

Medication	Mechanism of Action/Use	Nursing considerations
Methotrexate	<p><b>Mechanism of Action:</b> Methotrexate causes an immunosuppressive effect by preventing the replication and function of T and B lymphocytes (Jones &amp; Bartlett Learning, 2022). Methotrexate also slows the growth of epithelial cells in psoriasis (Jones &amp; Bartlett Learning, 2022). Methotrexate also helps to prevent damage to joints by disrupting the inflammation process (Jones &amp; Bartlett Learning, 2022).</p> <p><b>Use:</b> Methotrexate is used to treat several different issues, including psoriasis, rheumatoid arthritis, and neoplastic diseases such as acute lymphoblastic leukemia, breast cancer, non-Hodgkin lymphoma, squamous cell carcinoma, etc. (Jones &amp; Bartlett Learning, 2022).</p>	<p>With this medication, you need to monitor results of the liver and renal function, CBC, chest x-ray, and urinalysis because this medication has the potential for severe adverse reactions. Educate the client to hydrate properly, taking in 2 to 3L a day. Monitor patient for any bleeding or infection (Jones &amp; Bartlett Learning, 2022).</p>
Mifepristone	<p><b>Mechanism of Action:</b> This medication acts as an antagonist of progesterone and glucocorticoid receptors. If this medication is given at a low dose, then it will bind to the progesterone receptors; at high doses, the medication will block cortisol at the glucocorticoid receptors, which leads to an increase in circulating cortisol, which results in controlling hyperglycemia in some patients (Autry &amp; Wadhwa, 2022). For abortions, this medication disrupts progesterone, which is the main hormone that prepares the endometrium for implantation and increases prostaglandin synthesis. The increase leads to menstrual bleeding and interruption of the endometrium which leads to termination (Autry &amp; Wadhwa, 2022).</p> <p><b>Use:</b> This medication is classified as a synthetic steroid and is most commonly</p>	<p>With this medication, you want to tell the patient to contact their provider if they experience any of the following: nausea, vomiting, weakness, diarrhea, abdominal pain, or fever more than 24 hours after taking mifepristone. These signs and symptoms could indicate sepsis (Autry &amp; Wadhwa, 2022). The nurse and or patient should monitor for and be aware of potential vaginal bleeding and uterine cramping that might occur (Autry &amp; Wadhwa, 2022).</p>

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	<p>given to clients seeking an abortion since it can medically induce abortions (Autry &amp; Wadhwa, 2022). This medication can also help treat client's with uterine leiomyomas, Cushing's syndrome, and hyperglycemia (Autry &amp; Wadhwa, 2022).</p>	
Rhogam	<p><b>Mechanism of Action:</b> This medication is preventing a reaction from occurring, this medication causes the immune response of the individual with Rh-negative blood to Rh-positive red blood cells to be suppressed (Multum, 2023a).</p> <p><b>Use:</b> RhoGAM ultimately is utilized to help prevent an allergic reaction or an overall immune response to Rh positive blood in individuals with an Rh negative blood type (Multum, 2023a). RhoGAM comes into play with pregnant mothers and their babies and individuals who might unfortunately get mismatched blood transfusions. This medication can also be used to treat a disorder called ITP, immune thrombocytopenic purpura (Multum, 2023a).</p>	<p>Clients who have hemolytic anemia or a deficiency in immune globulin A (IgA) with antibody to IgA should not be given RhoGAM (Multum, 2023a).</p>
Promethazine	<p><b>Mechanism of Action:</b> "Promethazine also prevents motion sickness, nausea, and vertigo by acting centrally on medullary chemoreceptive trigger zone by decreasing vestibular stimulation and labyrinthine function in the inner ear" (Jones &amp; Bartlett Learning, 2022). Promethazine reduces allergy signs and symptoms by competing against histamine for H<sub>1</sub>-receptor sites (Jones &amp; Bartlett Learning, 2022).</p> <p><b>Use:</b> Promethazine is used to treat/prevent nausea and vomiting caused by specific</p>	<p>Patients taking this medication will need to have their hematologic status monitored because it could potentially cause bone marrow depression. Patients need to watch for any bleeding or infection. After receiving this medication, patients should have an intradermal allergen test completed within 72 hours due to a significant adverse response (Jones &amp; Bartlett Learning, 2022). The elderly and children who have cardiovascular disease or hepatic dysfunction may be more sensitive to the effects of this medication, so administration to those specific</p>

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	types of anesthesia, motion sickness, and symptoms of an allergic reaction. Promethazine can provide obstetric sedation and helps with nighttime sleep (Jones & Bartlett Learning, 2022).	patients should be carefully considered. This medication could potentially cause adverse effects in patients with asthma and patients with seizure disorders (Jones & Bartlett Learning, 2022).
Pyridoxine and Doxylamine	<p>Mechanism of Action: These medications reduce the signs and symptoms of nausea and vomiting during pregnancy by preventing histaminergic signaling to the vomiting center in the medulla (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat women who are pregnant and are experiencing nausea and vomiting (Skidmore-Roth, 2020). This medication is also used to help treat individuals with vitamin B6 deficiencies, seizures, oral contraceptives, and isoniazid therapy (Skidmore-Roth, 2020).</p>	While the client begins to take pyridoxine they need to be assessed for pyridoxine deficiency which could potentially cause seizures, conjunctivitis, cheilitis, anemia, irritability, confusion, weakness, fatigue, and a red tongue, because of this their pyridoxine levels need to be monitored (Skidmore-Roth, 2020). Certain blood tests need to be monitored while a patient is taking these medications such as their hematocrit and hemoglobin. The patient needs to adhere to a nutritional diet that includes, green vegetables, liver, yeast, legumes, bananas, and whole grains (Skidmore-Roth, 2020).
Ondansetron	<p>Mechanism of Action: This medication inhibits nausea and vomiting by blocking serotonin centrally, peripherally, and even in the small intestine (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to prevent/treat nausea and vomiting, including severe vomiting in pregnancy and vomiting related to cancer chemotherapy and radiotherapy, gastroenteritis, alcoholism, and pruritis (Skidmore-Roth, 2020).</p>	Determine if pregnancy by the patient was planned or not. This medication should be avoided in clients who are pregnant, due to the potential of cardiac malformations and oral clefts occurring if taken in the first trimester. Careful use of medication is recommended during breastfeeding (Skidmore-Roth, 2020). Monitor for any reaction such as a skin rash or bronchospasm (Skidmore-Roth, 2020).
Betamethasone	<p>Mechanism of Action: “Crosses the cell membrane to attach to receptors to decrease inflammation, itching; inhibits multiple inflammatory cytokines” (Skidmore-Roth, 2020).</p> <p>Use: This medication is given to treat</p>	Assess skin for any reactions such as burning, pruritus, erythema, folliculitis, and dermatitis (Skidmore-Roth, 2020).

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Indomethacin	<p>inflammation/itching taking place on the skin or scalp (Skidmore-Roth, 2020).</p> <p><b>Mechanism of Action:</b> This medication blocks cyclooxygenase which is the enzyme that causes prostaglandin synthesis. By blocking and inhibiting both of those, this specific NSAID minimizes inflammatory symptoms and aids in pain relief (Jones &amp; Bartlett Learning, 2022).</p> <p><b>Use:</b> This medication is used to treat the following, symptoms of ankylosing spondylitis, osteoarthritis, rheumatoid arthritis, acute gouty arthritis, inflammation and shoulder pain from tendinitis or bursitis, and it also treats hemodynamically significant patent ductus arteriosus in premature infants that weigh 1 to 3.9 lbs. (Jones &amp; Bartlett Learning, 2022).</p>	<p>In a client who is receiving this medication for patent ductus arteriosus their respiratory rate, heart sounds and character need to be assessed (Skidmore-Roth, 2020). This medication should be given cautiously to women who are pregnant or who are breastfeeding. Do not give indomethacin after 30 weeks gestation, only use if the benefits of this medication outweigh the risk for the fetus. This medication is excreted through breast milk so it should be avoided in breastfeeding mothers (Skidmore-Roth, 2020). This medication has a black box warning for clients who have or had a CV, cardiac disease, any thrombotic events such as an MI or stroke and should not be used on a client undergoing CABG surgery (Skidmore-Roth, 2020).</p>
Magnesium Sulfate	<p><b>Mechanism of Action:</b> This medication increases the osmotic pressure which draws fluid into the colon, and neutralizes hydrochloric acid (Skidmore-Roth, 2020).</p> <p><b>Use:</b> This medication is used to treat the following, constipation, dyspepsia, eclampsia, anticonvulsant for preeclampsia, persistent pulmonary hypertension of the newborn (PPHN), premature labor, seizure prophylaxis, cardiac arrest, and ventricular fibrillation/tachycardia (Skidmore-Roth, 2020).</p>	<p>Patients who are experiencing eclampsia and have been given this medication need to be on seizure precautions, need to have their blood pressure and an ECG done, monitor for magnesium toxicity, intake/output ratio, they could experience confusion, thirst, and a decrease in their reflexes (Skidmore-Roth, 2020). This medication should only be used if clearly stated, chloride is contraindicated in labor. If this medication is given 2 hours prior to birth it will appear in breast milk (Skidmore-Roth, 2020).</p>
Terbutaline Sulfate	<p><b>Mechanism of Action:</b> "Relaxes bronchial smooth muscle by direct action on B<sub>2</sub>-adrenergic receptors through the accumulation of cAMP at</p>	<p>This medication has a black box warning having to do with labor. This medication can effect maternal heart rate, her blood pressure,</p>

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	<p>B-adrenergic receptor sites (Skidmore-Roth, 2020).</p> <p>Use: This medication is used for bronchospasms, premature labor, and nonresponsive status asthmaticus in children (Skidmore-Roth, 2020).</p>	<p>contractions, the fetal heart rate, and can prevent uterine contractions, need to monitor the mother for hypoglycemia. The injectable product should not be used to treat or prevent anything over a 72 hour preterm labor. The oral medication should not be used for preterm labor and the mother should avoid breastfeeding (Skidmore-Roth, 2020). This medication can also cause paradoxical bronchospasm, you need to be alert for dyspnea, or any wheezing (Skidmore-Roth, 2020).</p>
Glyburide	<p>Mechanism of Action: This medication makes working beta cells in the pancreas to release insulin, which results in a drop in blood glucose levels (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat type 2 diabetes and gestational diabetes (Skidmore-Roth, 2020).</p>	<p>Monitor patient for a hyper/hypoglycemic reaction taking place after meals (Skidmore-Roth, 2020). Patients taking glyburide will need to get their A1C checked regularly (Skidmore-Roth, 2020). For mothers breastfeeding, the infant may be hypoglycemic, the mother should take insulin during pregnancy (Skidmore-Roth, 2020).</p>
Insulin	<p>Mechanism of Action: Lowers the blood glucose level by transporting glucose to glycogen, which indirectly raises blood pyruvate and lactate and lowers phosphate and potassium (Skidmore-Roth, 2020).</p> <p>Use: Insulin is used to treat the following conditions, type 1 diabetes mellitus, type 2 diabetes mellitus, gestational diabetes, and a specific insulin, insulin lispro may be used along with sulfonylureas in kids that are 3 years and older (Skidmore-Roth, 2020).</p>	<p>Patients taking insulin will need to have their fasting blood glucose assessed and have their A1C taken as ordered by the provider (Skidmore-Roth, 2020). Ketones in the patient's urine may increase with illness. Doses of insulin may increase in times of illness, surgery, or stress (Skidmore-Roth, 2020).</p>
Hydralazine hydrochloride	<p>Mechanism of Action: This medication causes the arteriolar smooth muscle to open up by relaxation, which leads to lowering of the blood pressure with an increase in</p>	<p>Clients taking this medication will need to have their electrolyte and blood tests ran regularly (Skidmore-Roth, 2020). Obtain intake and output measurements, daily weight,</p>

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	<p>heart rate, cardiac output, and stroke volume (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat hypertensive emergencies, hypertension, heart failure, and preeclampsia (Skidmore-Roth, 2020).</p>	<p>assess for edema in feet and legs regularly, and skin turgor (Skidmore-Roth, 2020). For individuals who are pregnant only use medication if the benefits are greater than the risk to the fetus (toxicity has occurred in the 3<sup>rd</sup> trimester); if breastfeeding use caution (Skidmore-Roth, 2020).</p>
Labetalol	<p>Mechanism of Action: This medication effects the blood pressure by lowering it without reflex tachycardia or an excessive drop in heart rate through a combination of alpha-blocking and beta-blocking effects (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat mild, moderate, and severe hypertension (Skidmore-Roth, 2020). This medication has also been used to induce hypotension in some individuals (Skidmore-Roth, 2020).</p>	<p>Obtain base line blood pressure and assess apical/radial pulse before beginning treatment, after being on treatment note the pulse, rhythm, rate, and quality (Skidmore-Roth, 2020). This medication should not be discontinued abruptly. This medication should be gradually tapered off over 2 weeks (Skidmore-Roth, 2020).</p> <p>For individuals who are pregnant only use medication if the benefits are greater than the risk to the fetus, if breastfeeding use caution (Skidmore-Roth, 2020).</p>
Nifedipine	<p>Mechanism of Action: This medication prevents the transportation of calcium ions across the cell membrane during cardiac depolarization which will lead to the dilation of coronary and peripheral arteries, the relaxation of coronary vascular smooth muscle, and an increase in myocardial oxygen that is delivered in clients with vasospastic angina (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat hypertension, chronic stable angina pectoris, and variant angina. This medication has also been used to treat preterm labor, acute hypertension in pediatric patients, migraines, diabetic nephropathy, proteinuria, and hiccups (Skidmore-Roth, 2020).</p>	<p>Monitor for heart failure such as signs and symptoms that include peripheral edema, dyspnea, JVD, rales, weight gain of 5 or more lbs., daily weight, and intake and output measurements (Skidmore-Roth, 2020).</p> <p>Assess client for any skin issues such as a rash that starts abruptly, fever, lesions that might have pustules, stop giving medication if fever or sever rash is present (Skidmore-Roth, 2020).</p> <p>Avoid using this medication in older adults, could potentially cause hypotension or myocardial ischemia (Skidmore-Roth, 2020).</p> <p>For individuals who are pregnant only use medication if the benefits are greater than the risk to the fetus. Do not breastfeed while on this</p>

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Calcium gluconate	<p><b>Mechanism of Action:</b> This medication causes the levels of intracellular and extracellular calcium to rise, which results in the maintenance of homeostasis. This primarily is beneficial in the musculoskeletal and nervous system (Jones &amp; Bartlett Learning, 2022). This medication also helps with stomach acid by acting as a neutralizing agent to ease the client's discomfort they are experiencing due to the heightened acidity (Jones &amp; Bartlett Learning, 2022).</p> <p><b>Use:</b> This medication has been used to treat the following conditions, hypocalcemia, hyperkalemia, hyperphosphatemia (Jones &amp; Bartlett Learning, 2022). This medication has been used to provide additional calcium during a transfusion (Jones &amp; Bartlett Learning, 2022). This medication has also been used to treat indigestion and heartburn due to its antacid effects it has (Jones &amp; Bartlett Learning, 2022).</p>	<p>medication (Skidmore-Roth, 2020).</p> <p>During the administration process of the medication frequently check I.V. site for any signs of infiltration since calcium can cause necrosis. If there are signs of infiltration stop the administration of the medication and notify the provider (Jones &amp; Bartlett Learning, 2022). Clients taking this medication will need to have their serum calcium levels monitored. Provide additional assessments such as Chvostek and Trousseau's sign to verify levels are normal (Jones &amp; Bartlett Learning, 2022). Be aware that this medication can lead to aluminum toxicity due to the concoction containing 100 mcg per liter of aluminum (Jones &amp; Bartlett Learning, 2022).</p>
Misoprostol	<p><b>Mechanism of Action:</b> "Misoprostol is a synthetic prostaglandin E1 analog that inhibits basal and nocturnal gastric acid secretion through direct stimulation of prostaglandin E1 receptors on parietal cells in the stomach" (Krugh &amp; Maani, 2023). This specific action prevents the secretion of stomach acid secondary to stimulation from caffeine, alcohol, food, NSAIDs, etc. (Krugh &amp; Maani, 2023). "Uterotonic effects are caused by prostaglandin binding to smooth muscle cells in the uterine lining; this is responsible for its abortifacient</p>	<p>You will want to monitor uterine activity and the fetal pulse before and after administering this medication to the client (Krugh &amp; Maani, 2023). This medication has a black box warning stating, this medication should be avoided by pregnant women due to the medication potentially causing miscarriage, abortion, and birth defects (Drugs.com, 2023a). Pregnant women should avoid this medication to treat gastric ulcers (Drugs.com, 2023a).</p>

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	<p>properties, as well as its ability to promote labor and cervical ripening” (Krugh &amp; Maani, 2023).</p> <p>Use: This medication has been approved by the FDA to prevent/treat gastric ulcers that were induced by NSAID use (Krugh &amp; Maani, 2023). This medication has been used to treat several other conditions around the world, however these are not considered to be FDA approved. Those include, abortions in the 1<sup>st</sup> and 2<sup>nd</sup> trimester, inducing the cervix to be ready for labor, inducing labor with full-term pregnancies, and after labor this medication can be helpful with postpartum uterine bleeding (Krugh &amp; Maani, 2023).</p>	
Cervidil	<p>Mechanism of Action: This medication provokes uterine contractions which ultimately leads to an abortion (Skidmore-Roth, 2020).</p> <p>Use: This medication is used for the following abortion in the 2<sup>nd</sup> trimester, missed abortion, expelling the uterine contents related to a fetal death up to 28 weeks, effacing and dilating the cervix in pregnancy at term, and benign hydatidiform mole (Skidmore-Roth, 2020).</p>	<p>This medication has a black box warning that states, “use only with emergency equipment nearby, by a clinician experiences when used in pregnancy termination; complete abortion should result within 17 hr; use only in 12 – 20 wk or up to 28 wk for removal of remaining material after miscarriage” (Skidmore-Roth, 2020). Monitor for vaginal discharge and amount, if any itching or irritation occurs this could suggest a vaginal infection is present (Skidmore-Roth, 2020). If this medication is being utilized to promote cervical ripening then monitor dilation and effacement of the cervix and uterine contractions, observe for contractions longer than one minute, and assess fetal heart beat (Skidmore-Roth, 2020).</p>
Penicillin G	<p>Mechanism of Action: This medication impedes the cell-wall replication process of the infectious organism which leads to lysis of the</p>	<p>Monitor the following signs and symptoms of the client’s infection including, any presence of fever, characteristics of any wounds,</p>

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	<p>cell and ultimately the death of the cell (Skidmore-Roth, 2020).</p> <p>Use: This medication has been used to treat the following, respiratory infections, otitis media, pneumonia, scarlet fever, erysipelas, skin and soft-tissue infections, and gonorrhea (Skidmore-Roth, 2020).</p>	<p>sputum, bowel movements, and urine before, during, and after medication treatment. Do not give client the medication before a culture is obtained (Skidmore-Roth, 2020).</p> <p>Monitor client for input and output measurements, report any blood in the urine or oliguria since this medication is nephrotoxic in high doses. Renal tests such as a urinalysis, blood and protein need to be taken (Skidmore-Roth, 2020). While on this medication a liver panel (AST, ALT, and Bili) and blood tests (RBC, WBC, Hct, and Hgb) need to be monitored (Skidmore-Roth, 2020).</p>
Methylergon ovine	<p>Mechanism of Action: This medication provokes uterine, smooth, and vascular muscle causing contractions to take place and decreases bleeding by narrowing of the blood vessels (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to prevent/treat hemorrhages related to postpartum and postabortion, and it also treats uterine contractions (Skidmore-Roth, 2020).</p>	<p>Monitor client's blood pressure, heart rate, quantity and character of vaginal bleeding, observe for signs of hemorrhage (Skidmore-Roth, 2020).</p> <p>This medication is not suggested to be used during pregnancy, only during an abortion procedure or during delivery of the baby to minimize the risk of postpartum hemorrhage. Mother may breastfeed after 1 week postpartum (Skidmore-Roth, 2020).</p>
Nalbuphine (Nubain)	<p>Mechanism of Action: This medication reduces the transmission of pain impulses located at the spinal cord and interacting with opioid receptors (Skidmore-Roth, 2020).</p> <p>Use: This medication is used as a supplemental option to anesthesia and treats moderate to severe pain (Skidmore-Roth, 2020).</p>	<p>Assess client for any pain such as, location, type, intensity of pain before administration and after administration of medication , if breastfeeding use caution (Skidmore-Roth, 2020).</p> <p>Monitor patient for any withdrawal reactions in an opiate-dependent clients including pulmonary embolism, vascular occlusions, ulcerations, abscesses, seizures, nausea, and vomiting, if breastfeeding use caution (Skidmore-Roth, 2020).</p> <p>If client is pregnant only use if</p>

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Naloxone	<p><b>Mechanism of Action:</b> This medication competes against opioids at opiate receptor sites (Skidmore-Roth, 2020).</p> <p><b>Use:</b> This medication is used on a client during an episode of respiratory depression induced by opioids and used to treat an opiate agonist overdose (Skidmore-Roth, 2020).</p>	<p>clearly called for, if breastfeeding use caution (Skidmore-Roth, 2020).</p> <p>If client is experiencing withdrawal monitor client for the following signs and symptoms, cramping, anxiety, vomiting, and hypertension (Skidmore-Roth, 2020).</p> <p>If client is experiencing respiratory issues monitor client for the following, respiration rate, rhythm, and character, and respiratory depression. If client’s respiration rate is 10 breaths or less a minute administer naloxone and monitor client’s level of consciousness, blood pressure, and ECG (Skidmore-Roth, 2020).</p> <p>If client is pregnant only use if clearly called for, if breastfeeding use caution (Skidmore-Roth, 2020).</p>
Fentanyl	<p><b>Mechanism of Action:</b> “Inhibits ascending pain pathways in CNS, increases pain threshold, alters pain perception by binding to opiate receptors” (Skidmore-Roth, 2020).</p> <p><b>Use:</b> This medication is used to treat moderate to severe pain, in preoperative and postoperative situations and is used as a sedative (Skidmore-Roth, 2020).</p>	<p>For individuals who are pregnant only use medication if the benefits are greater than the risk to the fetus. If this medication is used for a prolonged time period it could cause an adverse effect to the fetus leading to neonatal withdrawal syndrome (Skidmore-Roth, 2020).</p> <p>This medication is excreted through breast milk so it should be avoided in breastfeeding mothers (Skidmore-Roth, 2020).</p> <p>Monitor patient for any of the following central nervous system alterations, level of consciousness, dizziness, drowsiness, pupil reaction, hallucinations, and feelings of euphoria (Skidmore-Roth, 2020).</p>
Ibuprofen	<p><b>Mechanism of Action:</b> This medication works by “inhibiting COX-1 and COX-2 by blocking arachidonate” (Skidmore-Roth, 2020).</p> <p><b>Use:</b></p>	<p>This medication should not be used after 30-week gestation. Only use this medication if the benefits outweigh the risk to the fetus prior to 30-week gestation (Skidmore-Roth, 2020).</p>

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	<p>This medication is used to treat the following, migraines, fever, tooth pain, rheumatoid arthritis, osteoarthritis, musculoskeletal disorders, dysmenorrhea, and patent ductus arteriosus (Skidmore-Roth, 2020).</p>	<p>Do not breastfeed while taking ibuprofen (Skidmore-Roth, 2020). For clients experiencing dysmenorrhea give at the start of menstrual cycle (Skidmore-Roth, 2020). Clients taking ibuprofen need to monitor their blood, renal and hepatic function by focusing on their Hbg, BUN, creatinine, ALT, AST, and stool guaiac before and after treatment (Skidmore-Roth, 2020).</p>
acetaminophen	<p>Mechanism of Action: This medication has the capability of blocking peripheral pain impulses that take place due to the prevention of prostaglandin synthesis (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat headaches, mild to moderate pain, tooth pain, dysmenorrhea, osteoarthritis, and myalgia (Skidmore-Roth, 2020).</p>	<p>If client is taking for pain, assess for location and type of pain, the intensity, and how long it lasts, and any relieving or aggravating elements to the pain (Skidmore-Roth, 2020). Clients taking this medication need to have hepatic (ALT, AST, bilirubin, and creatinine) and renal tests (BUN, urine creatinine, occult blood, and albumin) completed if on a long period of time; could potentially cause hepatic toxicity and renal failure (Skidmore-Roth, 2020). Clients who are pregnant or breastfeeding need to use caution while using this medication; use only if clearly stated (Skidmore-Roth, 2020).</p>
oxycodone	<p>Mechanism of Action: “Inhibits ascending pain pathways in CNS, increases pain threshold, alters pain perception” (Skidmore-Roth, 2020).</p> <p>Use: This medication is used to treat clients experiencing moderate to severe pain (Skidmore-Roth, 2020).</p>	<p>If client is taking this medication for pain, you need to assess the following for the client, location and type of pain, intensity, and character of pain. Determine if the client needs any pain medication by the pain scale (Skidmore-Roth, 2020). If the client is pregnant only use this medication if the benefits outweigh the risks of the fetus; avoid breastfeeding while on this medication due to it being excreted in breast milk (Skidmore-Roth, 2020).</p>

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		Long term use of this medication while pregnant may result in neonatal opioid withdrawal syndrome (Skidmore-Roth, 2020).
hydrocodone	<p>Mechanism of Action:            “Binds to and activates opioid receptors at sites in the periaqueductal and periventricular gray matter, the ventromedial medulla, and the spinal cord to produce pain relief” (Jones &amp; Bartlett Learning, 2022).</p> <p>Use:            This medication is used to treat moderate to severe pain (Skidmore-Roth, 2020).</p>	<p>If client is taking medication for pain, you need to assess for the type and location of the pain, the intensity, and any other characteristics before and after administering the medication (Skidmore-Roth, 2020).</p> <p>If client is pregnant and takes this medication they need to monitor the neonate for withdrawal symptoms such as hyperactivity, irritability, unusual sleep patterns, tremors, vomiting, diarrhea, and high-pitched crying) (Skidmore-Roth, 2020).</p> <p>If the client is pregnant, only use this medication if the benefits outweigh the risks for the fetus due to the potential risk of neonate withdrawal syndrome with long-periods of use (Skidmore-Roth, 2020).</p> <p>Mothers who are breastfeeding should not use this medication due to the medication being excreted in the breast milk (Skidmore-Roth, 2020).</p>
ketorolac	<p>Mechanism of Action:            This medication works by “reversibly inhibiting cyclooxygenase-1 and -2 (COX-1 and COX-2) enzymes” (Skidmore-Roth, 2020).</p> <p>Use:            This medication is used to treat temporary mild to moderate pain (Skidmore-Roth, 2020).</p>	<p>If client is taking this medication you will need to monitor patient for bleeding, observe for any bleeding, bruising, occult blood in urine and stool guaiac (Skidmore-Roth, 2020).</p> <p>You should not use this medication intrathecally or epidurally due to the presence of alcohol in the medication (Skidmore-Roth, 2020).</p> <p>Monitor signs and symptoms of patient for hepatic dysfunction while taking this medication including, having a yellow sclera and skin, jaundice, and clay-colored stools (Skidmore-Roth, 2020).</p>
Hepatitis B vaccine	<p>Mechanism of Action:            The strain in the vaccine itself is</p>	Obtain consent from client before administering the vaccination

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	<p>classified as a non-infectious subunit of the Hepatitis B virus which results in an active immunity. The immunization produces antibodies that focus on the surface antigen or the outer protein coat which, results in protection from all genotypes of the virus (Hodgens &amp; Marathi, 2023).</p> <p>Use: This vaccine is used to prevent any infection by all subtypes of the hepatitis B virus (Hodgens &amp; Marathi, 2023).</p>	<p>(Hodgens &amp; Marathi, 2023). For newborns you will administer the vaccine within the first 24 hours of birth via IM injection on the anterolateral thigh (Hodgens &amp; Marathi, 2023).</p>
<p>Erythromycin eye ointment</p>	<p>Mechanism of Action: This medication works by adhering to the 50S ribosomal subunit of the 70S ribosome in several kinds of organisms such as, gram-negative and gram-positive organisms and also aerobic and anaerobic organisms. This specific action the medication causes results in the synthesis prevention of RNA-dependent protein that takes place in bacterial cells leading to their death (Jones &amp; Bartlett Learning, 2022).</p> <p>Use: This medication is used to treat newborns who have contracted pneumonia via Chlamydia trachomatis and newborns with conjunctivitis (Jones &amp; Bartlett Learning, 2022).</p>	<p>Infantile hypertrophic pyloric stenosis has occurred in infants taking this medication, you need to monitor the infant for any vomiting or irritability related to feeding (Jones &amp; Bartlett Learning, 2022). This drug should be used with caution in clients who have liver impairment since this medication is metabolized in the liver (Jones &amp; Bartlett Learning, 2022). Monitor clients for signs and symptoms of fluid volume overload such as, crackles and sudden dyspnea during I.V. administration (Jones &amp; Bartlett Learning, 2022). In elderly clients and clients who receive a minimum of 4 g a day you should assess the clients hearing on a regular basis. Impaired hearing can occur as quickly as 36 hours and take up to 8 days to effect the client. Hearing impairment typically improves within 1 to 14 days after the client stops taking the medication (Jones &amp; Bartlett Learning, 2022).</p>
<p>Phytonadione</p>	<p>Mechanism of Action: This medication operates as a cofactor that is a requirement for the activity of vitamin K-dependent proteins, those</p>	<p>After administration of medication the client's INR will need to be monitored to determine the effectiveness of the medication and</p>

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	<p>include factors 2, 7, 9 and 10, and also proteins C and S. Clients with a vitamin K deficiency taking phytonadione will restore their vitamin K levels (Ingold &amp; Sergent, 2023).</p> <p>Use: This medication has been used to treat clients with a vitamin K deficiency issue, which is a primary issue for bleeding and intracranial hemorrhages (Ingold &amp; Sergent, 2023).</p>	<p>if the client may need an additional dose (Ingold &amp; Sergent, 2023). Be aware of signs and symptoms of vitamin K toxicity and know that the majority of those cases occur by I.V. administration (Ingold &amp; Sergent, 2023). Taking vitamin K supplements during pregnancy is not recommended due to reports of the medication causing the baby to be jaundice (Mayo Clinic, 2023).</p>
Prenatal vitamins	<p>Mechanism of Action: The prenatal vitamin is essentially a multivitamin that benefits the specific vitamins and minerals a female may need if she is wanting to become pregnant. These multivitamins are typically concentrated in, metabolized and stored in the liver, especially the fat-soluble vitamins (National Institute of Diabetes and Digestive and Kidney Diseases, 2021).</p> <p>Use: These vitamins are used to give a female additional vitamins and minerals that are necessary before, during, and after the pregnancy is complete (Multum, 2023b).</p>	<p>A client taking prenatal vitamins will need to monitor their sodium levels (Multum, 2023b). Clients who have Wilson's disease, vitamin B12 deficiency or pernicious anemia, cirrhosis of the liver, or an iron overload disorder should avoid taking prenatal vitamins (Multum, 2023b).</p>
MMR vaccine	<p>Mechanism of Action: This vaccine will invigorate the immune system to increase protection against measles, mumps, and rubella (Bailey &amp; Sapro, 2022).</p> <p>Use: This routine vaccine contains live-attenuated strains combined together and is used to prevent individuals from contracting any of the following infectious diseases, measles, mumps, and rubella (Bailey &amp; Sapro, 2022).</p>	<p>If client is pregnant or trying to become pregnant receiving the vaccine is not recommended. The client should be encouraged to wait 28 days after vaccination to become pregnant due to the possibility of congenital rubella (Bailey &amp; Sapro, 2022). Monitor patient after administration for any signs or symptoms of anaphylaxis or seizure (Bailey &amp; Sapro, 2022). This vaccine contains a very small amount of poultry properties such as egg or chicken protein so be vigilant for an allergic reaction (Bailey &amp;</p>

Medication	Mechanism of Action/Use	Nursing considerations
<p>Tetanus &amp; reduced diphtheria toxoids/acellular pertussis vaccine</p>	<p><b>Mechanism of Action:</b>                      This vaccine is a combination type vaccine that protects us against diphtheria, tetanus, and pertussis. The combination vaccine specifically contains inactivated toxins of diphtheria and tetanus and also acellular pertussis antigens. (Ogden et al., 2022). The vaccine causes an active immune response by the body leading to the development of antitoxins and antibodies against the toxoids and acellular pertussis antigens (Ogden et al., 2022).</p> <p><b>Use:</b>                      This vaccine is used to prevent the following diseases, diphtheria, tetanus, and pertussis (Ogden et al., 2022).</p>	<p>Sapra, 2022).</p> <p>Infants and children who have been diagnosed with neurological diseases or seizure disorders need to wait to get the vaccine with pertussis components until they have a treatment regimen in place (Ogden et al., 2022).</p> <p>A special type of reaction can occur with this vaccine, called an Arthus reaction, which is caused by a reaction to the diphtheria or tetanus toxoids within the vaccine. This reaction can involve swelling, severe pain, edema, induration, hemorrhage, and even necrosis (Ogden et al., 2022).</p> <p>Vaccines that contain tetanus toxoids can lead to brachial neuritis based on reports from the WHO (Ogden et al., 2022). Signs and symptoms of brachial neuritis include severe pain located in the shoulder or upper arm, pain affecting one side of the body, and lack of muscle control in the arm.</p>
<p>Lidocaine mucosal gel</p>	<p><b>Mechanism of Action:</b>                      “Lidocaine stabilizes the neuronal membrane by inhibiting the ionic fluxes required for the initiation and conduction of impulses, thereby effecting local anesthetic action” (Drugs.com, 2023b).</p> <p><b>Use:</b>                      This medication is used to as an anesthetic for skin and mucous membranes and also used to provide pain relief related to postherpetic neuralgia (Jones &amp; Bartlett Learning, 2022).</p>	<p>Monitor client’s level of lidocaine if they have severe renal or hepatic impairments, this could lead to lidocaine toxicity (Jones &amp; Bartlett Learning, 2022).</p> <p>Monitor the client’s lidocaine level, the therapeutic range for lidocaine is 2 – 5 mcg/mL (Jones &amp; Bartlett Learning, 2022).</p> <p>The client’s BUN, serum creatinine, vitals, and electrolytes need to be closely monitored before and after administration of medication (Jones &amp; Bartlett Learning, 2022).</p> <p>Be aware of potential electrolyte complications and fluid volume overload when administering this medication to clients with compromised myocardial function (Jones &amp; Bartlett Learning, 2022).</p>

Medication	Mechanism of Action/Use	Nursing considerations
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Medication	Mechanism of Action/Use	Nursing considerations
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