except in unusual circumstances, oxytocin should not be administered in the following conditions: prematurity, borderline cephalopelvic disproportion, previous major surgery on the cervix or uterus including Caesarean section, overtension of the uterus, grand multiparity or invasive cervical carcinoma. Because of the variability of the combinations of factors which may be present in the conditions listed above, the definition of “unusual circumstances” must be left to the judgment of the physician. The decision can only be made by carefully weighing the potential benefits which oxytocin can provide in a given case against rare but definite potential for the drug to produce hyper tonicity or tetanic spasms.

Maternal deaths due to hypertensive episodes, subarachnoid hemorrhage, rupture of the uterus, and fetal deaths due to various causes have been reported associated with the use of parenteral oxytocic drugs for induction of labor and for augmentation in the first and second stages of labor.

ADVERSE REACTIONS

The following adverse reactions have been reported:

- Anaphylactic reaction
- Nausea
- Postpartum hemorrhage
- Vomiting
- Cardiac arrhythmia
- Premature ventricular contractions
- Fatal a fibrinogenemia
- Pelvic hematoma
- Excessive dosage or hypersensitivity to the drug may result in uterine hypertonicity, spasms, uterine contraction, or rupture of the uterus.
- The possibility of increased blood loss and a fibrinogenemia 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:
- Bradycardia
- Neonatal retinal hemorrhage
- Premature ventricular contractions and other arrhythmias
- Permanent CNS or brain damage
- Fetal death

Due to use of oxytocin in the mother:
- Bradycardia
- Neonatal retinal hemorrhage
- Low Apgar scores at five minutes
- 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 Hg 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 of oxytocin is determined by uterine response. The following dosage information is based upon various regimens and indications in general use.

Induction or Stimulation of Labor

Intravenous infusion (drip method) is the only acceptable method of administration for the induction or stimulation of labor.

Accurate control of the rate of infusion flow is essential. An infusion pump or other such device and frequent monitoring of strength of contractions and fetal heart rate are necessary for the safe administration of oxytocin for the induction or stimulation of labor. If uterine contractions become too powerful, the infusion can be abruptly stopped, and oxytocic stimulation of the uterine musculature will soon wane.

An intravenous infusion of a non-oxytocin containing solution should be started. Physiologic electrolyte solutions should be used except under unusual circumstances.

To prepare the usual solution for the intravenous infusion—one mL (10 units) is combined aseptically with 1,000 mL of a non-hydrating diluent.

The combined solution, rotated in the infusion bottle to insure thorough mixing, contains 10 mU/mL. Add the container with dilute oxytocic solution to the system through the use of a constant infusion pump or other such device to control accurately the rate of infusion.

The initial dose should be no more than 1 to 2 mU/min. The dose may be gradually increased in increments of no more than 1 to 2 mU/min., until a contraction pattern has been established which is similar to normal labor.

The fetal heart rate, resting uterine tone, and the frequency, duration, and force of contractions should be monitored.

The oxytocin infusion should be discontinued immediately in the event of uterine hyperactivity or fetal distress. Oxygen should be administered to the mother. The mother and fetus must be evaluated by the responsible physician.

Control of Postpartum Uterine Bleeding

Intravenous infusion (drip method)

To control postpartum bleeding, 10 to 40 units of oxytocin may be added to 1,000 mL of a nonhydronating diluent and run at a rate necessary to control uterine atony.

Intramuscular administration

1 mL (10 units) of oxytocin can be given after the delivery of the placenta.

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.

HOW SUPPLIED

Oxytocin Injection, USP (Synthetic) is available as follows:

<table>
<thead>
<tr>
<th>NDC Number</th>
<th>Oxytocin Injection, USP</th>
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<tbody>
<tr>
<td>0703-6271-04</td>
<td>1 mL single dose vials packaged 25 per shelf pack</td>
</tr>
<tr>
<td>0703-6275-03</td>
<td>10 mL multiple dose vials packaged 10 per shelf pack</td>
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</tbody>
</table>

Discard unused portion.

Use only if solution is clear & seal intact.

STORAGE

Store at controlled room temperature 15°-30°C (59°-86°F).

Do not permit to freeze.

Issued: February 2006

SICOR Pharmaceuticals, Inc.
Irvine, CA 92618
Oxytocin Injection, USP Synthetic
10 units/1 mL
1 mL Single Dose Vial
For intravenous infusion or intramuscular injection.
Each mL contains: Oxytocin activity equivalent to 10 USP Oxytocin Units; 5.25 mg Chlorobutanol, NF (hemihydrate); Water for Injection q.s. Acetic acid may have been added for pH adjustment.

Usual Dosage: See Package Insert.

Store at controlled room temperature 15°-30°C (59°-86°F). Do not permit to freeze.