ADMINISTERING MEDICATIONS BY INJECTION pdf

1: Background | Injection Safety | CDC

A subcutaneous injection is a method of administering medication. Subcutaneous means under the skin. In this type of injection, a short needle is used to inject a drug into the tissue layer.

Intra-articular Intrathecal The oral route of administration is the preferred route of administration for all clients but the oral route is contraindicated for clients adversely affected with a swallowing disorder or a decreased level of consciousness. Oral medications can, at times, be crushed and put into something like apple sauce, for example, for some clients who have difficulty swallowing pills and tablets, but, time release capsules, enteric coated tablets, effervescent tablets, medications irritating to the stomach, foul tasting medications and sublingual medications should not be crushed. An alternative route for some clients is a liquid form of the medication. Liquid oral medications are given with a spoon or a cup, the vastus lateralis, rectus femoris and ventrogluteal sites are used for intramuscular injections, the gluteus maximus muscle can be used after the toddler has been walking for at least a year, flavors can be used to improve the taste of oral medications, and the dosages continue to be based on kilograms of weight. Preschool and school age children: These children are usually able to take capsules and tablets, the gluteus maximus muscle and the deltoid muscle can now be used for intramuscular injections, in addition to the vastus lateralis, rectus femoris and ventrogluteal intramuscular injection sites, and dosages continue to be based on kilograms of weight. Adolescents get adult dosages, routes and forms of medications. Adult dosages may be decreased because the normal physiological changes of the aging process make this age group more susceptible to side effects, adverse drug reactions, and toxicity and over dosages. Renal function is decreased which can impair the elimination and clearance of medications, the liver function can be decreased, absorption in the gastrointestinal tract may be decrease, and the distribution of medications can be decreased because the elderly client may have decreased serum albumin, for example. For example, the risk of toxicity is increase when the elderly client is taking aminoglycosides, thiazides, a nonsteroidal anti-inflammatory medication, heparin, long acting benzodiazepines, warfarin, isoniazid and many antiarrhythmics. Nurses must, therefore, begin a new medication with the lowest possible dosage and then increase the dosage slowly over time until the therapeutic effect is achieved. Reviewing Pertinent Data Prior to Medication Administration Prior to the administration of medications, the nurse must check and validate the medication order, and also apply their critical thinking skills to the ordered medication and the status and condition of the client in respect to the contraindications, pertinent lab results, pertinent data like vital signs, client allergies, and potential interactions of the medication that is to be given. The four general types of medication orders are stat orders, single orders, standing orders and prn orders. A prn order indicates that the ordered medication is only given when a specified condition, like pain or nausea, is present. This questioning and validation requires that the registered nurse use, integrate and apply their critical thinking and professional judgment skills. Automated order entry using a computer eliminates some medication order errors including those that result from illegibility of handwriting and ordering a medication with which the client is allergic to, however, nurses should never assume that this is the case. For example, medications that have sound alike names and medications that are similar in terms of their correct spelling can remain at risk even when computerized, automatic order entry is used. Medication orders are often transcribed by hand onto a medication administration record MAR or Medex, when the facility is not using computerized order entry. The doctor must be notified whenever the nurse has any concerns or problems with these things. Many diabetic clients who take two forms of insulin can mix these medications from two vials so that they will only have to use one, rather than two, subcutaneous injection sites. For example, a client who takes NPH insulin in the morning and also takes regular insulin prior to breakfast for the coverage of hyperglycemia can mix the NPH insulin and the regular insulin in the same syringe. The procedure for this mixing insulins is as below. Prep the top of the longer acting insulin vial with an alcohol swab. Inject air that is equal to the ordered dosage of the longer acting insulin using the insulin syringe. Do NOT withdraw the longer acting insulin yet. Prep the top of the shorter acting insulin with an alcohol swab Inject air that is equal to the ordered dosage of the shorter acting insulin using the same insulin syringe. Withdraw the ordered

dosage of the shorter acting insulin using the same insulin syringe. And, then lastly, withdraw the ordered dosage of the longer acting insulin using the same insulin syringe. For example, if the client has an order for 10 units of NPH insulin in the morning and they also need 3 units of regular insulin according to their sliding scale for coverage, the client will draw up both insulins according to the above procedure and then inject 13 units total for the NPH and the regular insulins. Administering and Documenting Medications Given by a Common Route The procedures for the administration of medications using different routes are briefly described below. Note that the verification of the order, its appropriateness for the client, client identification using at least two unique identifiers, and explaining the medication and the procedure for it administration is done BEFORE any medication is given to a client. Oral Route Administration Give the patient the medication. Remain with the patient until the medication is swallowed; some clients may pocket and store medications in their cheeks rather than swallow them. Sublingual medications are administered under the back of the tongue: Instruct the client to not chew or swallow the medication but, instead, to leave the drug in its position until it is completely dissolved. Topical Route Administration Some topical medications are only suitable on intact skin and others that contain a medication are used for the treatment of broken skin or a wound. Open the tube or container. Place the top upside down on a table top to prevent contamination to the inner aspect of the cap. Apply the topical medication onto the ordered area s using the gloved hand, a tongue depressor, a cotton tipped applicator or sterile gauze. Apply the topical medication in long and even strokes following the direction of hair growth when the ordered bodily area has hair. Transdermal Route Administration Transdermal medications are absorbed from the surface of the skin. Some transdermal medications are commercially prepared with the ordered dosage and others require the nurse to measure and apply the ordered dosage on a transdermal patch. This procedure is described below. Remove the old transdermal patch if there is one. Wash the site with soap and water. With the medication against the skin gently move the strip over a 3 inch area to spread it out. Do not rub the medication into the skin. Secure the site with a plastic wrap or another semipermeable membrane specifically made for this use. Tape the patch in place if it is not surrounded with an adhesive. Write the date, time and your initials on the dressing. Ophthalmic Route Medication Administration Ophthalmic eye medications are applied using sterile technique which is one of the few routes that require more than medical asepsis or clean technique. Position the patient in a sitting position or in a supine position. To administer drops, pull down the lower lid and instill the ordered number of drops into the conjunctival space. Instruct the client to close their eyes, roll their eyes and blink. Blinking will spread the drops and rolling the closed eyes will spread the ointment over the eye. Otic Route Administration Warm the ear drops to body temperature. Instruct the person to lie on their side so that the ear to receive the medication is upright. Straighten out the ear canal by pulling the auricle up and back for the adult and down and back for the infant and young child less than 3 years of age. Administered the ordered number of drops against the side of the inner ear and hold the auricle in place until the medication is no longer visible. Release the auricle of the ear. Instruct the client to remain in the side lying position with the treated ear up for at least 10 minutes so that the medication gets a chance to enter the ear. Inhalation Route Administration The two different types of inhalers that administer medications via the inhalation route are a metered-dose inhalers and a turbo inhaler. The procedure for using a metered dose inhaler is: Shake the bottle and remove the cap. Instruct the client to exhale as fully as possible. Have the client then firmly place their lips around the mouthpiece immediately after the strong exhalation. Press the bottle against the mouthpiece to release the medication while the person is taking in a long, slow inhalation. Instruct the client to hold their breath for a couple of seconds and then slowly exhale. Have the client rinse their mouth with water and then spit it out to prevent a fungal infection of the mouth. The procedure for using a turbo inhaler is: Slide the sleeve away from the mouthpiece. Turn the mouthpiece counter-clockwise to open it. Place the colored part of the medication into the stem of the mouthpiece. Slide the sleeve all the way down to puncture the capsule. Instruct the client to fully exhale and then to deeply inhale and hold their breath for several seconds. Repeat inhalations until all of the medication has been used. The patient can then gargle and rinse their mouth. Insure proper tube placement by aspirating the residual and checking the pH of the aspirate or by auscultating the epigastric area with the stethoscope to hear air sounds when about 30 mLs of air are injected into the feeding tube. Prepare the medication s to be

administered. Insert the syringe without the piston into the end of the nasogastric tube. Pour the medications into the syringe and allow them to flow with gravity. Follow the administration with about 30 to 50 ml of water for an adult and 15 to 30 ml for children to clear the tube and to maintain its patency. Vaginal Route Administration Assist the client into the lithotomy position. Drape the patient exposing only the perineum. Remove the suppository from the wrapper and lubricate it with a water soluble jelly. Spread the labia and insert the suppository about 3 to 4 inches into the vagina. If an applicator was used, wash it or discard it if the applicator is for a single use. Drape the patient exposing only the buttocks. Instruct the person to lie still so the suppository can be retained. If the person has the urge to defecate, place a gauze pad over the rectum and gently press the area until the urge to defecate passes. Rectal Ointment Administration Drape the patient exposing only the buttocks. Place the ointment on a gauze pad and apply to the rectum. Subcutaneous Route Injections Subcutaneous injections can be given in the abdomen, upper arms and the front of the thighs. Subcutaneous injections are used for the administration of insulin, heparin and other medications. The sites for these injections should be rotated. Clean the injection site with an alcohol swab in an outward circular pattern of about 2 inches around the selected site. Gently pinch the site so a 1 inch fat fold appears. In this case, use a 90 degree angle with the exception of heparin. Heparin is always injected at a 90 degree angle.

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2: Medication Administration | www.enganchecubano.com

Is it acceptable to use the same syringe and/or needle to administer multiple injections to the same patient (e.g., in the case of numbing a large area of skin or to provide incremental doses of intravenous medication)?

Intravenous therapy Intravenous injections involve needle insertion directly into the vein and the substance is directly delivered into the bloodstream. In medicine and drug use, this route of administration is the fastest way to get the desired effects since the medication moves immediately into blood circulation and to the rest of the body. This type of injection is the most common and often associated with drug use. Intramuscular injection Intramuscular injections IM injections deliver a substance deep into a muscle , where they are quickly absorbed by blood vessels. Common injections sites include the deltoid , vastus lateralis , and ventrogluteal muscles. Medical professionals are trained to give IM injections, but patients can also be trained to self-administer medications like epinephrine. Subcutaneous injection In a subcutaneous injection, the medication is delivered to the tissues between the skin and the muscle. Since the needle does not need to reach the muscles, often a bigger gauge and shorter needle is used. Usual site of administration is fat tissues behind the arm. Intradermal injection A tuberculin sensitivity test being administered intradermally. In an Intradermal Injection, medication is delivered directly into the dermis , the layer just below the epidermis of the skin. Absorption takes the longest from this route compared to intravenous, intramuscular, and subcutaneous injections. Because of this, intradermal injection are often used for sensitivity tests, like tuberculin and allergy tests, and local anesthesia tests. The reactions caused by these tests are easily seen due to the location of the injections on the skin. Depot injection[edit] A depot injection is an injection, usually subcutaneous , intradermal , or intramuscular , that deposits a drug in a localized mass, called a depot, from which it is gradually absorbed by surrounding tissue. Such injection allows the active compound to be released in a consistent way over a long period. Depot injections are usually either solid or oil-based. Depot injections may be available as certain forms of a drug, such as decanoate salts or esters. Examples of depot injections include Depo Provera and haloperidol decanoate. Prostate cancer patients receiving hormone therapy usually get depot injections as a treatment or therapy. Zoladex is an example of a medication delivered by depot for prostate cancer treatment or therapy. Naltrexone may be administered in a monthly depot injection to control opioid abuse; in this case, the depot injection improves compliance by replacing daily pill administration. The advantages of using a long-acting depot injection include increased medication compliance due to reduction in the frequency of dosing, as well as more consistent serum concentrations. A significant disadvantage is that the drug is not immediately reversible, since it is slowly released. In psychiatric nursing, a short acting depot, zuclopenthixol acetate , which lasts in the system from 24â€”72 hours, is now more regularly used for rapid tranquillisation. Local anesthetics are often infiltrated into the dermis and hypodermis. Injection pain[edit] The pain of an injection may be lessened by prior application of ice or topical anesthetic, or simultaneous pinching of the skin. Recent studies suggest that forced coughing during an injection stimulates a transient rise in blood pressure which inhibits the perception of pain. Babies can be distracted by giving them a small amount of sweet liquid, such as sugar solution, during the injection, which reduces crying. Needles should not be shared between people, as this increases risk of transmitting blood-borne pathogens. This can lead to infections and even lifelong disease. Needles should be disposed of in sharps containers. This reduces the risk of accidental needle sticks and exposure to other people. Another risk is poor collection and disposal of dirty injection equipment, which exposes healthcare workers and the community to the risk of needle stick injuries. In some countries, unsafe disposal can lead to re-sale of used equipment on the black market. Many countries have legislation or policies that mandate that healthcare professionals use a safety syringe safety engineered needle or alternative methods of administering medicines whenever possible. Open burning of syringes, which is considered unsafe by the World Health Organization , is reported by half of the non- industrialized countries. In nature[edit] Many species of animals, and some stinging plants, have developed poison-injecting devices for self-defence or catching prey, for example:

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3: chet_wilson_drugguides_1|Medication Administration Techniques|Injections

Application details and deadlines. Alberta pharmacists must apply for the authorization within one year of having successfully completed both the education and practical training portions of an ACP approved or a CCCEP Competency-Mapped Accredited Immunization and Injection program.

Usually, bunching the skin will ensure that the injection is made into the subcutaneous tissue and not the muscle beneath. Spreading the skin would not allow sufficient subcutaneous tissue to prevent intramuscular injection. The angle of injection varies with the amount of available tissue Fig. Most subcutaneous injections are given at a degree angle. However; a thin client may need to be injected at an angle of a lesser degree as small as 45 degrees. It is important to choose an injection angle that will ensure the medication is delivered into the subcutaneous tissue and not the muscle. It is important to have a needle that is short enough to just reach the subcutaneous tissue and not extend into muscle. Doing so will allow for faster absorption and onset of action of the medication and may cause local irritation. This might actually be an intradermal injection if it is very shallow. Documentation provides coordination of care. Site rotation prevents injury to subcutaneous tissue. Drugs administered parenterally have a rapid onset. These injections are given in much the same way as subcutaneous injections. However, a longer needle with a larger bore is used, most often a IV2- to 2-inch, to G needle, depending on the type of medication. Use an angle of 90 degrees for the injection see Fig. In addition to requiring a longer and larger-gauge needle, IM injections are more difficult and dangerous than SC injections. If the medication is thick, injecting into the muscle may be more difficult In Practice: A Dorsogluteal posterior view: B Ventrogluteal side view: C Deltoid side view: Deltoid site not used for children younger than 4 years. Give injection in outer middle third. Vastus lateralis site used in infants and toddlers as well as adults. The rectus femoris site is on the anterior aspect of the thigh, approximately one-third of the way between knee and hip. This site is uncomfortable and not commonly used. Nursing Alert When administering IM and SC injections, insert and remove the needle quickly unlike the intradermal injection. To use the dorsogluteal site, assist the client to a side-lying or prone position. If the client is on the side, instruct him or her to bend the knees. If on the stomach,instruct the client to point the toes inward. This positioning aids in relaxation of the gluteal muscles, making the injection more comfortable. Key Concept Do not administer an intramuscular injection with the client standing. Explain to the client who is reluctant to lie down that this will be the safest and most comfortable position. Clear identification of the area is difficult, and the muscles will be tenser while standing. In addition, the client may experience a vasovagal reaction and faint, sustaining injury as he or she falls. Nursing Alert It is very important to select the dorsogluteal site carefully. This site is very close to the sciatic nerve. Hitting this nerve can cause permanent damage. Do not use this site for infants and children younger than 3 years. Their muscles in this area are not yet developed and are not of sufficient mass. Ventrogluteal Site The preferred site for injection in the hip area is the ventrogluteal site see Fig. This site can be used if the client is in the side-lying, prone, or supine position. The ventrogluteal site is safer and less painful for IM injections than the dorsogluteal site, through which the sciatic nerve runs. The fat layer is thinner in the ventrogluteal area, and the gluteal muscle is thicker, even in very thin clients. One disadvantage of the ventrogluteal site is that the client may never have received an IM injection in this area, which may cause anxiety. Another disadvantage is that the client can see what the nurse is doing, which may also increase anxiety. The client will be most comfortable in a side-lying position. Deltoid Site Although the deltoid muscle may be used for IM injections, it is large enough only for small amounts of medication. In most cases, 1 mL is the maximum amount of medication that can safely be given in this site. A risk of brachial artery and radial nerve damage exists with this site. Use this route in children only if they are older than 4 and only if the medication to be administered is not irritating to the tissues, the volume is very small, and the medication will be absorbed quickly. This site is not used for infants and toddlers. The deltoid muscle is located on the lateral aspect of the upper arm, 1 to 2 inches below the acromion process see Fig. Identify the injection site by placing the index and middle fingers over the acromion process. Hepatitis B vaccine and tetanus toxoid are examples of medications often given in the deltoid muscle. Vastus Lateralis Site The vastus lateralis is a thick

muscle located on the anterior, lateral area of the thigh. This muscle may be used for IM injections in infants and children younger than 3 years because it is the largest muscle mass in this age group. Little risk of injury exists with this site because no large nerves or arteries surround the area. Locate this site by placing the palm of one hand over the greater trochanter and the palm of the other hand over the knee; identify the injection site anteriorly and laterally, halfway between these two points see Fig. Rectus Femoris Site The rectus femoris muscle lies medially to the vastus lateralis. Identify the injection site in the same manner as that for the vastus lateralis see Fig. This site is often used for infants and toddlers. Many adult clients find the rectus femoris site uncomfortable; it is often used in adults only when other sites are contraindicated. Disadvantages of this site are that the sciatic nerve and numerous blood vessels run very close to it. Should contact with the sciatic nerve be made while administering the injection, nerve damageâ€”resulting in permanent damage or paralysisâ€”may occur. Table presents further guidelines for site selection. Nursing Alert IM injections must be given into healthy muscle tissue for proper absorption to occur. Rotating insulin injection sites is particularly important because insulin can atrophy tissue lipodystrophy with repeated injection in the same site.

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4: Route of administration - Wikipedia

Intravenous Medications by Direct IV Route Intravenous (IV) is a method of administering concentrated medications (diluted or undiluted) directly into the vein using a syringe through a needleless port on an existing IV line or a saline lock.

Classification[edit] Routes of administration are usually classified by application location or exposition. The route or course the active substance takes from application location to the location where it has its target effect is usually rather a matter of pharmacokinetics concerning the processes of uptake, distribution, and elimination of drugs. Exceptions include the transdermal or transmucosal routes, which are still commonly referred to as routes of administration. The location of the target effect of active substances are usually rather a matter of pharmacodynamics concerning e. An exception is topical administration , which generally means that both the application location and the effect thereof is local. However, uptake of drugs administered orally may also occur already in the stomach , and as such gastrointestinal along the gastrointestinal tract may be a more fitting term for this route of administration. Strictly enteral administration directly into the intestines can be used for systemic administration, as well as local sometimes termed topical , such as in a contrast enema , whereby contrast media is infused into the intestines for imaging. However, for the purposes of classification based on location of effects, the term enteral is reserved for substances with systemic effects. A medical professional injects medication into a gastric tube. Many drugs as tablets , capsules , or drops are taken orally. Administration methods directly into the stomach include those by gastric feeding tube or gastrostomy. Substances may also be placed into the small intestines , as with a duodenal feeding tube and enteral nutrition. Enteric coated tablets are designed to dissolve in the intestine, not the stomach, because the drug present in the tablet causes irritation in the stomach. Administering medication rectally The rectal route is an effective route of administration for many medications, especially those used at the end of life. Rectal mucosa is highly vascularized tissue that allows for rapid and effective absorption of medications. In hospice care , a specialized rectal catheter , designed to provide comfortable and discreet administration of ongoing medications provides a practical way to deliver and retain liquid formulations in the distal rectum, giving health practitioners a way to leverage the established benefits of rectal administration. Parenteral[edit] Needle insertion angles for 4 types of parenteral administration of medication: Parenteral administration can be performed by injection , that is, using a needle usually a hypodermic needle and a syringe , [16] or by the insertion of an indwelling catheter. Locations of application of parenteral administration include: Used in experimental research of chemicals [17] and as a treatment for malignancies of the brain. One use is as a last line of opioid treatment for terminal cancer patients with intractable cancer pain. A medical professional applies nose drops. Administering medication vaginally epicutaneous application onto the skin. It can be used both for local effect as in allergy testing and typical local anesthesia , as well as systemic effects when the active substance diffuses through skin in a transdermal route. Sublingual administration is when medication is placed under the tongue to be absorbed by the body. The word "sublingual" means "under the tongue. These medications can come in the form of tablets, films, or sprays. Many drugs are designed for sublingual administration, including cardiovascular drugs, steroids, barbiturates, opioid analgesics with poor gastrointestinal bioavailability, enzymes and, increasingly, vitamins and minerals. Such substances are also called inhalational, e. Used in treating osteoarthritis intracardiac into the heart , e. This route is occasionally used for drugs and fluids in emergency medicine and pediatrics when intravenous access is difficult. Skin popping is a slang term that includes subcutaneous injection, and is usually used in association with recreational drugs. In addition to injection, it is also possible to slowly infuse fluids subcutaneously in the form of hypodermoclysis. Topical medication The definition of the topical route of administration sometimes states that both the application location and the pharmacodynamic effect thereof is local. If defined strictly as having local effect, the topical route of administration can also include enteral administration of medications that are poorly absorbable by the gastrointestinal tract. One poorly absorbable antibiotic is vancomycin , which is recommended by mouth as a treatment for severe Clostridium difficile colitis. Physical and chemical properties of the drug. The

physical properties are solid, liquid and gas. The chemical properties are solubility, stability, pH, irritancy etc. Site of desired action: Rate of extent of absorption of the drug from different routes. Effect of digestive juices and the first phase of metabolism. Condition of the patient. In acute situations, in emergency medicine and intensive care medicine , drugs are most often given intravenously. This is the most reliable route, as in acutely ill patients the absorption of substances from the tissues and from the digestive tract can often be unpredictable due to altered blood flow or bowel motility. Convenience[edit] Enteral routes are generally the most convenient for the patient, as no punctures or sterile procedures are necessary. Enteral medications are therefore often preferred in the treatment of chronic disease. However, some drugs can not be used enterally because their absorption in the digestive tract is low or unpredictable. Transdermal administration is a comfortable alternative; there are, however, only a few drug preparations that are suitable for transdermal administration. Desired target effect[edit] Identical drugs can produce different results depending on the route of administration. For example, some drugs are not significantly absorbed into the bloodstream from the gastrointestinal tract and their action after enteral administration is therefore different from that after parenteral administration. This can be illustrated by the action of naloxone Narcan , an antagonist of opiates such as morphine. Naloxone counteracts opiate action in the central nervous system when given intravenously and is therefore used in the treatment of opiate overdose. The same drug, when swallowed, acts exclusively on the bowels; it is here used to treat constipation under opiate pain therapy and does not affect the pain-reducing effect of the opiate. Oral administration The oral route is generally the most convenient and costs the least. Biopharmaceuticals have to be given by injection or infusion. However, recent research found an organic ionic liquid suitable for oral insulin delivery a biopharmaceutical into the blood stream. Local[edit] By delivering drugs almost directly to the site of action, the risk of systemic side effects is reduced. Inhaled medications can be absorbed quickly and act both locally and systemically. Some medications can have an unpleasant taste or irritate the mouth. A medical professional performs an intradermal ID injection. As the drug is delivered to the site of action extremely rapidly with IV injection, there is a risk of overdose if the dose has been calculated incorrectly, and there is an increased risk of side effects if the drug is administered too rapidly. Drug delivery systems allow the rate of growth factor release to be regulated over time, which is critical for creating an environment more closely representative of in vivo development environments.

ADMINISTERING MEDICATIONS BY INJECTION pdf

5: Administering drugs by injection | Alberta College of Pharmacy

*used to administer medication and fluids directly into a patient's vein by using the injection port of an IV line What are the advantages of using syringes for IV lines? *eliminate repeated punctures.*

Test you knowledge on safe administration of medications. Choose the MOST correct answer. Smith is to receive 0. It is supplied to you from the pharmacy in. How will you proceed to administer this medication? Choose the most correct answer. Break the tablet in half and administer to Mr. Ensure the tablet is scored, break it in half, take Mr. Smiths pulse to ensure it is greater than 50, check the dose with another nurse and then administer drug, staying with Mr. Smith until he has swallowed the pill. Call the pharmacy and ask them to supply the right dose Call the physician to see if the dose can be increased to 0. The following quiz should be taken after completion of each of the learning activities in the learning contract. A screen shot of your completed quiz score should be taken and pasted into a MS Word doc. Prior to administering the medication, the nurse is called to another room to assist another client onto a bedpan. This nurse then asks a second nurse to give the injection so that she can help the client needing the bedpan. Which of the following actions should the second nurse take? Offer to assist the client needing the bedpan. Give the injection prepared by the other nurse. Prepare another syringe and give the injection. Tell the client needing the bedpan she will have to wait for her nurse.

ADMINISTERING MEDICATIONS BY INJECTION pdf

6: Administering Injectable Medication To Your Dog

Physician-Administered Drugs Note: For updates to coding, coverage, and benefit information, see the IHCP banner pages and bulletins, available from the News, Bulletins, and Banner Pages page at.

Certain medications, such as insulin, can only be administered by injection. Most injectable medications given at home are done subcutaneously known as an SC or SQ injection , which means the medicine is injected directly under the skin. Others can be injected into a vein intravenous, or IV injection or into a muscle intramuscular, or IM injection. Getting Started Before you begin, ask your veterinary health care team for advice and training on how to give the medicine, and tips on preventing injury to you and your cat. Here are a few things to consider: Be sure you can handle your cat without being injured. This may not be an issue if your cat is very relaxed and is used to being handled. However, if you have problems trying to trim nails or perform other procedures on your cat, you may need help with the injections. Your veterinary care team can offer advice on properly restraining your cat for the injections. In some cases, you may need another person to help hold your cat so you can safely give the injection. Your team of veterinary professionals will be glad to answer any questions you may have about safely administering injections to your cat. Include the date and time the medication needs to be administered. This will prevent you from missing a dose and will help you remember when treatment is completed. Giving injections to a cat requires skill, patience, and confidence. This can be a practical option for short-term medication, but if your cat is on long-term therapy such as insulin , this may require a prolonged time commitment. Basic Equipment The syringe is the clear cylinder that holds the medication to be injected. The plunger is a stem that moves inside the syringe. Pull the plunger backward to fill the syringe and push it forward to empty the syringe. Your veterinary care team will show you how to open a syringe and draw up the medication without compromising sterility. Be sure to use a new syringe, plunger, and needle for each injection, since reusing syringes and needles can cause infection. Plus, a used needle is dull and therefore more painful for your cat than a new needle. Proper Restraint Some cats are happy lying or sitting on your lap while you administer the injection. However, you should place a towel or blanket across your lap to avoid getting scratched in case your cat tries to jump down. Some cats do better on a smooth surface, such as a table. You may find it easier still if you have a partner to help: One person can hold the cat while the other gives the injection. Giving a Subcutaneous Injection Your veterinary care team will show you how to administer an injection before you have to do it alone at home, but here are steps to keep in mind: Load the syringe with medication and set it close by. Find an area of loose skin. The skin over the middle of the back or just behind the shoulders generally works well. If the injection will be given frequently, as with insulin, try not to use the same location each time. Gently pinch the skin between your thumb and forefinger. Pull the loose skin gently upward and look for a small indentation of skin between your fingers. Pick up the syringe with your other hand and insert the sterile needle directly into the indentation. Keep the needle parallel to the surface of the skin on the back. If you angle the needle too much, you may enter a muscle, go through the skin to the opposite side, or stick your own finger. Once the needle has been inserted, pull back on the plunger only. If you see blood, remove the needle and try a different location. When the syringe is empty, remove the needle, backing out along the same path that was used to enter the skin. Check the area for bleeding or leakage of medication. If this is detected, use a clean facial tissue or cotton ball to gently apply pressure to the area for a minute or so. Giving an Intramuscular Injection There are a few precise areas on the body that are best for intramuscular injections. Your veterinary care team will show you how to find an appropriate injection site and administer the medication before you have to try it alone at home, but here are the steps to keep in mind: Find the injection site, using the techniques your veterinarian demonstrated for you. If the injection will be given frequently, try to alternate injection sites. Hold the syringe in one hand and insert the sterile needle directly through the skin and into the underlying muscle. If your angle is too shallow, you may not inject deeply enough to enter a muscle. If not, push the plunger forward to empty the syringe. If there is no bleeding or leakage of medication, release the cat after giving her a big hug for being a good patient! As always, if you have any concerns or questions, call your veterinary care team. This article has been reviewed

by a Veterinarian.

ADMINISTERING MEDICATIONS BY INJECTION pdf

7: Injection (medicine) - Wikipedia

This is the third and final program in a three-part series that will demonstrate and describe the safe administration of medication by injection: subcutaneous, intradermal, intramuscular, and into an intravenous injection port (parenteral medication administration).

What is an intramuscular injection? An intramuscular IM injection is a shot of medicine given into a muscle. Certain medicines need to be given into the muscle for them to work correctly. What should I know about the syringe? There are 3 parts to a syringe: The needle goes into your muscle. The barrel holds the medicine and has markings on it like a ruler. The markings are in milliliters mL. The plunger is used to get medicine into and out of the syringe. Where can I give an intramuscular injection? Look at your thigh and divide it into 3 equal parts. The middle third is where the injection will go. The thigh is a good place to give yourself an injection because it is easy to see. It is also a good spot for children younger than 3 years old. Have the person getting the injection lie on his or her side. To find the correct location, place the heel of your hand on the upper, outer part of the thigh where it meets the buttocks. Form a V with your fingers by separating your first finger from the other 3 fingers. You will feel the edge of a bone along the tips of your little and ring fingers. The place to give the injection is in the middle of the V. The hip is a good place for an injection for adults and children older than 7 months. Completely expose the upper arm. You will give the injection in the center of an upside down triangle. Feel for the bone that goes across the top of the upper arm. This bone is called the acromion process. The bottom of it will form the base of the triangle. The point of the triangle is directly below the middle of the base at about the level of the armpit. The correct area to give an injection is in the center of the triangle, 1 to 2 inches below the acromion process. This site should not be used if the person is very thin or the muscle is very small. Expose one side of the buttocks. With an alcohol wipe draw a line from the top of the crack between the buttocks to the side of the body. Find the middle of that line and go up 3 inches. From that point, draw another line down and across the first line, ending about halfway down the buttock. You should have drawn a cross. In the upper outer square you will feel a curved bone. The injection will go in the upper outer square below the curved bone. Do not use this site for infants or children younger than 3 years old. Their muscles are not developed enough. How do I choose the best place for an intramuscular injection? Keep track of where the injections are given: Make a list of the sites you use. Write down the date, time, and the site each time you give an injection. Change sites for the injections: It is important to use a different site each time you give an injection. This helps prevent scars and skin changes. The sites where injections are given should be at least 1 inch away from each other. Ask your healthcare provider if you need to inject the medicine in a certain site. What items do I need to give an injection? One alcohol wipe One sterile 2 x 2 gauze pad A new needle and syringe that are the correct size Disposable gloves, if you have them How do I give an intramuscular injection? Wash your hands with soap and dry them completely. Put on gloves if necessary. Open the alcohol wipe: Wipe the area where you plan to give the injection. Let the area dry. Do not touch this area until you give the injection. Hold the syringe with your writing hand and pull the cover off with your other hand. Place the syringe between your thumb and first finger. Let the barrel of the syringe rest on your second finger. Hold the skin around where you will give the injection: With your free hand, gently press on and pull the skin so that it is slightly tight. Insert the needle into the muscle: Hold the syringe barrel tightly and use your wrist to inject the needle through the skin and into the muscle at a 90 degree angle. Let go of the skin with your other hand. Hold the syringe so it stays pointed straight in. Pull back on the plunger a little to make sure you did not hit a blood vessel. If blood comes back, remove the needle immediately. Do not inject the medicine. Dispose of both the syringe and the medicine. Get more medicine in a new syringe. When you give the second injection, give it on the other side. Push down on the plunger to inject the medicine. Do not force the medicine by pushing hard. You can inject the medicine slowly to reduce the pain. Once the medicine is injected, remove the needle at the same angle as it went in. Place gauze over the area where you gave the injection. How do I get rid of used syringes and needles? It is important to dispose of your needles and syringes correctly. Do not throw needles into the trash. You may receive a hard plastic container made

especially for used syringes and needles. You can also use a soda bottle or other plastic bottle with a screw lid. Make sure that both the syringe and needle fit into the container easily and cannot break through the sides. Ask your healthcare provider or a pharmacist what your state or local requirements are for getting rid of used syringes and needles. What are the risks of an intramuscular injection? An intramuscular injection could cause an infection, bleeding, numbness, or pain. When should I contact my healthcare provider? A fever, sneezing, or coughing develops after the injection. There is a lump, swelling, or bruising where the injection was given that does not go away. You have questions about how to give an injection. When should I seek immediate care or call ? A rash or itching develops after the injection is given. Shortness of breath develops after the injection is given. The mouth, lips, or face swells after the injection is given. Care Agreement You have the right to help plan your care. Learn about your health condition and how it may be treated. Discuss treatment options with your healthcare providers to decide what care you want to receive. You always have the right to refuse treatment. The above information is an educational aid only. It is not intended as medical advice for individual conditions or treatments. Talk to your doctor, nurse or pharmacist before following any medical regimen to see if it is safe and effective for you.

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8: Medication Administration Safety - Patient Safety and Quality - NCBI Bookshelf

This course is intended for use by nursing and medical professionals, and those in training for those professions. "Administer Intramuscular, Subcutaneous, and Intradermal Injections" was originally developed by the U.S Army Medical D.

Review medication orders, and check for drug allergies. Wash hands, and put on gloves. Identify client by checking armband. Maximum amount of fluid to administer SQ is 1 cc. Avoid areas of bony prominence, major nerves, and blood vessels. Sites for routine subcutaneous injections. Wipe with alcohol in a circular motion to cleanse. Pinch skin between finger and thumb. Spread taut if client has substantial cutaneous tissue. Release the subcutaneous tissue, and aspirate prior to injecting medication except insulin or heparin. Inject medication slowly, remove needle quickly, and gently massage site with alcohol swab. Do not massage after the administration of heparin. Intramuscular IM Review medication orders, and check for drug allergies. Use 3 cc syringe and 20 - 23 gauge, 1 - 2 inch needle. Use 2 inch needle with obese client to ensure that medication is injected into a large muscle. Position client, and locate site using appropriate anatomical landmarks. Wipe site with alcohol in a circular motion to cleanse. Aspirate, and observe for blood. If blood appears, remove and discard needle. Inject medication slowly, remove needle quickly, and gently apply pressure to site with dry, sterile 2 x 2 gauze. Do not massage injection site. Deltoid Upper Arm Use if volume is 0. Use a 23 gauge, 1 inch needle. Client may be positioned sitting, standing, supine, or prone. Locate site by measuring 2 - 3 fingerbreadths below the acromion process on the lateral midline of the arm. The deltoid muscle of the upper arm, used for intramuscular injections. The upper arm can be used for both intramuscular IM and subcutaneous Sub Q injections. Administer in nondominant arm when possible. Dorsogluteal Upper Outer Quadrant Use if volume is 1 - 3 cc, but less than 5 cc. Position client in side-lying or supine position, with knee flexed on injection side, or prone with toes pointed inward to rotate femur. Locate site by palpating the posterior iliac spine where the spine and pelvis meet. Imagine a line from the posterior iliac spine to the greater trochanter. Administer medication above imaginary line at midpoint. The dorsogluteal site for intramuscular injections. Locate greater trochanter to identify dorsogluteal site. Locate posterosuperior spine of iliac crest. Draw imaginary line between trochanter and iliac spine. Ventrogluteal Use if volume is 1 - 3 cc. Position client in supine lateral position. Locate site by placing the hand with heel on the greater trochanter and thumb toward umbilicus. Point to the anterior iliac spine with the index finger forming a "V". Injection of medication is given within the "V" area. The ventrogluteal site for intramuscular injections. Identify greater trochanter, and place palm at site. Place palm on greater trochanter, and point to anterior iliac spine. Position client in supine or sitting position. Locate by identifying the greater trochanter and lateral femoral condyle. Injection site is the middle third and anterior lateral aspect of the thigh. The vastus lateralis site of the right thigh, used for intramuscular injections. The vastus lateralis muscle of the upper thigh. Identify greater trochanter and lateral femoral condyle. Select site using middle third and anterior lateral aspect of thigh. Z-Track Method Discard needle after medication is drawn up, and use new needle for injection to minimize tissue staining or irritation. Use this method when administering injection in ventrogluteal or dorsogluteal sites. Displace skin to one side laterally before inserting needle. Z-track is used to prevent backflow of medication into subcutaneous tissue. Withdraw needle before releasing skin. Intradermal Review medication orders, and check for drug allergies. Amount to be injected is usually 0. Body sites commonly used for intradermal injections. Advance needle until entire bevel is under skin. Slowly inject medication to form small bleb. Inject solution to form wheal on skin. Withdraw needle quickly, and pat site gently with sterile 2 x 2 gauze pad. Do not massage area.

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9: Medication Administration: NCLEX-RN || www.enganchecubano.com

â€¢ Anintramuscular injection involves depositing medication into deep, muscle tissue using an injection needle longer than those used for subcutaneous injections.

Although a routine part of providing nursing care, administering medications should never be a casual practice as the potential for serious harmâ€”even life endangermentâ€”can easily result from an error. This is particularly true when administering injectable medications. This is the third and final program in a three-part series that will demonstrate and describe the safe administration of medication by injection: Included in this program is discussion of the mandatory use of safer needle devices to prevent needlestick injuries. After completing this course, the learner should be able to: Medication Safety and Oral Medications Product code: One of the biggest responsibilities of nurses today involves safe medication administration practices. Nurses, and others authorized to administer medications not only must have the knowledge base about the drugs they are delivering, but also have the skill to administer them appropriately. This is the first program in a three-part series that will describe general guidelines for the safe administration medications, and specifically demonstrate and describe safe administration of oral medications. Topical, Suppository and Inhalant Medications Product code: Nurses are one of the most vital parts of the team involved in medication safety as they are charged with administering the drugs. This means they are the last stop, the place where â€” if an error has been made before hand â€” it can be caught and harm to the patient averted. This is the second program in a three-part series that will demonstrate and describe safe techniques for the administration of topical medications, suppositories and inhalants. Prerequisite knowledge and skills for administrating oral, suppository and inhalant medications are presented in this program which has also been updated to reflect current hand hygiene technique. Oral medications are introduced first beginning with types of solid and liquid forms. Guidelines for preparing oral medications are demonstrated including administration via a nasogastric tube and sublingual administration. Different forms of topical medications and techniques for application of topical discs, sterile ophthalmic ointments and drops and nasal agents are shown. The suppository method of administration is presented with emphasis given to techniques for rectal and vaginal administration. Devices used to administer prescribed inhalant medication are introduced and skills for their use are demonstrated for patient teaching. Caring for patients is challenging and fulfilling, but often stressful and harried as well. Frequent interruptions and constantly changing patient needs can lead to error. Since nurses do most of the actual medication administration in a facility, they provide the last opportunity to prevent a medication error. This program presents 12 scenarios that result in medication errors, then discusses how they could have been avoided. The goal is to help the viewer identify ways errors can creep into nursing practices and develop strategies that can be used to prevent them. After viewing this program the nurse should be able to: List the "6 Rights of Medication administration" Describe methods for preventing medication errors Heart Medications: Anatomy Review and Antianginals Product code: The series focuses on the medications used to treat conditions of the cardiovascular system. It begins with an overview of the anatomy and physiology of the heart, followed by an explanation of the effects of chronotropic and inotropic agents. Drug classes used for the treatment of cardiac disorders are discussed as they relate to specific conditions and uses, including angina, hypertension, anticoagulation, heart failure, hyperlipidemia and arrhythmias. Indications, contraindications and possible adverse reactions are included. The segment on antiarrhythmics begins with an overview of the electrophysiologic properties of the heart. Patient teaching regarding the medications as well as signs and symptoms of cardiac disease and adverse drug reactions are covered. Content throughout is enhanced with animated graphics and realistic patient care scenarios. This program provides a review of the cardiovascular system and discusses the role of angina medications in heart diseases Objectives: Identify three main factors that determine proper function of the heart. Define angina and describe the causes and results of this condition. Identify the three types of angina medications and understand how and under what circumstances each is used. Antiarrhythmic Agents, Part 1 Product code: It begins with an overview of the anatomy and physiology of the heart, followed by an explanation of the affects of chronotropic and inotropic agents. This program provides

an overview and discussion of the electrical properties of the heart as they relate to arrhythmias, which are abnormalities of heart rate or rhythm. Define arrhythmias and their related conditions. Understand and differentiate the various electrical properties of the heart. Discuss the five phases of depolarization and repolarization. Antiarrhythmic Agents, Part 2 Product code: This program provides a detailed overview and discussion of the four classes of antiarrhythmic drugs. Differentiate the various electrical properties of the heart. Antihypertensives and Anticoagulants Product code: This program provides a brief overview of high blood pressure or hypertension and discusses the various medications used to treat this condition, as well as anti-clotting agents or anticoagulants Objectives: Identify the causes and basic pathophysiology of high blood pressure. Identify the various medications used to treat high blood pressure and discuss their function and administration. Discuss the circumstances under which blood clots can form in the heart. Describe the purpose, function s , administration and side effects of various anticoagulants. This program provides an overview and discussion of heart failure medications and cholesterol-lowering agents. Identify the causes and symptoms of congestive heart failure. Discuss the origin, action, administration and side effects of digoxin. Explain the purpose and administration of loop and potassium-sparing diuretics. Identify high cholesterol and understand the purpose, proper administration and possible side effects of cholesterol-lowering medications, including cholestyramine and lovastatin. Meeting the Standards Product code: Meeting the Standards video and workbook can be used to train and educate clinical care providers, pharmacists, physicians and new hires about the JCAHO medication management requirements for each discipline. Your staff will learn: Key processes that lead to optimal medication management Mandatory JCAHO medication management requirements How best to demonstrate compliance with these requirements Safeguards against medication errors Methods to avoid common medication management pitfalls Types of medication management information that will be requested and examined during your next JCAHO accreditation survey The Medication Management: By viewing this video and using the helpful workbook included, you will increase staff knowledge and comfort levels while building survey confidence. Knowing what the surveyors expect to see and hear related to medication management throughout your institution, can guarantee accreditation success in this area. Medication Use by the Elderly: Implications for Nurses Product code: OBRA regulations, including Resident Rights, self administration of drugs, antipsychotics and drug monitoring. Moderate or Procedural Sedation: Patient Assessment and Monitoring Product code: The nurse has an important role in caring for patients who receive moderate, or procedural, sedation before, during, and after diagnostic and therapeutic procedures. This program focuses on intravenous administration of moderate, or procedural sedation as this route shortens recovery times and reduces risk for patients having minor surgery and endoscopic procedures. Define the degrees of sedation and anesthesia. Preventing and Managing Complications: Sedation in Children Product code: Not all patients are good candidates for moderate, or procedural, sedation. Pregnant women, and patients with kidney, liver, and cardiac disease may be excluded from receiving sedating drugs, as well as those patients with respiratory compromise, acute narrow angle glaucoma, unstable arrhythmias. In addition, young children, infants, neonates must be treated with caution. The purpose of this program is to provide nurses and others an understanding of monitoring and managing complications of moderate sedation, and the special responsibilities of performing moderate sedation on children. Identify complications of moderate sedation. Describe the safe use of reversal drugs. Describe discharge criteria after moderate sedation of children. Never Events and Hospital-Acquired Conditions: Admission Assessment and Quality Reporting Product code: A "Never Event" is an adverse medical event, occurring during care that is unambiguous, serious and preventable. These are shocking medical errors, such as wrong-site surgery, that should never occur. The Centers for Medicare and Medicaid Services CMS , has moved aggressively to improve patient safety by adopting a policy of actively addressing some of these identified Never Events - and in fact denies payment to providers for some of them, when they do occur. This series identifies specific Never Events and describes practices that can prevent them. This series is designated for a total of 1. The final program will discuss identifying conditions present on admission, plus the quality measures that need to be reported to CMS in order to qualify for the updated payment schedule. Foreign Object Retained After Surgery 2. Falls and Trauma 6. Manifestations of Poor Glycemic Control 7. Vascular

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Catheter-Associated Infection 9. Surgical Site Infection following: Define a "Never Event" Describe new indicator codes that have been created for present-upon-admission POA diagnoses Identify conditions already present - particularly conditions that CMS is excluding from payment - so that payments will not be reduced Identify the measures that must be reported, which are defined in six areas of care Never Events and Hospital-Acquired Conditions: Identifying the Danger Product code: Prevention Practices Product code: This program will discuss nursing practices that can prevent Never Events - many of which are already in place in healthcare institutions. Define a "Never Event" Identify the 11 hospital-acquired events that currently incur payment implications Implement the practices and measures that should be taken to prevent the occurrence of the 11 Never Events Parenteral Medication Administration:

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