

Колеги, задачата за 12-та седмица е продължение на старото задание.

1.Превод на понятията от първите колонки на следните таблици:

Display 8-3 Routes of Drug Administration /page 152

Display 8-4 Drug preparation/page 154

Display 8-5 Terms pertaining to injectable drugs/ page 154

2. Запознайте се със съкращенията от **таблицата в зелено ABBREVIATIONS** на стр. 145,които се използват за лекарства и съответните дозировки, предписания и др. **Без превод.**

Срок 10.05.

Колеги, за **13 –та седмица(11.05 -17.05)** ще има още едно задание от мен. За **14 и 15 седмица**, както сме говорили в началото на учебната година, за финал на курса по английски всеки трябва да изготви презентация на тема по избор от областта на фармацията . Презентациите да са до 15 слайда максимум. Съгласувайте помежду си , за да няма едни същи теми. След 17 май до 29.05. ще очаквам вашите презентации. Разбира се , ако имате готовност ,може да ги пращате и преди това.

Този план е валиден , ако до края на семестъра остане дистанционното обучение.

Но ако след 13.05 минем на присъствено обучение, то тогава ще направите презентациите в час.

Лека работа и бъдете здрави.

М.Бонева

Identify and define the root in each of the following words:

	Root	Meaning of Root
10. hypnotic	_____	_____
11. toxicity	_____	_____
12. chemistry	_____	_____
13. narcosis	_____	_____
14. pharmacist	_____	_____

Define each of the following words:

15. vasoconstriction	_____
16. pharmacology	_____
17. gonadotropic	_____
18. antitoxin	_____

ABBREVIATIONS

Drugs and Drug Formulations

APAP	Acetaminophen
ASA	Acetylsalicylic acid (aspirin)
cap	Capsule
elix	Elixir
FDA	Food and Drug Administration
INH	Isoniazid (antitubercular drug)
MED(s)	Medicine(s), medication(s)
NCCAM	National Center for Complementary and Alternative Medicine
NSAID(s)	Nonsteroidal anti-inflammatory drug(s)
ODS	Office of Dietary Supplements
OTC	Over-the-counter
PDR	<i>Physicians' Desk Reference</i>
Rx	Prescription
supp	Suppository
susp	Suspension
tab	Tablet
tinct	Tincture
USP	<i>United States Pharmacopeia</i>
ung	Ointment

Dosages and Directions

\bar{a}	Before (Latin, <i>ante</i>)
$\bar{a}\bar{a}$	Of each (Greek, <i>ana</i>)

ac	Before meals (Latin, <i>ante cibum</i>)
ad lib	As desired (Latin, <i>ad libitum</i>)
aq	Water (Latin, <i>aqua</i>)
bid	Twice a day (Latin, <i>bis in die</i>)
\bar{c}	With (Latin, <i>cum</i>)
cc	Cubic centimeter
D/C, dc	Discontinue
ds	Double strength
gt(t)	Drop(s) (Latin, <i>gutta</i>)
hs	At bedtime (Latin, <i>hora somni</i>)
IM	Intramuscular(ly)
IU	International unit
IV	Intravenous(ly)
mcg	Micrograms
mg	Milligrams
LA	Long-acting
NS	Normal saline
p	After, post
pc	After meals (Latin, <i>post cibum</i>)
po	By mouth (Latin, <i>per os</i>)
pp	Postprandial (after a meal)
prn	As needed (Latin, <i>pro re nata</i>)
qam	Every morning (Latin, <i>quaque ante meridiem</i>)
qd	Every day (Latin, <i>quaque die</i>)
qh	Every hour (Latin, <i>quaque hora</i>)
q ____ h	Every ____ hours

ABBREVIATIONS

qid	Four times a day (Latin, <i>quater in die</i>)	SR	Sustained release
qod	Every other day (Latin, <i>quaque [other] die</i>)	ss	Half (Latin, <i>semis</i>)
s̄	Without (Latin, <i>sine</i>)	tid	Three times per day (Latin, <i>ter in die</i>)
SA	Sustained action	U	Unit(s)
SC, SQ, subcu	Subcutaneous(ly)	x	Times

DISPLAY 8-1 Common Drugs and Their Actions

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES			
		GENERIC NAME	TRADE NAME		
adrenergics <i>ad-ren-ER-jiks</i> (sympathomimetics <i>[sim-pa-thō-mi-MET-iks]</i>)	mimic the action of the sympathetic nervous system, which responds to stress	epinephrine	Bronkaid		
		phenylephrine	Neo-Synephrine		
		pseudoephedrine	Sudafed		
		dopamine	Intropin		
analgesics <i>an-al-JĒ-siks</i>	alleviate pain				
		narcotic <i>nar-KO-tik</i>	decrease pain sensation in central nervous system; chronic use may lead to physical dependence	meperidine morphine	Demerol Duramorph
		nonnarcotic <i>non-nar-KO-tik</i>	act peripherally to inhibit prostaglandins (local hormones); they may also be anti-inflammatory and antipyretic (reduce fever)	aspirin (acetylsalicylic acid; ASA) acetaminophen (APAP) ibuprofen celecoxib	Tylenol Motrin, Advil Celebrex, Vioxx
anesthetics <i>an-es-THET-iks</i>	reduce or eliminate sensation	local			
		lidocaine	Xylocaine		
		procaine	Novocain		
		general nitrous oxide midazolam	Versed		
anticoagulants <i>an-ti-kō-AG-ū-lants</i>	prevent coagulation and formation of blood clots	heparin			
		warfarin	Coumadin		
anticonvulsants <i>an-ti-kon-VUL-sants</i>	suppress or reduce the number and/or intensity of seizures	phenobarbital	Dilantin		
		phenytoin	Tegretol		
		carbamazepine	Depakene		
		valproic acid			
antidiabetics <i>an-ti-dī-a-BET-iks</i>	prevent or alleviate diabetes	insulin	Humulin (injected)		
		chlorpropamide	Diabinese (oral)		
		glyburide	Micronase		
		metformin	Glucophage		
		acarbose	Precose		

DISPLAY 8-1 Common Drugs and Their Actions, continued

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES	
		GENERIC NAME	TRADE NAME
antiemetics <i>an-tē-e-MET-iks</i>	relieve symptoms of nausea and prevent vomiting (emesis)	ondansetron dimenhydrinate prochlorperazine scopolamine promethazine	Zofran Dramamine Compazine Transderm-Scōp Phenergan
antihistamines <i>an-ti-HIS-ta-mēnz</i>	prevent responses mediated by histamine: allergic and inflammatory reactions	diphenhydramine brompheniramine loratadine cetirizine	Benadryl Dimetane Claritin Zyrtec
antihypertensives <i>an-ti-hī-per-TEN-sivs</i>	lower blood pressure by reducing cardiac output, dilating vessels, or promoting excretion of water by the kidneys; see also calcium channel blockers, beta blockers, and diuretics under cardiac drugs, below	clonidine prazosin minoxidil losartan captopril (ACE inhibitor; see Chapter 9)	Catapres Minipress Loniten Cozaar Capoten
anti-inflammatory drugs <i>an-tē-in-FLAM-a-tō-rē</i>	counteract inflammation and swelling		
corticosteroids <i>kor-ti-kō-STER-oyds</i>	hormones from the cortex of the adrenal gland; used for allergy, respiratory, and blood diseases, injury, and malignancy; suppress the immune system	dexamethasone cortisone prednisone hydrocortisone fluticasone	Decadron Cortone Deltasone Hydrocortone, Cortef Flonase
nonsteroidal anti-inflammatory drugs (NSAIDs) <i>non-ster-OYD-al</i>	reduce inflammation and pain by interfering with synthesis of prostaglandins; also antipyretic	aspirin ibuprofen indomethacin naproxen diclofenac	Motrin, Advil Indocin Naprosyn, Aleve Voltaren
anti-infective agents	kill or prevent the growth of infectious organisms		
antibacterials <i>an-ti-bak-TĒ-rē-als</i> antibiotics <i>an-ti-bī-OT-iks</i>	effective against bacteria	amoxicillin penicillin V erythromycin vancomycin linezolid gentamycin clarithromycin cephalexin sulfisoxazole tetracycline	Polymox Pen-Vee K Erythrocin Vancocin Zyvox Garamycin Biaxin Keflex Gantrisin Achromycin

DISPLAY 8-1 Common Drugs and Their Actions, *continued*

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES	
		GENERIC NAME	TRADE NAME
		ciprofloxacin (acts on ulcer-causing <i>Helicobacter pylori</i>)	Cipro
		isoniazid (INH) (tuberculosis)	Nydrazid
antifungals <i>an-ti-FUNG-gals</i>	effective against fungi	amphotericin B	Fungizone
		miconazole	Monistat
		nystatin	Nilstat
		fluconazole	Diflucan
		itraconazole	Sporanox
antiparasitics <i>an-ti-par-a-SIT-iks</i>	effective against parasites: protozoa, worms	iodoquinol (amebae)	Yodoxin
		quinacrine	Atabrine
antivirals <i>an-ti-VI-rals</i>	effective against viruses	acyclovir	Zovirax
		amantadine	Symmetrel
		zanamivir (influenza)	Relenza
		zidovudine (HIV)	Retrovir
		indinavir (HIV protease inhibitor)	Crixivan
antineoplastics <i>an-ti-nē-ō-PLAS-tiks</i>	destroy cancer cells; they are toxic for all cells but have greater effect on cells that are actively growing and dividing; hormones and hormone inhibitors also are used to slow tumor growth	cyclophosphamide	Cytoxan
		doxorubicin	Adriamycin
		methotrexate	Folex
		vincristine	Oncovin
		tamoxifen (estrogen inhibitor)	Nolvadex
cardiac drugs <i>KAR-dē-ak</i>			
antiarrhythmics <i>an-tē-a-RITH-miks</i>	correct or prevent abnormalities of heart rhythm	quinidine	Quinidex
		lidocaine	Xylocaine
		digoxin	Lanoxin
beta-adrenergic blockers (beta blockers) <i>bā-ta-ad-ren-ER-jik</i>	inhibit sympathetic nervous system; reduce rate and force of heart contractions	propranolol	Inderal
		metoprolol	Lopressor
		atenolol	Tenormin
		carvedilol	Coreg
calcium channel blockers <i>KAL-sē-um</i>	dilate coronary arteries, slow heart rate, reduce contractions	diltiazem	Cardizem
		nifedipine	Procardia
		verapamil	Calan
		nitroglycerin	Nitrostat
		isosorbide	Isordil
hypolipidemics <i>hī-pō-lip-i-DE-miks</i>	lower cholesterol in patients with high serum	cholestyramine	Questran
		lovastatin	Mevacor

DISPLAY 8-1 Common Drugs and Their Actions, continued

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES	
		GENERIC NAME	TRADE NAME
	levels that cannot be controlled with diet alone; hypocholesteroleemics, statins	pravastatin atorvastatin simvastatin	Pravachol Lipitor Zocor
nitrates <i>Nĭ-trātz</i>	dilate coronary arteries and reduce workload of heart by lowering blood pressure and reducing venous return; antianginal	nitroglycerin isosorbide	Nitrostat Isordil
CNS stimulants	stimulate the central nervous system	methylphenidate amphetamine (chronic use may lead to drug dependence)	Ritalin Adderall, Dexedrine
diuretics <i>dī-ū-RET-iks</i>	promote excretion of water, sodium, and other electrolytes by the kidneys; used to reduce edema and blood pressure	bumetanide furosemide mannitol hydrochlorothiazide (HCTZ) triamterene + HCTZ	Bumex Lasix Osmitrol Hydrodiuril Dyazide
gastrointestinal drugs <i>gas-trō-in-TES-tin-al</i>			
antidiarrheals <i>an-ti-di-a-RE-als</i>	treat or prevent diarrhea by reducing intestinal motility or absorbing irritants and soothing the intestinal lining	diphenoxylate loperamide attapulgate atropine	Lomotil Imodium Kaopectate
histamine H ₂ antagonists <i>HIS-ta-mēn</i>	decrease secretion of stomach acid by interfering with the action of histamine at H ₂ receptors; used to treat ulcers and other gastrointestinal problems	cimetidine ranitidine	Tagamet Zantac
laxatives <i>LAK-sa-tivs</i>	promote elimination from the large intestine; types include:		
	stimulants	bisacodyl	Dulcolax
	hyperosmotics (retain water)	lactulose	Constilac, Chronulac
	stool softeners	docusate	Colace, Surfak
	bulk-forming agents	psyllium	Metamucil

DISPLAY 8-1 Common Drugs and Their Actions, continued

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES	
		GENERIC NAME	TRADE NAME
hypnotics <i>hip-NOT-iks</i>	induce sleep or dull the senses; see antianxiety agents (below, under psychotropics)		
muscle relaxants <i>rē-LAK-sants</i>	depress nervous system stimulation of skeletal muscles; used to control muscle spasms and pain	baclofen carisoprodol methocarbamol	Lioresal Soma Robaxin
psychotropics <i>sī-kō-TROP-iks</i>	affect the mind, altering mental activity, mental state, or behavior		
antianxiety agents <i>an-tē-ang-Zī-e-tē</i>	reduce or dispel anxiety; tranquilizers; anxiolytic agents	lorazepam chlordiazepoxide diazepam hydroxyzine alprazolam buspirone	Ativan Librium Valium Atarax Xanax BuSpar
antidepressants <i>an-ti-dē-PRES-sants</i>	relieve depression by raising brain levels of neurotransmitters (chemicals active in the nervous system)	amitriptyline imipramine fluoxetine paroxetine sertraline	Elavil Tofranil Prozac Paxil Zoloft
antipsychotics <i>an-ti-sī-KOT-iks</i>)	act on nervous system to relieve symptoms of psychoses	chlorpromazine haloperidol clozapine risperidone olanzapine	Thorazine Haldol Clozaril Risperdal Zyprexa
respiratory drugs			
antitussives <i>an-ti-TUS-sivs</i>	suppress coughing	dextromethorphan	Benlyn DM
bronchodilators <i>brong-kō-dī-LĀ-tors</i>	prevent or eliminate spasm of the bronchi (breathing tubes) by relaxing bronchial smooth muscle; used to treat asthma and bronchitis	albuterol epinephrine metaproterenol salmeterol theophylline montelukast (prevents attacks)	Proventil Sus-Phrine Alupent Serevent Theo-Dur Singulair
expectorants <i>ek-SPEK-tō-rants</i>	induce productive coughing to eliminate respiratory secretions	guaifenesin	Robitussin
mucolytics <i>mū-kō-LIT-iks</i>	loosen mucus to promote its elimination	acetylcysteine	Mucomyst

DISPLAY 8-1 Common Drugs and Their Actions, continued

CATEGORY	ACTIONS; APPLICATIONS	EXAMPLES	
		GENERIC NAME	TRADE NAME
sedatives/hypnotics <i>SED-a-tivs/hip-NOT-iks</i>	induce relaxation and sleep; lower (sedative) doses promote relaxation leading to sleep; higher (hypnotic) doses induce sleep; antianxiety agents also used	phenobarbital zolpidem	Ambien
tranquilizers <i>tran-kwi-LĪZ-ers</i>	reduce mental tension and anxiety; see anti-anxiety agents (above, under psychotropics)		

DISPLAY 8-2 Therapeutic Uses of Herbal Medicines

NAME	PART USED	THERAPEUTIC USES
aloe	leaf	treatment of burns and minor skin irritations
black cohosh	root	reduction of menopausal hot flashes
chamomile	flower	anti-inflammatory, gastrointestinal antispasmodic, sedative
echinacea <i>e-ki-NĀ-shē-a</i>	all	reduction in severity and duration of colds; may stimulate the immune system; used topically for wound healing
evening primrose oil	seed	source of essential fatty acids important for the health of the cardiovascular system; treatment of premenstrual syndrome (PMS), rheumatoid arthritis, skin disorders
flax	seed	source of fatty acids important in maintaining proper lipids (e.g., cholesterol) in the blood
ginkgo	leaf	improves blood circulation in and function of the brain; improves memory; used to treat dementia; antianxiety agent; protects the nervous system
ginseng	root	stress reduction; lowers blood cholesterol and blood sugar
green tea	leaf	antioxidant; acts against cancer of the gastrointestinal tract and skin; oral antimicrobial agent; reduces dental caries
kava	root	antianxiety agent; sedative
milk thistle	seeds	protects the liver against toxins; antioxidant
saw palmetto	berries	used to treat benign prostatic hyperplasia (BPH)
slippery elm	bark	as lozenge for throat irritation; for gastrointestinal irritation and upset; protects irritated skin
soy	bean	rich source of nutrients; protective estrogenic effects in menopausal symptoms, osteoporosis, cardiovascular disease, cancer prevention
St. John's wort	flower	treatment of anxiety and depression; antibacterial and antiviral properties (note: this product can interact with a variety of drugs)
tea tree oil	leaf	nonirritating antimicrobial; used to heal cuts, skin infections, burns
valerian	root	sedative; sleep aid

DISPLAY 8-3 Routes of Drug Administration

ROUTE	DESCRIPTION
absorption	drug taken into the circulation through the digestive tract or by transfer across another membrane
inhalation <i>in-ha-LĀ-shun</i>	administration through the respiratory system, as by breathing in an aerosol or nebulizer spray
instillation <i>in-stil-LĀ-shun</i>	liquid is dropped or poured slowly into a body cavity or on the surface of the body, such as into the ear or onto the conjunctiva of the eye (Fig. 8-1)
oral <i>OR-al</i>	given by mouth; per os (po)
rectal <i>REK-tal</i>	administered by rectal suppository or enema
sublingual (SL) <i>sub-LING-gwal</i>	administered under the tongue
topical <i>TOP-i-kal</i>	applied to the surface of the skin
transdermal <i>trans-DER-mal</i>	absorbed through the skin, as from a patch placed on the surface of the skin
injection (Fig. 8-2)	administered by a needle and syringe (Fig. 8-3); described as parenteral (<i>pa-REN-ter-al</i>) routes of administration
epidural <i>ep-i-DUR-al</i>	injected into the space between the meninges (membranes around the spinal cord) and the spine
intra-dermal (ID) <i>in-tra-DER-mal</i>	injected into the skin
intra-muscular (IM) <i>in-tra-MUS-kū-lar</i>	injected into a muscle
intra-venous <i>in-tra-VĒ-nus</i>	injected into a vein
spinal (intrathecal) <i>in-tra-THĒ-kal</i>	injected through the meninges into the spinal fluid
subcutaneous (SC) <i>sub-kū-TĀ-nē-us</i>	injected beneath the skin; hypodermic



FIGURE 8-1. Instillation of eye drops into the lower conjunctival sac. (Reprinted with permission from Taylor C, Lillis C, LeMone P. *Fundamentals of Nursing: The Art and Science of Nursing Care*. 4th Ed. Philadelphia: Lippincott Williams & Wilkins, 2001.)

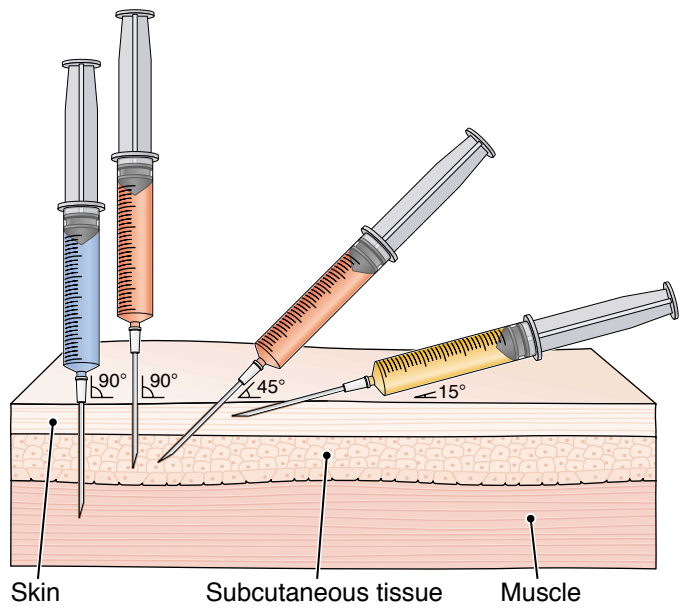


FIGURE 8-2. Comparison of the angles of insertion for intramuscular, subcutaneous, and intradermal injections.

- Intramuscular injection
- Subcutaneous injection
- Intradermal injection

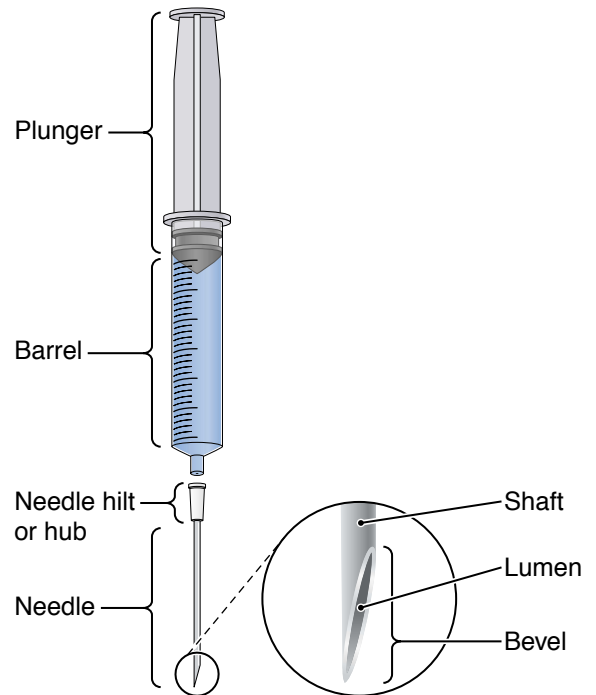


FIGURE 8-3. Parts of a needle and syringe.

DISPLAY 8-4 Drug Preparations

FORM	DESCRIPTION
LIQUID	
aerosol <i>AR-o-sol</i>	solution dispersed as a mist to be inhaled
aqueous solution <i>A-kwē-us</i>	substance dissolved in water
elixir (elix) <i>ē-LIK-sar</i>	a clear, pleasantly flavored and sweetened hydroalcoholic liquid intended for oral use
emulsion <i>ē-MUL-shun</i>	a mixture in which one liquid is dispersed but not dissolved in another liquid
lotion <i>LŌ-shun</i>	solution prepared for topical use
suspension (susp) <i>sus-PEN-shun</i>	fine particles dispersed in a liquid; must be shaken before use
tincture (tinct) <i>TINK-chur</i>	substance dissolved in an alcoholic solution
SEMISOLID	
cream <i>krēm</i>	a semisolid emulsion used topically
ointment (ung) <i>OYNT-ment</i>	drug in a base that keeps it in contact with the skin
SOLID	
capsule (cap) <i>KAP-sūl</i>	material in a gelatin container that dissolves easily in the stomach
lozenge <i>LOZ-enj</i>	a pleasant-tasting medicated tablet or disk to be dissolved in the mouth, such as a cough drop
suppository (supp) <i>su-POZ-i-tor-ē</i>	substance mixed and molded with a base that melts easily when inserted into a body opening
tablet (tab) <i>TAB-let</i>	a solid dosage form containing a drug in a pure state or mixed with a nonactive ingredient and prepared by compression or molding; also called a pill

DISPLAY 8-5 Terms Pertaining to Injectable Drugs

TERM	MEANING
ampule <i>AM-pūl</i>	a small sealed glass or plastic container used for sterile intravenous solutions (Fig. 8-4)
bolus <i>BŌ-lus</i>	a concentrated amount of a diagnostic or therapeutic substance given rapidly intravenously
catheter <i>KATH-e-ter</i>	a thin tube that can be passed into a body cavity, organ, or vessel (Fig. 8-5)
syringe <i>sir-INJ</i>	an instrument for injecting fluid (see Fig. 8-4)
vial <i>VĪ-al</i>	a small glass or plastic container (see Fig. 8-4)

FIGURE 8-4. Ampules, vials, and syringes.
 (Reprinted with permission from Taylor C, Lillis C, LeMone P. *Fundamentals of Nursing: The Art and Science of Nursing Care*. 4th Ed. Philadelphia: Lippincott Williams & Wilkins, 2001.)

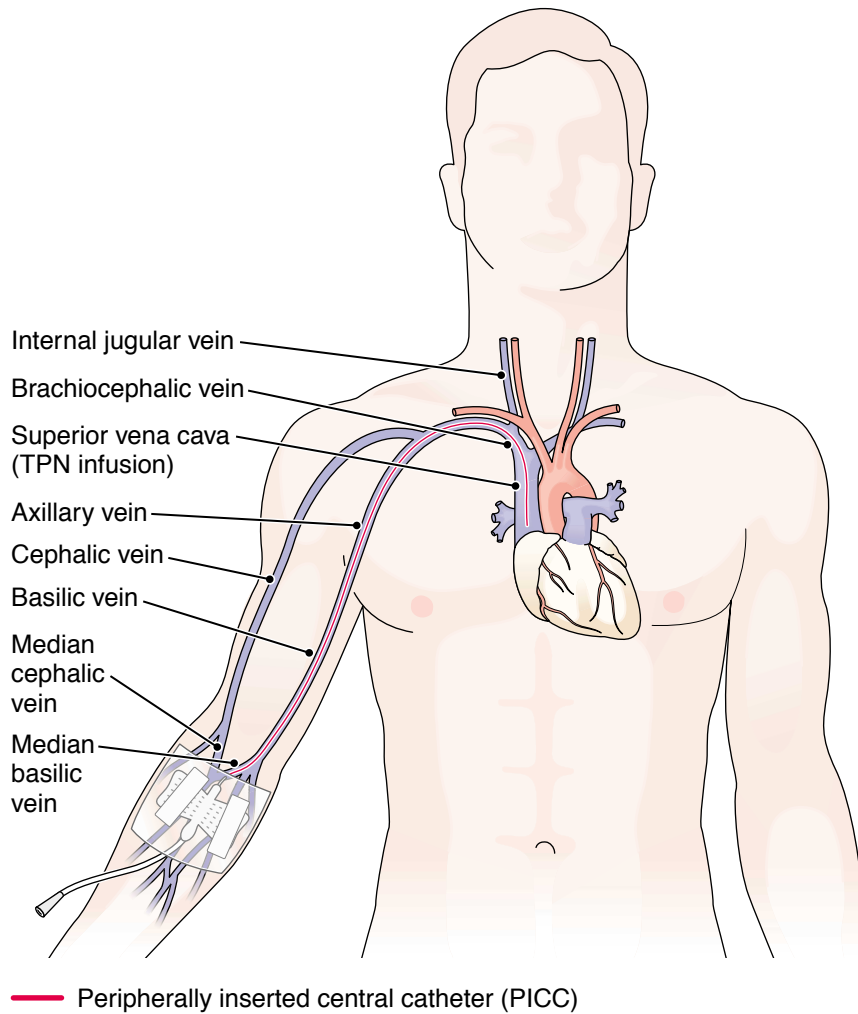


FIGURE 8-5. Placement of a peripherally inserted central catheter (PICC).