

Medications Commonly used in Maternal Newborn

Medication	Mechanism of Action/Use	Nursing considerations
Methotrexate	<p>Class: antiprotozoal, anti-infective.</p> <p>Used to treat septicemia and trichomonas virginals.</p> <p>It binds, degrades DNA structure, and inhibits bacterial nucleic acid synthesis.</p>	<p>Assess patient for allergic reactions: rash, urticaria, and pruritus.</p> <p>Assess patient for perineal itching.</p>
Mifepristone	<p>Class: antiprogestosterone steroids.</p> <p>Used to contrate uterus, caused cramping and bleeding.</p> <p>MOA: blocks progesterone, which is essential for development of pregnancy.</p>	<p>Monitor for diarrhea.</p> <p>Assess for post menopause bleeding.</p> <p>Avoid using concurrent magnesium-containing antacids because of increased incidence of diarrhea.</p>
Rhogam	<p>Class: immune globulins.</p> <p>Used to treat hemolytic disease.</p> <p>MOA: works by suppressing the immune response of Rh-negative individuals to RH- positive red blood cells.</p>	<p>Obtain history of systemic allergic reactions to human immune globulin preparations prior to drug administration.</p> <p>Send mother and newborn's blood to laboratory for crossmatch.</p>
Promethazine	<p>Class: Antiemetic agents, antihistamines 1st generation, sedative/hypnosis</p> <p>Used to treat allergic conditions, nausea, vomiting in pregnancy, motion sickness, hematologic disorders, and sedation. Also use to adjust anesthesia and analgesia.</p> <p>MOA: blocks the effect of histamine. Inhibitory effect on the chemoreceptor trigger zone in the medulla resulting in antiemetic.</p>	<p>Monitor respiratory status: rate, rhythm, increase in bronchial secretions, wheezing.</p> <p>Monitor I/O, monitor cardiac status: VS, palpitation, and increase pulse.</p>
Pyridoxine and Doxylamine	<p>Pyridoxine: vitamin B6</p> <p>Doxylamine: antihistamine.</p> <p>Used to control nausea and vomiting in pregnant women.</p> <p>MOA: They both work by blocking the action of certain natural substances in the body that contribute to nausea and vomiting.</p>	<p>Monitor Vit B6 level and nutrition status: yeast, liver, green vegetables</p> <p>Assess for Hct, Hgh.</p> <p>Monitor CNS side effects: irritability, drowsiness, dry mouth, and headache.</p>
Ondansetron	<p>Class: Antiemetic.</p> <p>Used for nausea and vomiting in pregnant women.</p>	<p>Assess for rash and bronchospasm.</p> <p>Assess for stiffness gait, tremors, and rigidity.</p>

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	MOA: Acts on the CNS transmitters to prevent vomiting.	
Betamethasone	Class: Glucocorticoids, corticosteroids, immunosuppressant, or anti-inflammatory. Used to increase lung development in preterm fetuses. MOA: activates natural substances in the skin to reduce swelling, redness, and itching. It uses to treat severe inflammation and condition requiring immunosuppression.	Monitor the weight, BP, and glucose level. Assess liver, kidney, and thyroid function.
Indomethacin	Class: NSAID, antirheumatic. Used in closure of patent ductus arteriosus in premature infants. MOA: inhibits prostaglandin synthesis by decreasing enzyme needed for biosynthesis, analgesic, anti-inflammatory, and antipyretic.	Assess for patient ductus arteriosus: respiratory rate, heart sounds. Assess for confusion, mood changes, hallucination. Assess renal, liver, and blood studies: BUN, creatinine, AST, ALT.
Magnesium Sulfate	Class: anticonvulsant. Used to treat hypomagnesemia, to prevent seizure in pregnant women with pre-eclampsia. MOA: works by reducing ischemia generated by cerebral vasospasm during eclamptic event.	Monitor serum magnesium level. Monitor kidney function: creatinine, BUN.
Terbutaline Sulfate	Class: selective B2-agonist, bronchodilator. Used to treat a bronchospasm. MOA: relaxes bronchial smooth muscle by direct action on B-adrenergic receptors through accumulation of cyclic AMP at B-adrenergic receptor sites.	Monitor respiratory function: vital capacity and ABGs. Assess for labor maternal heart rat, BP, contractions, labor, and hypoglycemia.
Glyburide	Class: antidiabetic Used to decrease polyuria, polydipsia in type 2 diabetes mellitus patients. MOA: causes functioning B cells in pancreas to release insulin, leading to drop in blood glucose.	Assess for hypo/hyperglycemia reactions that can occur soon after a meal. Monitor CBC, liver function tests, and BUN.
	Class: antidiabetic	Monitor Hgh A1C every 3 month.

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Insulin	Used to decrease blood glucose level in diabetes mellitus patients. MOA: decreases blood glucose by transporting of glucose into cells and converting glucose to glycogen.	Assess urine ketones during illness. Monitor for S/S of hypoglycemia: tachycardia, fatigue, slurred speech, confuse. Monitor for S/S of hyperglycemia: polydipsia, dry skin, lethargy, acetone breath.
Hydralazine hydrochloride	Antihypertensive/ vasodilators It used to treat high blood pressure. MOA: lowers blood pressure by exerting a peripheral vasodilating effect through a direct relaxation of vascular smooth muscle, thus improving perfusion to renal, uterine, and cerebral areas.	Assess patient feet and ankles for fluids retention. Monitor the patient weight.
Labetalol	Noncardioselective beta-blocker/ alpha1 blocker. Use: treat mild to moderate hypertension MOA: it works by affecting the response to nerve impulses in the heart and decreases the blood pressure.	Monitor BP at the beginning of the treatment and periodically. Monitor liver and renal function. Monitor for possible adverse effects such as gastric pain, flatulence, constipation, vertigo, dizziness, and fatigue. Monitor the patient's weight daily.
Nifedipine	Class: Calcium-channel blocker, antihypertensive. Use: control hypertension in pregnancy during pregnancy and to stop preterm labor. MOA: is through smooth muscle relaxation secondary to blockage of the slow calcium channels into the cells of the uterus, preventing contractions.	Monitor potassium, renal/liver function tests periodically during the treatment. Monitor I/O and cardiac status: B/P, pulse, respiration, and ECG.
Calcium gluconate	Class: Electrolyte's replacement-calcium product. Used to treat neonatal tetany, vit D deficiency, cardiac toxicity, and hypocalcemia. MOA: calcium needed to maintain the nerve, muscular, skeletal system, and normal cardiac contractility.	Monitor ECG for decreased QT interval and T-wave inversion. Assess for cardiac status.
Misoprostol	Class: Prostaglandin E, analog Used to prevent NSAID-induced	Monitor patient for GI symptoms: hematemesis, blood in the stools.

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	gastric ulcers MOA: Inhibits gastric acid secretion, protects gastric mucosa, increase bicarbonate.	Monitor for abdominal pain, cramping, and severe diarrhea.
Cervidil	Obstetrical drugs Used to initiate cervical ripening or induce labor. MOA: directly softens and dilates the cervix/ to ripen cervix and induce labor.	Monitor for allergic reactions: wheezing, dyspnea, and tightness in the throat and chest. Monitor excessive vaginal bleeding.
Penicillin G	Class: Broad-spectrum anti-infective. Used to treat respiratory tract infection, gonorrhea, pneumonia, and soft tissue infection. MOA: Interferes with cell wall replication of susceptible organism.	Assess patient for previous reaction to penicillin. Assess for allergic reactions: rash, pruritus, chills, and fever. Assess patient for signs and symptoms of infection.
Methylergonovine	Class: Ergot alkaloid It used to prevent and treat hemorrhage postpartum or after abortion, and uterine contractions. MOA: stimulates uterine and vascular smooth muscle, causing contractions, and decreased bleeding.	Assess baseline bleeding, uterus tone, and vital signs every 15 minutes. Monitor for possible adverse effects: hypertension, seizures, uterine cramping, nausea, vomiting, and palpitations.
Nalbuphine (Nubain)	Class: Opioid analgesic. Used for moderate to severe pain, supplement to anesthesia. MOA: depresses pain impulse transmission at the spinal cord level by interacting with opioid receptors.	Monitor the VS and assess for pain. Monitor any CNS changes: confusion, agitation, and headache.
Naloxone--	Class: Opioid antagonist/ Antidote. It used to treat a postoperative opioid-induced respiratory depression and opioid agonist overdose. MOA: competes with opioids at opioid receptor sites.	Assess for signs of opioid withdrawal in drugs 'dependent person: cramping, hypertension, anxiety, and vomiting. Monitor VS every 5 minutes Assess cardiac status: tachycardia
Fentanyl	Class: Opioid analgesic. It used to control moderate to severe pain. Adjunct to regional anesthesia and sedation.	Monitor all the Vital signs closely. Assess for any muscle rigidity. Monitor for CNS changes Monitor allergic reactions: rash,

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	MOA: Inhibits ascending pain pathways in CNS, increases pain threshold, alters pain perception by binding to opiate receptors.	urticaria. Assess for headache, migraine, and apnea.
Ibuprofen	Class: NSAID Use: relieve mild to moderate pain, migraine, musculoskeletal disorders. MOA: Inhibits COX-1, COX-2 by blocking arachidonate, analgesic, anti-inflammatory, and antipyretic.	Assess for infection Monitor liver function tests Monitor blood studies Assess for vision change: blurring, halos, and retinal damage.
acetaminophen	Class: Nonopioid analgesic. Used for mild to moderate pain or fever. MOA: It may block pain impulses peripherally that occur in response to inhibition of prostaglandin synthesis.	Monitor liver function studies: AST, ALT, bilirubin, and creatinine. Monitor blood studies: CBC and PT if the patient is on long-term therapy.
oxycodone	Class: Opiate analgesic Uses for treating moderate to severe pain. MOA: Inhibits ascending pain pathways in CNS, increases pain threshold, and alters pain perception.	Assess for pain's intensity, location, type, and characteristics. Monitor I/O: altered in output may indicate urinary retention. Assess for allergic reaction: skin rash.
hydrocodone	Class: Analgesic/nonopioid analgesic. Used for mild to moderate pain. MOA: Acts directly on cough center in medulla to suppress cough and binds to opiate receptors in the CNS to reduce pain.	Monitor any changes in CNS: dizziness, hallucination, drowsiness, euphoria, LOC. Monitor for allergic reactions: rash and urticaria.
ketorolac	Class: NSAID Mild to moderate pain (short term), decrease ocular itching. MOA: Inhibits prostaglandin synthesis by decreasing an enzyme needed biosynthesis, analgesic, and anti-inflammatory effects.	Assess patient's eyes: redness, swelling, tear, and itching. Assess for GI bleeding: blood in sputum, emesis, and stools.
Hepatitis B vaccine	Vaccine. Immunization against all	Assess the patient for Soreness, redness, swelling at the site of the

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	subtypes of hepatitis B virus, MOA: It Contains inactivated hepatitis B virus surface antigen and works by provoking the immune response	injection. Storage the vaccine in the cold area.
Erythromycin eye ointment	Class: Macrolides, antibiotic. Used for ocular hypertension and to treat superficial eye infections. MOA: Erythromycin inhibits protein synthesis without affecting nucleic acid synthesis.	Monitor intraocular pressure readings Monitor blood count: renal/hepatic function tests.
Phytonadione	Vitamin K, fat-soluble vitamin. It used to prevent hemorrhagic disease of the newborn. MOA: It is needed for adequate blood clotting (factors II, VII, IX, X).	Monitor PT during treatment Monitor bleeding. INR pulse, and BP. Assess for any black tarry stools and hematemesis.
Prenatal vitamins	Vitamins It helps to help prevent neural tube defects. It used to treat or prevent vitamin deficiency due to poor diet, certain illnesses, or during pregnancy. MOA: building blocks of the body and help keep you in good health.	Instruct the patient to take medication with food to avoid stomach upset. Avoid taking antacids, dairy products, tea, or coffee within 2 hours before or after taking prenatal vitamins.
MMR vaccine	Vaccines Immunity to measles, mumps, rubella, and varicella MOA: They stimulate our immune system to produce antibodies	Assess the patient for Soreness, redness, swelling at the site of the injection
Tetanus & reduced diphtheria toxoids/acellular pertussis vaccine	Vaccines Used for prophylactic treatment of wounds. MOA: It produces an active immune response of the body by developing antibodies and antitoxins against the toxoids and acellular pertussis antigens.	Assess the patient for Soreness, redness, swelling at the site of the injection. Assess the patient for fever, fatigue, headache, or body aches. Assess the patient for nausea, vomiting or diarrhea.
Lidocaine mucosal gel	Class: Antidysrhythmic Used to temporarily numb and relieve pain.	Monitor blood count, renal/hepatic function test, and serum electrolytes during long-term

