



FIGURE 20-2: Oxytocin

Labor **tocolytics** have an effect opposite that of oxytocin. They slow or stop uterine contractions and are indicated to prevent premature birth and allow the baby to mature, especially its lungs. Magnesium sulfate, indomethacin, and nifedipine are agents used as tocolytics. These medications are labeled for other uses, but they are commonly used to stop labor.

Magnesium sulfate is not proven to stop preterm labor, but it is commonly used to treat preeclampsia (a pregnancy-related condition) and premature labor. It may be given by the IV route for a short time (24 to 48 hours) and is thought to act as a calcium channel blocker, by keeping the calcium from the muscles, where it is needed for the uterus to contract. There is some belief that if other tocolytics are ineffective and premature birth is imminent, magnesium sulfate may reduce the possibility of cerebral palsy in the preterm infant. Side effects include hypotension, cardiac arrhythmias, and weakness.

A medication that can be taken orally for preterm labor is nifedipine (Adalat CC, Procardia). This medication is a calcium channel blocker, which relaxes smooth muscles such as the uterus. This medication is used when the cervix is minimally dilated, the amniotic sac remains intact, and other tocolytic medications have not been successful. Again, this medication is preferably used on a short-term basis (for 24 to 48 hours).

Indomethacin (Indocin, Tivorbex) is a strong NSAID that is administered by the IV route, orally, or as a rectal suppository. This drug is commonly used as an anti-inflammatory drug for joint conditions. Indocin has a strong antiprostaglandin effect, which is necessary for uterine contractions. Use should be limited to less than 7 days, to minimize effects on the developing fetus. This medication should not be used during the last 2 months of pregnancy because of the effects on fetal cardiac development.

■ INFERTILITY MEDICATIONS

Medications can also help women increase their fertility. Some medications are used to help ovaries release multiple eggs, to increase the chance that one will be fertilized and grow into a fetus. These drugs are referred to as ovulation stimulants. Clomiphene (Clomid, Serophene) is an example of a drug that increases the hormones FSH and LH, which initiate ovulation. This is the drug of choice when infertility has no obvious cause, and the medication is taken orally with minimal side effects. Menotropins (Humegon, Menopur, Pergonal, Repronex) are given as an injection that stimulates follicle ripening and release. This treatment is indicated in women who have functional ovaries but in whom hormonal stimulation is lacking. Chorionic gonadotropin (Ovidrel, Pregnyl) is given as an injection in combination with clomiphene to stimulate the release of a mature egg. The patient should be prepared for the possibility of not becoming pregnant or becoming pregnant with multiple fetuses when fertility drugs are used.

■ MEDICATIONS FOR OTHER FEMALE REPRODUCTIVE DISORDERS

Premenstrual dysphoric disorder (formerly premenstrual syndrome or PMS) is frequently treated with selective serotonin reuptake inhibitors (SSRIs). Serotonin levels are increased with the use of SSRIs, and this leads to alleviation of many symptoms of PMS such as hot flashes, depression, anxiety, and pain.