

Medication	Mechanism of Action/Use in OB	Nursing Considerations
Methotrexate	Slows rapidly growing cells by inhibiting dihydrofolate reductase, the enzyme that reduces folic acid to tetrahydrofolic acid. Used in OB to treat a pregnancy that is implanted outside of the uterus.	Assess patient for bleeding and infection.
Mifepristone	Works by blocking the effects of progesterone making the cervix and uterine vessels dilate resulting in uterine contractions. It is used in OB in combination with Misoprostol to terminate a pregnancy 10 weeks or less.	Advise female patients to avoid breast feeding while taking this medication.
Rhogam	Suppresses the immune response of Rh- individuals to Rh+ red blood cells. It is used in OB by being administered to women who have a Rh-negative blood type before delivery or if they experience any bleeding during their pregnancy	Administer at least one dose of RhoGAM Ultra-Filtered PLUS between 26 and 28 weeks of pregnancy.
Betamethasone	Binds to intracellular glucocorticoid receptors and suppresses inflammatory and immune responses by inhibiting neutrophil and monocyte accumulation at the inflammation site and suppressing their phagocytic and bactericidal activity, stabilizes lysosomal membranes, suppresses antigen response of macrophages and helper T cells, and inhibits synthesis of inflammatory response mediators, such as interleukins and prostaglandins. Used in OB to accelerate fetal organ (lungs) maturation if a mother were to go into preterm labor.	Assess for signs of pulmonary edema and hyperglycemia.

Indomethacin	Blocks activity of cyclooxygenase, the enzyme needed to synthesize prostaglandins, which mediate inflammatory response and cause local vasodilation, pain, and swelling. By blocking cyclooxygenase and inhibiting prostaglandins, this NSAID reduces inflammatory symptoms and helps relieve pain.	Anticipate a second dose of IV indomethacin if the patent ductus arteriosus fails to close or reopens. After 2 courses surgery may be performed.
Magnesium Sulfate	Binds with and activates opioid receptors in the brain and spinal cord to produce analgesia and euphoria.	Know that chronic maternal use of morphine during pregnancy can result in NOWS, which can be life-threatening if not recognized and treated properly. NOWS occurs when a newborn has been exposed to opioid drugs for a prolonged period while in utero.
Terbutaline Sulfate	Stimulates beta2-adrenergic receptors in the lungs, which is believed to increase production of cAMP. The increased cAMP level relaxes bronchial smooth muscles, therefore increasing bronchial airflow and relieving bronchospasm. It is used in OB to stop or prevent premature labor.	Assess patient's respiratory rate, depth and quality, oxygen saturation and activity tolerance at regular intervals because continuous uses of beta2-agonists for 12 months or longer can accelerate the decline in pulmonary function.
Hydralazine hydrochloride	May act in a manner that resembles organic nitrates and sodium nitroprusside, except that hydralazine is selective for arteries. It exerts a direct vasodilating effect on vascular smooth muscles, interferes with calcium movement in vascular smooth muscle by altering cellular calcium metabolism, dilates arteries which minimizes orthostatic hypertension and increases cardiac output and cerebral blood flow, causes reflex autonomic response that increases cardiac output, heart	Check blood pressure and pulse rate regularly and weigh patient daily during therapy. Take orthostatic vital signs.

	<p>rate, and left ventricular ejection fraction, and has a positive inotropic effect on the heart.</p> <p>Used to control high blood pressure in mother's during pregnancy, known as preeclampsia or eclampsia.</p>	
Labetalol	<p>Produces decreases in B/P without reflex tachycardia or significant reduction in heart rate through mixture of α-blocking, B-blocking effects; elevated plasma renin are reduced.</p>	<p>Check for renal and liver function test.</p>
Nifedipine	<p>Inhibits calcium ion influx across cell membrane during cardiac depolarization, produces relaxation of coronary vascular smooth muscle, dilates coronary vascular arteries, increases myocardial oxygen delivery in patients with vasospastic angina, dilates peripheral arteries.</p>	<p>Instruct patient to limit caffeine consumption; to avoid alcohol and OTC products unless directed by prescriber.</p>
Calcium gluconate	<p>Calcium needed for maintenance of nervous, muscular, skeletal systems, enzyme reactions, normal cardiac contractility, coagulation of blood; affects secretory activity of endocrine, exocrine glands.</p>	<p>Monitor calcium levels during treatment (9-10 mg/dl is normal level), urine calcium if hypercalciuria occurs.</p>
Misoprostol	<p>Misoprostol is a synthetic prostaglandin E1 analog that stimulates prostaglandin E1 receptors on parietal cells in the stomach to reduce gastric acid secretion.³ Mucus and bicarbonate secretion are also increased along with thickening of the mucosal bilayer so the mucosa can generate new cells.</p>	<p>Advise patient to avoid alcohol and foods that may cause an increase in GI irritation.</p>

Cervidil	<p>Dinoprostone administered intravaginally stimulates the myometrium of the gravid uterus to contract in a manner that is similar to the contractions seen in the term uterus during labor, resulting in the evacuation of the products of conception from the uterus. It is believed that dinoprostone exerts its uterine effects via direct myometrial stimulation, but the exact mechanism of action is unknown. Other suggested mechanisms include the regulation of cellular membrane calcium transport and of intracellular concentrations of cyclic 3',5'-adenosine monophosphate. Dinoprostone also appears to produce local cervical effects including softening, effacement, and dilation. The exact mechanism of action for this effect is also unknown, but it has been suggested that this effect may be associated with collagen degradation caused by secretion of the enzyme collagenase as a partial response to locally administered dinoprostone.</p>	<p>Patients with unexplained vaginal bleeding during this pregnancy.</p>
Methylergonovine	<p>Stimulates uterine and vascular smooth muscle, causing contractions, decreased bleeding, arterial vasoconstriction.</p>	<p>Monitor prolactin levels and for decreased breast milk production.</p>
Hepatitis B vaccine	<p>Provides passive immunity to hepatitis B.</p>	<p>Monitor weight daily, I&O; check for edema in feet, legs daily; check skin turgor, dryness of mucous membranes for hydration status.</p>

Erythromycin eye ointment	Binds to 50S ribosomal subunits of susceptible bacteria and suppresses protein synthesis.	Monitor electrolytes: potassium, sodium, chloride monthly if patient is on long-term therapy.
Phytonadione	Needed for adequate blood clotting (factors II, VII, IX, X).	Monitor pro-time during treatment (2-sec deviation from control time, bleeding time, and clotting time).
Prenatal vitamins	This medication is a multivitamin and iron product used to treat or prevent vitamin deficiency due to poor diet, certain illnesses, or during pregnancy. Vitamins and iron are important building blocks of the body and help keep you in good health.	Monitor liver functions.
MMR vaccine	Active immunization with the MMR vaccine stimulates the immune system to produce disease-specific antibodies by inducing a subclinical and noncommunicable infection with attenuated virus particles.	Make sure the patient isn't hypersensitive to eggs.