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Intravenous Therapy Management

Performance Checklist

UNIT ONE Initiating Intravenous Therapy

UNIT ASSESSMENT

- ☐ Validated physician's order for IV therapy.
- ☐ Assessed need for client teaching about IV therapy.
- ☐ Evaluated client for IV site selection.
- ☐ Selected appropriate vessel for venipuncture.
- ☐ Determined appropriate type and size of cannulation device for client.
- ☐ Determined IV equipment needed.

PREPARING THE INFUSION SYSTEM

Preparation

	Performed yes	Performed no	Mastered
1. Washed hands.			
2. Compared type and amount of solution with physician's order.			
3. Checked pharmacy label for client's identification, solution type, additives, and expiration date.			
4. Selected appropriate IV tubing.			
5. Selected add-on filter, if indicated.			
6. Obtained needless cannula or adapter for established infusion site.			

Procedure

	Performed yes	Performed no	Mastered
1. Removed outer wrap around IV bag. Bag may have been wet due to condensation.			
2. Inspected bag carefully for tears or leaks by applying gentle pressure to bag.			
3. Held bag against dark and light backgrounds to examine for discoloration, cloudiness, or particulate matter.			
4. Hung IV bag on IV pole.			

	Performed yes	Performed no	Mastered
5. Closed tubing roller clamp.			
6. Removed plastic protector from IV port.			
7. Squeezed drip chamber and inserted tubing spike into bag port, holding port securely to prevent contamination.			
8. Released pressure on drip chamber until chamber was partially full.			
9. Attached add-on terminal filter (if indicated).			
10. Removed protective cap at end of tubing.			
11. Opened clamp on line to prime tubing and filter.			
12. Held tubing tip higher than tubing-dependent loop while priming.			
13. Inverted and tapped Y injection site as tubing primes.			
14. Held filter, if attached, pointing downward so proximal half of filter filled with fluid first, then inverted to complete priming, tapping air out as filter primed.			
15. Closed tubing clamp when primed.			
16. Placed needleless cannula on end of tubing.			

ADDING EXTENSION TUBING

Procedure

	Performed yes	Performed no	Mastered
1. Gathered equipment and determined type of cap, if needed.			
2. Swabbed tubing's terminal injection cap and inserted syringe cannula.			
3. Removed protector at opposite end and primed extension tubing with 1 mL normal saline solution.			
4. Added needleless cannula to tubing if attaching to capped catheter.			
5. Swabbed client's established IV cannula resealable cap and connected extension tubing or inserted primed extension tubing directly into client's IV catheter.			
6. Flushed with 1mL normal saline solution (optional).			

PREPARING THE VENIPUNCTURE SITE

Procedure

	Performed yes	Performed no	Mastered
1. Explained procedure to client.			
2. Provided privacy.			
3. Hung solution bag and primed administration set within easy reach.			
4. Positioned client; adjusted light.			
5. Cut tape and placed on table edge.			
6. Washed hands and donned gloves.			
7. Selected catheter or needle.			
8. Selected vein on client's nondominant arm, if possible.			
a. Inspected both of client's arms, palpating and visualizing the course of veins.			
b. Selected superficial, easily palpated, and large enough vein.			
c. Area was free of lesions or scars and away from joints.			

	Performed yes	Performed no	Mastered
d. Did not use antecubital fossa, if possible.			
e. Did not use same vein below an infiltrated or phlebitic site.			
f. Selected shortest and smallest cannula sufficient for delivery.			
g. Selected distal end of vein first, reserving proximal sites.			
h. Selected larger vein for hypertonic solution or blood.			
i. Avoided vein in affected arm following mastectomy.			
j. Used lower extremity ONLY if necessary.			
9. Applied tourniquet a few inches above elbow to observe potential veins; then applied tourniquet 6 inches above selected site to distend vein. Secured tourniquet with loop to impede venous return but ensure arterial flow.			
10. Checked for presence of radial pulse.			
11. Inflated blood pressure cuff, if using, just below diastolic reading.			
a. Tapped vein lightly to distend.			
b. Asked client to open and close fist.			
c. If difficulty palpating, applied warm, moist compress to area for 10–20 minutes.			
d. Then positioned client's arm dependent for few minutes to assist with distending vein.			
12. Prepped site with antimicrobial swab.			
13. Let prep solution dry naturally.			
14. Did not touch selected insertion site after prepping.			
15. Proceeded to appropriate procedure for venipuncture.			

INSERTING A WINGED NEEDLE

Procedure

	Performed yes	Performed no	Mastered
1. Followed steps in *Preparing the Venipuncture Site* and donned gloves.			
2. Selected winged needle for adults, children, infants, and elderly clients who have small or fragile veins.			
3. Affixed end of IV infusion tubing to end of winged needle tubing. Removed sterile cover from needle to run fluid through needle and prime tubing, then clamped tubing.			
4. Applied tourniquet or blood pressure cuff to distend selected vein.			
5. Prepped selected site.			
6. Removed protective cap from winged needle and held needle by its wings.			
7. Anchored vein by placing thumb of nondominant hand below selected site and pulling skin taut. With needle bevel up, entered client's skin at 30° angle.			
8. Followed course of vein until vein entered, when lack of resistance felt.			
9. Observed for flashback of blood in needle tubing.			
10. Carefully advanced needle up course of vein.			
11. Released tourniquet.			
12. Injected normal saline for lock, or affixed IV tubing, opened clamp, and observed drip chamber.			
13. Reduced flow rate to KVO until secured in place.			
14. Removed gloves and washed hands.			

	Performed yes	Performed no	Mastered
15. Secured needle with 1/2-inch tape using chevron technique over wings. Avoided taping directly on insertion site.			
16. Looped and taped IV tubing a short distance from needle.			
17. Applied occlusive transparent dressing over infusion site.			
18. Labeled dressing with date, time, initials, and size of catheter inserted.			
19. Established prescribed infusion rate of solution.			
20. Immobilized hand in functional position to arm board.			
21. Changed site every 48–72 hours.			

INSERTING AN OVER-THE-NEEDLE CATHETER

Preparation

1. Checked physician's orders and client care plan.
2. Gathered appropriate equipment.
3. Identified client and explained procedure.
4. Washed hands.

Procedure

	Performed yes	Performed no	Mastered
1. Prepared IV system and followed steps in *Preparing Venipuncture Site.*			
2. Donned gloves.			
3. Positioned extremity for venipuncture.			
4. Injected site intradermally with small wheal of local anesthetic according to agency policy. (Allowed 90 seconds for anesthetic to take effect.)			
5. Placed extremity flat on bed or placed in dependent position. If vein was not distended sufficiently for easy venipuncture, asked client to make a fist or lightly tapped on vein with fingertips.			
6. Held catheter with bevel up and examined the integrity of end of catheter.			
7. Applied traction to stabilize vein.			
8. With bevel of needle up, inserted needle/catheter unit at 45° angle into client's skin.			
9. Revisualized vein; reduced angle of cannula, pierced vein, observed for backflow of blood into hub, while continuing to apply traction.			
10. Held needle and gently advanced plastic catheter hub over needle and up vein no more than half way.			
11. Released tourniquet when catheter was fully in place.			
12. Stopped and separated, but did not completely remove stylet from catheter.			
13. Advanced only catheter until catheter hub met skin.			
14. Released tourniquet. Left stylet in catheter while taping catheter to skin.			
15. Taped catheter wings and across body of hub without touching puncture site, and without touching hub/catheter juncture.			
16. Placed digital pressure over distal end of catheter and carefully removed stylet.			
17. Maintaining aseptic technique, connected catheter to IV tubing or placed a saline lock on catheter.			

	Performed yes	Performed no	Mastered
18. Connected catheter to needless cap or inserted IV tubing into catheter.			
19. Opened clamp and observed drip chamber for fluid flow.			
20. Reduced flow, and proceeded to tape cannula with chevron method.			
21. Covered insertion site with sterile transparent dressing.			
22. Looped and taped tubing to client's arm a short distance from site.			
23. Set drip rate according to orders.			
24. Labeled IV site with date, time, initials, and size of catheter.			
25. Removed gloves and washed hands.			
26. Changed cannula and infusion site every 48 hours.			

UNIT TWO Intravenous Management

UNIT ASSESSMENT

- ☐ Assessed site for erythema, swelling, or pain.
- ☐ Assessed infusion for correct solution, amount, and flow rate.
- ☐ Assessed need for IV solution/administration set and infusion site change.
- ☐ Assessed need to change IV to saline lock.
- ☐ Assessed need to change client gown while IV infusing.
- ☐ Assessed need to change IV solution/administration set and infusion site.

REGULATING INFUSION FLOW RATE

Procedure

	Performed yes	Performed no	Mastered
1. Checked manufacturer's drip rate calibration on administration set package.			
2. Checked physician's order for amount of fluids to be delivered per unit of time.			
3. Calculated flow rate.			
4. Noted drip chamber; counted the drops in 1 minute (or 15 seconds and multiplied by 4).			
5. Adjusted tubing clamp to desired number of drops.			
6. Monitored flow rate frequently to maintain desired delivery.			

USING AN ELECTRONIC FLOW-CONTROL DEVICE

Procedure

	Performed yes	Performed no	Mastered
1. Spiked IV solution bag.			
2. Closed regulating clamp on set tubing before hanging bag.			
3. Filled drip chamber to minimum one-third full.			
4. Primed tubing by opening regulating clamp slowly and allowed tubing to fill with IV solution. (If using cassette type tubing, followed package instructions to correctly fill cassette portion of tubing.)			
5. Followed manufacturer's instructions, and loaded administration set into device, taking care to fit tubing or cassette into appropriate receptor sites.			

Performed yes	Performed no	Mastered

6. Closed device door and latched.
7. Donned gloves.
8. Checked that client's venipuncture site was free from signs of vein irritation or infiltration.
9. Connected administration set tubing to established infusion site cap using a needleless cannula.
10. Opened regulating clamp on administration set.
11. Turned device ON.
12. Set device parameters for operation, again following manufacturer's instructions or machine's setup prompts. Parameters may have included:
    a. Infusion (primary)
    b. Volume to be infused
    c. Rate (mL/hr)
    d. Pressure
13. Started device when parameters were set.
14. Observed that infusion was running properly.
15. Removed gloves and washed hands.
16. Checked client's infusion site frequently.

USING A SYRINGE PUMP

Procedure

1. Checked syringe label with physician's order for drug, dosage, and amount of drug to be delivered over specified time.
2. Ensured that medication was compatible with primary infusing solution.

Performed yes	Performed no	Mastered

3. Calculated amount of medication to be delivered per minute.
4. Attached microbore tubing to syringe and holding syringe upright, expelled air from medication syringe before priming tubing.
5. Holding syringe downward, carefully primed microbore tubing with medication (about 0.5 mL).
6. Inserted syringe into cradle of pump, squeezing clamp around designated parts of syringe; attached pusher to plunger.
7. Verified that IV site was free from infiltration or vein irrigation.
8. Swabbed primary IV tubing port closest to client.
9. Inserted microbore cannula into port.
10. Set rate for drug delivery according to pharmacy specifications on syringe label.
11. Started syringe pump.
12. Checked infusion indicator to verify pump was infusing.
13. Monitored site and pump function frequently.
14. Administered subsequent doses, used new syringe dispensed by pharmacy and reused tubing 48–72 hours, according to agency policy.

MANAGING THE IV SITE

Procedure

1. Evaluated every 8 hours for site-related complications.

Performed yes	Performed no	Mastered

2. Included gentle palpation through an intact transparent dressing.
3. Removed IV cannula in the periphery, and changed to new, more proximal site every 72–96 hours.
4. Assessed IV site carefully and frequently if client status prohibited change.

for IV Administration Sets

1. Changed administration sets, including all stopcocks and extension tubings, every 72–96 hours.
2. Changed IV tubing according to use.
   a. Hyperalimentation every 24 hours.
   b. Primary intermittent tubing every 24 hours.
   c. Secondary infusion "piggyback" tubing every 72–96 hours.
3. Used separate secondary tubing for each "piggybacked" agent.

for Converting from Continuous IV to "Lock"

1. Assessed site was patent and functional.
2. Donned clean gloves.
3. Clamped infusion tubing.
4. Disconnected IV tubing from catheter.
5. Attached needleless injection cap or primed T-connector extension tubing with needleless injection cap to catheter hub.
6. Prepped, then injected port with 1 mL sterile normal saline.

Performed yes	Performed no	Mastered

for Applying a Transparent Dressing

1. Covered IV insertion site with transparent dressing.
   a. Lined up slit in the frame with the catheter hub.
   b. Applied dressing over insertion site just to top edge of hub.
   c. Did not stretch dressing edges during application.
   d. Firmly smoothed down dressing edges as frame was slowly removed.
   e. Gently pinched and sealed dressing around catheter hub.
   f. Smoothed down entire dressing from center to edges, using firm pressure to enhance adhesion.
2. Documented catheter insertion and dressing information.

CONVERTING IV TO SALINE LOCK

Procedure

1. Gathered equipment and washed hands.
2. Assessed that IV was infusing and there were no signs of phlebitis or infiltration.
3. Donned gloves.
4. Primed extension tubing with normal saline.
5. Turned off IV and disconnected from pump if necessary.
6. Disconnected IV tubing and attached extension tubing with the lock cannula. Placed 2 × 2 gauze under IV site to catch drops from IV tubing disconnect.

	Performed yes	Performed no	Mastered
7. Attached threaded lock cannula to extension tubing.			
8. Inserted lock cannula into port.			
9. Turned threaded cannula until firmly locked in place.			
10. Restarted IV flow rate. Replaced tubing into pump as needed.			
11. Redressed IV site.			
12. Discarded equipment.			
13. Removed gloves and washed hands.			

CHANGING GOWN FOR CLIENT WITH IV

Procedure

	Performed yes	Performed no	Mastered
1. Checked client care plan for infusion drip rate, special considerations.			
2. Washed hands.			
3. Took equipment to client's room.			
4. Explained procedure to client.			
5. Untied back of gown, and removed gown from unaffected arm.			
6. Supported arm with IV and slipped gown down client's arm to IV tubing.			
7. Placed clean gown over client's chest and abdomen.			
8. Used tubing clamp to slow rate to keep open rate and removed tubing from infusion pump, if used.			
9. Removed IV bag from hook and slipped sleeve over bag, keeping bag above client's arm.			
10. Placed own hand through distal end of clean gown sleeve and grasped IV bag. Pulled bag and tubing out through clean gown sleeve.			
11. Rehung bag on hook, and checked to see infusion was running according to ordered drip rate.			
12. Replaced tubing into infusion pump, unclamped and reestablished primary infusion device.			
13. Guided sleeve of gown up client's arm to shoulder.			
14. Assisted client to put other arm through remaining sleeve.			
15. Tied gown at back.			
16. Checked IV infusion rate and IV tubing to determine that solution was flowing unimpeded.			
17. Returned bed to comfortable position for client, and replaced side rails.			
18. Removed dirty linen from room.			
19. Washed hands.			

DISCONTINUING AN IV

Procedure

	Performed yes	Performed no	Mastered
1. Gathered equipment.			
2. Washed hands and donned gloves.			
3. Explained procedure to client.			

Performed yes	Performed no	Mastered

4. Turned off infusion.
5. Loosened dressing and tape, peeled dressing edges back toward puncture site.
6. Stabilized needle or catheter while removing dressing and tape.
7. Removed needle/catheter carefully and smoothly keeping it almost flush with skin. Did not press down on top of needle point while it was in vein.
8. Quickly pressed sterile pad over venipuncture site, and held firmly until bleeding stopped.
9. Applied clean pad and taped in place.
10. Elevated arm to reduce venous pressure and help collapse vein. Did not bend arm at elbow.
11. Observed venipuncture site for redness, swelling, or hematoma.
12. Disposed of equipment and gloves.
13. Washed hands.
14. Checked site again in 15 minutes.
15. Recorded volume infused on I&O sheet.

UNIT THREE Intake and Output

UNIT ASSESSMENT

☐ Assessed client's need for intake and output recording.

☐ Assessed client's ability to keep intake and output fluid records.

☐ Evaluated client for any factors that might have affected his or her intake and output (e.g., preexisting disease states, concurrent disease, drug therapies, and current physical status).

☐ Determined all measurable sources of fluid intake: fluids with and between meals, tube feeding, liquid medications, IV fluids, and IV medications.

☐ Determined all measurable sources of fluid output: urine, emesis, diarrhea, and drainage sites.

☐ Determined alterations in nonmeasurable sources of fluid intake and loss: food, increased metabolism (e.g., fever), rapid respirations, and perspiration.

☐ Determined balance of daily intake and output.

MONITORING INTAKE AND OUTPUT

Procedure

Performed yes	Performed no	Mastered

1. Determined if client needed intake and output measurements by checking client's chart or care plan.
2. Measured intake from all sources.
3. Instructed client and/or family in need to measure all intake and output.
4. Measured output from all sources to establish a record and plan fluid replacement.
5. Recorded I&O on bedside record each time a measurement was made.
6. Correlated intake and output with daily weight.
7. Recorded 24-hour totals of intake and output on bedside record and placed in client's chart.
8. Notified physician of any significant imbalance.

MONITORING IV INTAKE

Performed yes	Performed no	Mastered

Procedure

1. Placed intake and output record at bedside.
2. Determined time interval required for monitoring IV intake.
3. Marked time intervals on IV container according to facility policy (used tape or preprinted time strips).
4. Set IV drip rate according to physician's orders.
5. Observed IV container and read IV solution level.
6. Recorded amount of IV solution infused at prescribed time (e.g., every hour, every shift).
7. If using electronic infusion device, pushed "total volume infused" for shift amount, then pushed "clear."
8. Recorded total IV intake on intake and output record at end of each shift.
9. Recorded 24-hour IV total at midnight. Took into account all sources of IV fluid (all IV sites, IV medications).

UNIT FOUR Medication Administration

UNIT ASSESSMENT

- ☐ Noted client's allergies.
- ☐ Noted any drug or solution incompatibilities.
- ☐ Assessed amount and type of diluent needed to prepare medications.
- ☐ Assessed client's general status to establish baseline for administering medications.
- ☐ Assessed patency of infusion set and condition of IV insertion site.

ADDING MEDICATION TO IV SOLUTION BAG

Performed yes	Performed no	Mastered

Procedure

1. Checked physician's orders, MAR, and agency policy.
2. Washed hands.
3. Gathered equipment.
4. Drew up medication into syringe according to directions on medication insert (or PDR).
5. Checked to ensure that prescribed drug was compatible with IV solution.
6. Wiped injection port on IV bag with antimicrobial swab.
7. Injected medication into bag while maintaining aseptic technique.
8. Squeezed injection port.
9. Mixed IV solution and medication by gently agitating bag.
10. Affixed medication label to IV bag.
11. Held bag against both a dark and a light background to inspect for any precipitate.
12. Inserted IV tubing into bag, and proceeded with appropriate method of administration as ordered.

USING A SECONDARY BAG (IV PIGGYBACK)

Procedure

1. Ensured medication compatibility with primary infusing solution.

	Performed yes	Performed no	Mastered
2. Spiked bag with secondary administration set. Affixed needleless locking cannula to end of secondary tubing.			
3. Cleansed injection port of primary tubing with antimicrobial swab.			
4. Inserted needleless cannula of secondary "piggyback" tubing into primary port above electronic infusion device.			
5. Hung the secondary bag on the IV pole.			
6. Used extension hook to lower primary bag below secondary bag (if indicated).			
7. Cleared tubing of medication bag by opening clamp, placing bag lower than primary solution, and allowed primary solution to flow into secondary bag tubing.			
8. Backfilled until secondary tubing chamber was one-third full. Clamped secondary tubing.			
9. Programmed secondary settings into infusion device if used.			
10. Opened clamp on secondary bag tubing.			
11. Checked that primary infusion resumed at its "set" rate when secondary volume had been infused.			
12. When secondary bag was empty, readjusted rate of administration in primary solution to desired flow (unless infusion device controlled).			
13. *To hang a new secondary bag,* assured that medication was the same as previously administered in the tubing. A *different* medication requires its own secondary tubing.			
14. Removed old secondary bag, and spiked new "piggyback" medication bag.			
15. Lowered partial-fill bag below injection port of primary IV.			
16. Opened clamp on secondary tubing, and allowed solution from primary IV set to enter tubing, backfilling the tubing to drip chamber.			
17. Replaced new secondary bag on IV pole, and proceeded with administration.			
18. Changed secondary tubing every 48 hours.			

USING A VOLUME CONTROL SET

Procedure

	Performed yes	Performed no	Mastered
1. Added extension tubing to volume control set, if needed, and closed clamps on volume control set, both above and below volume chamber.			
2. Opened air vent by turning clamp located on top of volume chamber.			
3. Spiked IV bag with volume control set, hung bag. Attached IV tubing into volume control set.			
4. Opened upper clamp and filled chamber with IV solution to one-third full.			
5. Closed upper clamp.			
6. Opened lower clamp, and squeezed drip chamber until it was one-half full.			
7. Allowed solution to flow down tubing.			
8. Primed tubing and cannula affixed to end of tubing. If volume control set had membrane filter instead of floating valve filter, followed manufacturer's instructions for priming so that I did not damage the filter.			

	Performed yes	Performed no	Mastered
9. Closed clamp.			
10. Swabbed injection port (located on top of the volume chamber) with antimicrobial swab.			
11. Injected prepared medication into chamber, and agitated gently to mix medication with solution in chamber.			
12. Diluted medication, if necessary, by opening upper clamp and adding additional fluid from IV bag.			
13. Opened clamp on volume control set and adjusted drip rate to desired rate of administration.			
14. Placed medication label on volume control set. Included client's name, medication, dose, and time medication infusion began.			

USING A PERIPHERAL SALINE LOCK

Procedure

1. Prepared medication with appropriate diluent according to manufacturer's instruction for IV injection, and drew up into syringe.
2. Filled two syringes with 1 mL of normal saline.
3. Explained procedure to client.
4. Checked client vital signs if indicated.
5. Prepped needleless injection port with antimicrobial swab.
6. Inserted saline syringe into port, briefly aspirated to check patency, flushed system, and noted for site swelling.

	Performed yes	Performed no	Mastered
7. Inserted medication syringe into port, and injected medication into vein, timing injection administration rate according to drug manufacturer's instructions (checked insert or PDR).			
8. Observed client for any adverse reactions.			
9. Removed medication syringe.			
10. Flushed with second saline syringe to clear line and maintain patency of lock.			
11. Disposed of equipment and gloves.			
12. Rechecked client's vital signs if indicated.			

ADMINISTERING MEDICATIONS BY PERIPHERAL IV LINE INJECTION ("PUSH")

Preparation

1. Checked physician's orders and MAR.
2. Gathered equipment.
3. Washed hands.
4. Prepared medication according to pharmaceutical company's instructions for IV injection in drug insert or PDR.
5. Checked for drug's compatibility with primary infusing solution.
6. Checked medication according to *Five Rights*.
7. Took medication to client's bedside.
8. Checked that client not allergic to drug.
9. Donned clean gloves.

Procedure

Performed yes	Performed no	Mastered

1. Checked client's identaband and asked client to state name.
2. Obtained vital signs if indicated by drug action.
3. Prepped primary tubing injection port closest to client.
4. Inserted medication syringe needleless cannula into line port.
5. Pinched primary tubing between port and infusion bag while injecting medication slowly in calculated increments (e.g., 25% over 20 seconds).
6. After injecting small increments, unpinched primary tubing to allow flushing of medication.
7. Observed client for adverse reaction.
8. Delivered next increment, using watch and timing drug injection according to drug insert instructions.
9. Withdrew cannula when medication injection complete.
10. Discarded equipment.
11. Removed gloves and washed hands.
12. Rechecked client's vital signs if indicated.

UNIT FIVE Blood Transfusions

UNIT ASSESSMENT

☐ Assessed if client had informed consent for transfusion.

☐ Assessed if client had established IV site.

☐ Assessed client's vital signs, especially temperature, for baseline data.

☐ Assessed client's number and blood type on unit matched client's blood ID bracelet name and number; validated with another nurse.

ADMINISTERING BLOOD THROUGH A Y-SET

Performed yes	Performed no	Mastered

Preparation

1. Checked physician's orders for number and type of transfusion units to be given (order must dictate "transfusion").
2. Checked client's room number, identaband, and had client state name.
3. Explained procedure and checked that client had signed consent form.
4. Checked that type and crossmatch had been completed and that blood was ready in Blood Bank.
5. Determined patency of client's IV. Began infusion of NS with appropriate blood tubing.
6. Obtained ordered typed and matched blood component bag from Blood Bank or notified Bank to deliver unit.
7. Obtained client's pretransfusion vital signs.
8. With another nurse, validated that client's ID bracelet matched Blood Bank number on unit to be transfused. If client had no ID bracelet, returned unit to Blood Bank.
9. Validated client's name, ID number, and blood group/Rh matched blood unit data and noted expiration date on unit.
10. Recorded client's vital signs on Transfusion Tag 5 minutes prior to starting, 15 minutes after starting, every 30 minutes during, and immediately following the transfusion.
11. Remembered that blood cannot be returned to Blood Bank after it has been checked out for 20 minutes.

	Performed yes	Performed no	Mastered
12. Checked blood bag for bubbles, cloudiness, dark color, or sediment.			
13. Washed hands and donned clean gloves.			

Procedure

1. Closed all clamps on the Y-set tubing.			
2. Spiked bag of normal saline with one arm of Y-tubing.			
3. Opened clamps on both arms of Y-tubing to flush.			
4. Closed clamp on free arm of Y-set (blood side) and opened clamp below tubing filter to prime main tubing.			
5. Closed main clamp when tubing was primed and attached needleless cannula.			
6. Closed clamps.			
7. Gently agitated blood unit bag.			
8. Pulled back tabs on blood unit bag and exposed port.			
9. Spiked blood bag port with free arm of Y-tubing, then hung unit.			
10. Prepped client's injection port.			
11. Inserted cannula into injection port.			
12. Loaded tubing into infusion pump.			
13. Opened clamp to blood bag.			
14. Started blood infusion, administered slowly (25–50 mL blood) for first 5–15 minutes (rate 100 mL/hr).			
15. Took vital signs 5 minutes, 15 minutes, and every 30 minutes after starting transfusion and recorded on Transfusion Tag record.			
16. Observed client closely for adverse signs.			
17. Agitated blood bag each time client was checked.			
18. If venospasm occurred with cold blood infusion, applied warm pack to site to improve flow.			
19. Completed blood transfusion in less than 4 hours.			
20. Checked that transfusion was completed, then flushed line with normal saline.			
21. Obtained posttransfusion vital signs.			
22. Reported a 1° Celsius (2° Fahrenheit) rise in temperature to physician.			
23. Completed documentation on Transfusion Tag: Placed one copy on client's chart and sent remaining copy to Blood Bank as soon as transfusion was completed.			
24. Discarded administration set within 4 hours of use.			
25. Placed all transfusion related equipment in biohazard waste receptacle.			
26. Washed hands.			
27. Continued to observe client for one hour.			

ADMINISTERING BLOOD THROUGH A STRAIGHT LINE

Procedure

1. Obtained and checked blood as stated in preparation for *Administering Blood Through a Y-Set.*			
2. Washed hands and donned gloves.			
3. Spiked blood bag port and hung unit.			

	Performed yes	Performed no	Mastered
4. Gently agitated unit and suspended unit.			
5. Opened clamp and filled drip chamber, making sure filter was totally submerged in the blood.			
6. Opened clamp on tubing and ran blood through tubing, then clamped.			
7. Placed needleless cannula on end of tubing.			
8. Loaded tubing into infusion pump if used.			
9. Carefully connected blood tubing to patient's IV site catheter or lock.			
10. Began blood transfusion.			
11. Observed client closely for first 5–15 and every 30 minutes.			
12. Obtained pre-, intra-, and post-transfusion vital signs.			
13. When blood bag was empty, closed all clamps and removed blood tubing cannula from IV site.			
14. Disposed of equipment in biohazard waste receptacle.			
15. Washed hands.			
16. Continued to observe client for one hour.			

ADMINISTERING BLOOD COMPONENTS

Procedure

	Performed yes	Performed no	Mastered
1. Checked physician's orders, client care plan, and client's signed consent for transfusion.			
2. Obtained blood component from Blood Bank.			
3. Obtained appropriate administration set.			
4. Washed hands and donned gloves.			
5. Read directions for proper administration of solution.			
6. Identified rate at which blood component should infuse.			
7. Checked Table 28–8 for appropriate rate, risk factors, and possible complications.			

MONITORING FOR POTENTIAL COMPLICATIONS

Procedure

	Performed yes	Performed no	Mastered
1. Checked temperature, blood pressure, pulse, and respiration before transfusion started.			
2. Checked vital signs every 5, 15, and 30 minutes for first 100 mL after transfusion started.			
3. Maintained vital sign assessment throughout blood infusion according to hospital policy.			
4. Monitored client for possible transfusion reactions.			
5. For severe untoward sign, STOPPED transfusion immediately.			
6. Removed blood and any blood-filled tubing, and replaced with saline bag and new tubing to keep line open. Returned blood bag and administration set to blood bank or laboratory.			
7. Notified physician immediately after stopping IV for signs of transfusion reaction. Also notified physician if any unusual sign (itching or hives) occurred.			

29

Central Vascular Access Devices

Performance Checklist

UNIT ONE Percutaneous Central Vascular Catheters

UNIT ASSESSMENT

- ☐ Determined client's level of consciousness so explanation of procedure can be done to allay anxiety.
- ☐ Assessed level of anxiety to determine need for possible premedication.
- ☐ Assessed skin and surrounding tissue for erythema, edema, and warmth.
- ☐ Assessed circulating volume status and right heart function.

ASSISTING WITH PERCUTANEOUS CENTRAL VASCULAR CATHETERIZATION

Procedure

	Performed yes	Performed no	Mastered
1. Validated signed consent for catheter insertion.			
2. Explained procedure to client, including rationale for mask, positioning, and Valsalva's maneuver.			
3. Placed client in Trendelenburg's position.			
4. According to physician's preference, extended client's neck and upper chest by placing rolled pillow or blanket between shoulder blades.			
5. Placed mask on client, and turned client's head away from side of venipuncture.			
6. Maintained sterility when opening glove packet and sterile drape pack.			
7. Opened prep pads.			
8. Assisted with central catheter insertion. a. Physician donned mask, gown, and sterile gloves for this procedure. b. Physician prepared client's skin, draped area, and, using sterile syringe and needle, drew up anesthetic to infiltrate site. c. As physician inserted catheter, had client perform Valsalva's maneuver to prevent air embolism.			

Performed yes	Performed no	Mastered

(1) Instructed client to exhale against a closed glottis, or to hum.
(2) If client unable to do this, compressed client's abdomen.

9. When physician completed catheterization, inserted injection cap, flushed with 5 mL NS, then 3 mL dilute heparin (according to agency policy). Used 10 mL syringe.
10. Physician sutured catheter into place.
11. Covered insertion site and sutures with sterile transparent dressing according to hospital policy.
12. Labeled insertion site dressing with date, nurse's initials, and time of insertion.
13. Obtained x-ray for validation of placement into superior vena cava before initiating infusion.
14. Monitored vital signs.

CHANGING A CENTRAL LINE CATHETER DRESSING

Preparation

1. Checked physician's orders, MAR, and client care plan for last dressing change.
2. Gathered equipment.
3. Checked client's identaband, asked client to state name, and explained procedure to client.
4. Washed hands thoroughly for 15–20 seconds with antimicrobial soap.
5. Positioned client flat on back.
6. Turned client's head away from insertion site, and masked client's nose and mouth, if necessary.
7. Made sure that all personnel donned masks, and/or gloves if client was neutropenic and according to hospital policy.

Performed yes	Performed no	Mastered

Procedure

1. Donned clean gloves.
2. Carefully removed old dressing and tape, removing edges toward insertion site, without pulling on catheter.
3. Discarded old dressing and gloves in proper receptacle.
4. Removed clean gloves and donned sterile gloves.
5. Inspected site for loose sutures and signs of infection, inflammation, infiltration, and checked length of exposed catheter.
6. Cleansed insertion site, sutures, and catheter with chlorhexadine, alcohol, or iodine swabs, working from insertion site outward in circular motion.
7. Cleansed site with circular motion three times with three different swabs and allowed agent to dry.
8. Covered site with sterile transparent dressing.
9. Changed IV tubing according to hospital policy.
   a. Clamped central catheter using on-line slide or squeeze clamp.
   b. Changed needleless access cap.
   c. Prepared site with antimicrobial swab.
   d. Inserted new tubing with needleless connector.

	Performed yes	Performed no	Mastered
10. Labeled dressing and tubing with date and initials.			
11. Changed dressing if loose, wet, or soiled, or according to hospital policy.			
12. Discarded equipment and gloves, and washed hands.			

INFUSING IV FLUIDS THROUGH A CENTRAL LINE

Preparation

1. Checked physician's order sheet and client's MAR for IV order.			
2. Checked IV order with IV solution bag.			
3. Took equipment to client's room.			
4. Checked room number and client's identaband. Asked client to state name.			
5. Explained procedure to client and provided privacy.			

Procedure

1. Washed hands and donned gloves.			
2. Hung IV solution on IV pump.			
3. Wiped access port with antimicrobial swab and allowed to dry.			
4. Inserted needleless cannula from saline flush syringe and unclamped lumen.			
5. Aspirated for blood return, using very little force, to check for lumen patency.			
6. Instilled saline solution slowly.			
7. Maintained positive pressure when withdrawing syringe by clamping catheter before removing syringe or by maintaining pressure on the syringe plunger before you clamped.			
8. Swabbed access port again with antimicrobial swabs.			
9. Inserted IV tubing with Luer Lock connector into access port. Unclamped lumen.			
10. Set electronic device to prescribed rate and began infusing IV fluids.			
11. Ensured central line dressing was clean and intact.			
12. Removed gloves and washed hands.			

DRAWING BLOOD FROM CENTRAL VASCULAR CATHETER

Preparation

1. Checked physician's orders and MAR.			
2. Checked client's room number and identaband.			
3. Asked client to state name.			

Procedure

1. Explained procedure to client.			
2. Washed hands, donned gloves and mask.			
3. If fluids were infusing through catheter, turned off infusion for at least one minute prior to drawing a blood specimen.			
4. Swabbed cap and hub with antimicrobial swabs for 30 seconds and allowed to dry. Used most proximal lumen of catheter for blood draw.			

	Performed yes	Performed no	Mastered
5. Removed cap from catheter end, inserted 10 mL saline-filled syringe, unclamped catheter.			
6. Flushed catheter with 5–10 mL normal saline.			
7. Clamped catheter, removed syringe, and attached new 10 mL empty syringe.			
8. Withdrew 5 mL of blood from catheter slowly and then clamped catheter.			
9. Discarded syringe in biohazard box.			
10. Cleaned injection cap with antimicrobial swabs and then inserted 10 mL syringe into cap and withdrew required amount of blood for laboratory tests. Checked lab manual for exact amount of blood necessary and appropriate blood tube for each test.			
11. Clamped catheter, and withdrew syringe. Injected blood into laboratory blood tubes by taking cap off tubes and gently filling tubes with blood.			
12. Disposed of syringe in biohazard container.			
13. Swabbed cap and inserted saline flush syringe, unclamped catheter.			
14. Flushed catheter slowly with 10-mL saline, clamped catheter and removed syringe by maintaining positive pressure on syringe plunger with your thumb while withdrawing syringe from injection cap.			
15. Swabbed cap with alcohol and inserted 10-mL syringe filled with 3 mL heparin solution, according to facility policy.			
16. Unclamped catheter; gently infused heparin solution.			
17. Clamped catheter and withdrew syringe following same procedure in step 14.			
18. Changed cap if needed.			
19. Removed gloves and disposed in appropriate container; washed hands.			

APPLYING A BIOPATCH

Procedure

	Performed yes	Performed no	Mastered
1. Checked client's chart and Kardex to determine last dressing change.			
2. Gathered equipment.			
3. Checked identaband, asked client to state name, and explained procedure to client.			
4. Washed hands and donned sterile gloves.			
5. Prepared skin surrounding percutaneous device according to hospital protocol. Ensured sufficient space was left between hub of catheter and insertion site for placement of dressing.			
6. Removed dressing from sterile package using aseptic technique.			
7. Placed BIOPATCH dressing around catheter so catheter rested on slit portion of patch. Ensured GRID side of patch was facing upward, with smooth foam side of patch next to skin.			
8. Ensured edges of slit approximated each other to assure efficacy of patch.			
9. Applied transparent dressing over patch and catheter insertion site. Ensured completed contact between skin and transparent dressing.			
10. Discarded equipment packages.			
11. Removed gloves and placed in receptacle.			

	Performed yes	Performed no	Mastered
12. Washed hands.			
13. Changed patch as necessary. Followed facility policy; however, ensured dressing change was completed a minimum of every 7 days. a. Donned clean gloves and removed patch by picking up corner of dressing and stretching dressing away from catheter, holding catheter in place. b. Peeled back dressing until resistance was felt. c. Repeated stretch and peel action until dressing was removed. Both the dressing and the patch were removed together with this action. d. Discarded old dressing biohazard container. e. Discarded gloves in appropriate receptacle. f. Washed hands.			

CHANGING AN ACCESS CAP

Procedure

	Performed yes	Performed no	Mastered
1. Checked client's chart and Kardex to determine time of last access cap change. (Cap is replaced when removed for IV fluid administration.)			
2. Checked client's room number, identaband, and asked client to state name.			
3. Explained procedure to client and provided privacy.			
4. Gathered equipment.			
5. Washed hands and donned gloves.			
6. Opened access cap package maintaining sterility and placed near working area.			
7. Assessed access cap to determine if cap should be changed even if the time frame not met.			
8. Placed client in supine position. Clamped catheter using online slide or squeeze clamp.			
9. Stopped any IV infusion and disconnected IV tubing from assess cap.			
10. Removed existing cap using aseptic technique.			
11. Took new access cap out of package, maintaining sterility and placed on catheter hub.			
12. Cleansed injection cap with antimicrobial swab.			
13. Flushed catheter using 10 mL syringe with normal saline or inserted new IV fluid tubing and began infusion at prescribed rate.			
14. Infused heparin solution if the central line was used for intermittent infusions. Followed directions for infusion heparin solution in skill: *Drawing Blood from Central Line.*			
15. Removed gloves and washed hands.			

MEASURING AND MONITORING CVP

Preparation

	Performed yes	Performed no	Mastered
1. Checked physician's orders and client care plan.			
2. Identified client's room, identaband, and asked client to state name.			
3. Explained procedure to client.			
4. Provided privacy.			
5. Determined client's previous CVP parameters.			

Procedure

Performed yes	Performed no	Mastered

1. Washed hands and donned sterile gloves.
2. Spiked IV solution bag with IV administration set using sterile technique.
3. Primed tubing with solution.
4. Closed clamp on tubing.
5. If using a one-piece disposable manometer and stopcock, affixed unit to IV pole.
6. Pushed male end of IV administration set into female end of stopcock, connecting IV set to stopcock.
7. Turned stopcock so that manometer and IV solution were open to each other, opened clamp on IV tubing, and filled manometer with IV solution to between 18 and 20 cm.
8. Closed clamp, and rotated stopcock so that IV solution was open to client.
9. Primed rest of IV tubing that extends from stopcock to client's central line.
10. Placed client flat in bed, without a pillow, or placed client in position of comfort (e.g., head of bed at 15–30°).
11. Recorded position so that same position used each time CVP reading was made.
12. Located client's right atrium (midaxillary at fourth intercostal space). Marked location on client's skin using marking pen.
13. Adjusted level of CVP manometer (using carpenter's level) so zero on manometer scale at same level as client's right atrium, 5 cm on manometer level to sternal notch.
14. Turned stopcock to open position for manometer, filling manometer with additional solution if needed.

Performed yes	Performed no	Mastered

15. Turned stopcock to manometer–client position, and watched level of solution in manometer fall to pressure level existing in right atrium.
16. Observed meniscus at eye level, and watched rise and fall of fluid column in response to client's breathing.
17. Took reading at end of respiratory cycle—expiration.
18. Turned off stopcock to manometer, and adjusted rate of infusion to reestablish IV solution flow to client.
19. Returned client to desired position, and recorded CVP reading.

UNIT TWO Total Parenteral Nutrition

UNIT ASSESSMENT

- ☐ Completed physical assessment and client history.
- ☐ Assessed client's nutritional status.
- ☐ Identified any condition that would affect TPN (renal or cardiac disease).
- ☐ Assessed nutritional needs of clients who were unable to ingest nutrients normally (gastrointestinally).
- ☐ Observed for correct additives in each hyperalimentation container.
- ☐ Checked rate of infusion on physician's orders.
- ☐ Monitored catheter insertion site for signs of infection or possible infiltration.
- ☐ Regularly monitored client's blood sugar response to hyperalimentation.

ASSISTING WITH CATHETER INSERTION

Preparation

1. Validated signed consent for catheter insertion.
2. Explained procedure.
3. Taught Valsalva's maneuver to use during insertion procedure.
4. Reviewed physician's orders for correct hyperalimentation solution.
5. Inspected TPN container for layering, turbidity, or precipitates. If layers were noted, returned to pharmacy.
6. Assembled IV system with in-line filter.
7. Washed hands.
8. Primed IV tubing and filter with solution.
9. Inserted IV tubing into infusion pump.

Procedure

1. Positioned client in head-down position with head turned to opposite direction of catheter insertion site. Placed small roll between client's shoulders to expose insertion site.
2. Cleansed insertion area with antimicrobial swabs.
   a. Cleansed large area around insertion site.
   b. Used circular motion to cleanse from insertion site to periphery.
3. Assisted physician to gown, mask, and glove prior to beginning procedure.
4. Donned mask and sterile gloves.
5. Assisted physician as needed during catheter insertion.

Performed yes	Performed no	Mastered

6. Instructed client in Valsalva's maneuver when stylet was removed from catheter and injection cap was connected to catheter.
   a. Instructed client to exhale against a closed glottis.
   b. If client was unable to do this, compressed client's abdomen.
7. After injection cap was connected, instructed client to breathe normally.
8. Flushed catheter with saline, then dilute heparin, according to agency policy.
9. Applied transparent dressing over insertion site.
10. Obtained portable chest x-ray to verify correct catheter placement.
11. Following confirmation of catheter placement, initiated hyperalimentation solution and adjusted flow rate as ordered.
12. Observed for signs of complications.
13. Took vital signs every 4 hours.

Performed yes	Performed no	Mastered

MAINTAINING HYPERALIMENTATION INFUSIONS (TPN)

Procedure

1. Stored hyperalimentation (TPN) solution in refrigerator until 30 minutes before use.
2. Ensured central line patency.
3. Changed IV tubing and filter every 24 hours.
4. Maintained IV flow rate as prescribed.
5. Changed solution every 12–24 hours.

Performed yes	Performed no	Mastered

6. Monitored client's finger stick blood sugar regularly.
7. If necessary, administered regular insulin according to prescribed "sliding scale."
8. Maintained accurate I&O.
9. Observed for complications, such as air embolus, hyperglycemia, osmotic diuresis, infiltration, or sepsis.

CHANGING HYPERALIMENTATION (TPN) DRESSING AND TUBING

Preparation

1. Checked physician's orders and client care plan.
2. Gathered appropriate equipment and washed hands.
3. Identified client and explained procedure.
4. Connected IV tubing and filter to parenteral hyperalimentation solution container.
5. Flushed tubing to clear air.
6. Placed IV tubing through infusion pump.
7. Prepared dressing, antimicrobial swabs, sterile 2 × 2 gauze pads, and tape or sterile transparent dressing.
8. Placed client supine, head turned in opposite direction of insertion site. Instructed client not to talk or cough, or placed mask on client.

Procedure

Performed yes	Performed no	Mastered

1. Donned mask (according to agency policy) and clean gloves.
2. Removed old dressing and gloves and discarded.
3. Donned sterile gloves.
4. Observed insertion site for signs of erythema, drainage, or swelling.
5. Cleansed insertion site with antimicrobial swabs, using a circular movement from inside outward.
6. Allowed at least 1 minute for drying.
7. Placed sterile transparent dressing over insertion site; secured dressing.
8. Changed IV tubing.
   a. Clamped catheter using slide clamp.
   b. Loosened tubing in catheter hub.
   c. Inserted new primed tubing, *or*
   d. Capped catheter and inserted new tubing with needleless connector.
9. Removed gloves and washed hands.
10. Labeled dressing with date and initials.

MAINTAINING HYPERALIMENTATION FOR CHILDREN

Preparation

1. Checked physician's orders and client care plan.
2. Gathered appropriate equipment.
3. Identified client and explained procedure to child and parents.
4. Washed hands.

Procedure

Performed yes	Performed no	Mastered

1. Verified solution with physician's orders.
2. Examined solution.
3. Monitored patency of catheter. Monitored infusion pump and filter.
4. Obtained finger stick or urine sugar and tested q8h.
5. Monitored I&O and daily weight.
6. Changed dressing every 48 hours and solution tubing every 24 hours using aseptic technique.
7. Monitored accurate rate of infusion. Did not "catch up" if infusion was behind.
8. If discontinuing, tapered infusion for one hour.
9. Observed child for accidents when ambulating, such as twisting or kinking tubing, getting tubing caught in crib, or stepping on it.
10. Instructed parents on rationale for treatment and methods to prevent accidental dislodging of tubing.
11. Provided play therapy and sources of stimulation to distract child from thinking about the catheter.

UNIT THREE Liquid Emulsion Therapy

UNIT ASSESSMENT

☐ Observed for signs of essential fatty acid deficits; rash; eczema; dry, scaly skin; poor wound healing; sparse hair.

☐ Assessed pancreatic function.

☐ Assessed client for predisposing factors that could promote fat emboli, such as anemia, coagulation disorders, abnormal liver, or pulmonary function.

☐ Checked IV site for patency, erythema, and edema before infusing solution.

☐ Assessed vital signs to establish baseline.

INFUSING IV LIPIDS

Preparation

Performed yes	Performed no	Mastered

1. Review physician's orders and MAR.
2. Obtained lipid emulsion (refrigerated) from pharmacy and warmed to room temperature.
3. Examined bottle for separation of emulsion into layers, or fat globules, or accumulation of froth. Did not use if any of the appeared.
4. Labeled bottle.
5. Identified client and checked client's identaband.
6. Explained procedure.

Procedure

1. Took vital signs for baseline assessment.
2. Washed hands, and then swabbed stopper on IV bottle with antimicrobial swab and allowed to dry.
3. Attached special IV tubing to bottle, twisting spike to prevent particles from stopper falling into emulsion, or spiked bag with regular IV tubing.
4. Hung IV bottle at least 30 inches above IV site.
5. Filled drip chamber two-thirds full, slightly opened clamp on tubing, and primed tubing slowly.
6. Attached tubing to IV site.
7. If piggybacking lipids into hyperalimentation, used port closest to client, below tubing filter.

Performed yes	Performed no	Mastered

8. Infused fat solutions initially at 1.0 mL/min for adults and 0.1 mL/min for children.
9. Monitored vital signs every 10 minutes, and observed for side effects during first 30 minutes of infusion. If side effects occurred, stop infusion and notified physician.
10. Adjusted flow to prescribed IV rate if no adverse reaction occurred.
11. Monitored and maintained infusion at prescribed rate.
12. Monitored serum lipids 4 hours after discontinuing infusion.
13. Monitored liver function tests for evidence of impaired liver function.
14. Discarded partially used bottles.
15. Continued to monitor vital signs, and observed client for adverse reactions during entire process of infusion.
16. Answered any questions the client had about the procedure, and made client comfortable before leaving room.

UNIT FOUR Tunneled Central Vascular Access Devices (CVADS)

UNIT ASSESSMENT

- ☐ Assessed patency of catheter.
- ☐ Assessed insertion site for signs of infection.
- ☐ Assessed the tubing for accidental breaks.
- ☐ Assessed injection cap at end of catheter to ensure tightness.

MAINTAINING THE HICKMAN OR BROVIAC CV CATHETER

Performed yes	Performed no	Mastered

Preparation

1. Checked physician's orders, MAR, and client care plan.
2. Prepared syringe with dilute heparin.
3. Explained procedure.
4. Provided privacy.
5. Washed hands and donned gloves.

Procedure

for Flushing Intermittently Used Line

1. Wiped catheter cap with antimicrobial swab.
2. Inserted syringe cannula into needleless access cap and unsnapped catheter squeeze clamp.
3. Injected heparin solution slowly through catheter until almost empty.
4. Removed syringe while still moving plunger forward, or clamped catheter before removing syringe.
5. Withdrew syringe.
6. Flushed unused capped lines daily.

for Irrigating a Nonpatent Catheter

1. Prepared three tuberculin syringes with dilute heparin.
2. Swabbed catheter cap with antimicrobial swab.
3. Inserted syringe with needleless cannula, and unclamped catheter.
4. Injected dilute heparin from syringes, to a total of 3 mL.

	Performed yes	Performed no	Mastered
5. Left heparin in catheter tubing for 1 hour.			
6. Checked hour completed, then used 10-mL syringe to aspirate solution from catheter by gently pulling back on plunger.			
7. Followed with irrigation of 5–10 mL of heparinized solution if aspiration successful. Used same dilution factor (100 u/mL) for irrigation solution as with maintenance solution.			
8. Repeated procedure once. If unsuccessful, notified physician.			

CHANGING THE HICKMAN OR BROVIAC CV CATHETER DRESSING

Procedure

	Performed yes	Performed no	Mastered
1. Washed hands and donned gloves.			
2. Removed old dressing.			
3. Observed for signs and symptoms of infection and crepitus at insertion site.			
4. Discarded dressing and gloves.			
5. Set up supplies on a sterile field.			
6. Donned sterile gloves.			
7. Cleansed exit site using 3 antimicrobial swabs. Started from inner aspect and moved out toward periphery approximately 1–2 inches from exit site. Did not go over same area twice with same swab.			
8. Cleaned catheter tubing starting at exit site and allowed to dry.			
9. Applied sterile transparent dressing. Changed weekly or if soiled.			
10. Removed gloves and discarded.			
11. Signed and dated dressing.			
12. Secured catheter to prevent dislodging; taped to chest.			
13. Washed hands.			

MAINTAINING THE CV CATHETER WITH GROSHONG VALVE

Procedure

	Performed yes	Performed no	Mastered
1. Wiped injection cap and catheter connection with antimicrobial swab.			
2. While holding catheter, inserted flush syringe needleless cannula or removed catheter cap and attached directly to catheter hub.			
3. Injected normal saline rapidly into lumen.			
4. Maintained positive pressure on syringe plunger as last 0.5 mL injected and as syringe was withdrawn.			
5. Attached new sterile injection cap.			
6. Removed cap by holding catheter connector between thumb and forefinger of one hand and grasping cap with other hand.			
7. Twisted and pulled counterclockwise to separate cap from connector.			
8. Continued to hold connector with one hand.			
9. Discarded old cap.			
10. Cleaned liberally around connector using antimicrobial swab.			
11. Held new injection cap, twisted new injection cap clockwise into connector.			

	Performed yes	Performed no	Mastered
for 10- or 20-mL Irrigation			
1. Removed needle from syringe.			
2. Removed injection cap carefully from connector and discarded.			
3. Cleaned connector with chlorhexadine. DID NOT let go of connector.			
4. Inserted syringe barrel directly into catheter connector, twisting slightly to ensure good connection.			
5. Irrigated lumen with normal saline using stop-start action.			
6. Maintained positive pressure on syringe barrel as syringe removed from connector. DID NOT clamp catheter following irrigation.			
7. Changed injection cap.			

DRAWING BLOOD FROM THE CV CATHETER WITH GROSHONG VALVE

Procedure

	Performed yes	Performed no	Mastered
1. Washed hands and donned gloves.			
2. Cleaned cap and outside of connector with swabs and allowed to dry.			
3. Removed and discarded injection cap while holding connector so that it did not contact any surface.			
4. Inserted first 10-mL syringe directly into catheter, twisting slightly to ensure connection.			
5. Pulled back plunger 0.5 mL, paused 2 seconds, and then continued aspirating until 5 mL of blood was in syringe.			
6. Removed syringe, set aside; continued to hold connector.			
7. Connected second 10-mL syringe directly to catheter connector, twisting slightly to ensure connection.			
8. Proceeded to aspirate blood volume needed for sample following same aspiration procedure of pulling 0.5 mL and waiting for 2 seconds.			
9. Removed syringe, and continued to hold connector.			
10. Flushed catheter briskly with 20 mL normal saline and attached new sterile injection cap.			
11. Transferred blood sample from second syringe into appropriate tube(s), and labeled.			
12. Discarded syringe containing first aspirated blood into biohazard container.			
13. Removed gloves and washed hands.			

UNIT FIVE Implanted Subcutaneous Port

UNIT ASSESSMENT

☐ Assessed site.

☐ Assessed patency of port.

ACCESSING AND FLUSHING AN IMPLANTED PORT USING A HUBER NEEDLE

Performed yes	Performed no	Mastered

Preparation

1. Checked physician's orders and client care plan. Reviewed hospital policy.
2. Gathered equipment.
3. Washed hands using germicide solution.
4. Drew up 10 mL normal saline into 10-mL syringe.
5. Drew up 5 mL dilute heparin (100 U/mL) into 10-mL syringe.
6. Identified client's identaband.
7. Explained procedure to client.
8. Donned clean gloves.

Procedure

1. Palpated skin over subcutaneous infusion port.
2. Placed thumb and forefinger of left hand on port (right hand if left-handed) and felt for septum with right hand.
3. Numbed area with topical anesthetic cream or ice, according to facility policy.
4. Cleaned skin with antimicrobial swab starting from center of septum, working outward to a diameter of 3 inches. Used circular movement. Scrubbed for 30 seconds.
5. Allowed site to air dry for 30 seconds.
6. Affixed syringe with 10 mL normal saline into Huber needle extension tubing cap and primed tubing; left syringe attached.
7. Removed clean gloves and disposed in appropriate container.
8. Donned mask and sterile gloves.
9. Stabilized port using thumb and finger.
10. Inserted needle into port at a 90° angle until met resistance from back of port.
11. Checked for correct placement by aspirating for blood return.
12. If placement was correct, stabilized needle and injected remaining normal saline.
13. Closed clamp of needle extension tubing.
14. Exchanged syringe of normal saline for syringe filled with dilute heparin flush, then opened clamp.
15. Instilled 5 mL heparin flush (100 U/mL).
16. Clamped extension tubing before removing needle.
17. Removed needle by pulling straight out from port while stabilizing port with free hand.
18. If needle left for intermittent use, placed 2×2 gauze to fill gap between needle and skin; secured wings with tape and applied sterile transparent dressing over all.
19. Disposed of equipment.
20. Removed gloves and washed hands.

ADMINISTERING DRUGS VIA A SUBCUTANEOUS IMPLANTED PORT

Performed yes	Performed no	Mastered

Procedure

1. Followed procedure listed in previous skill. (Using sterile gloves, accessed port and verified correct placement.)

	Performed yes	Performed no	Mastered
2. Clamped short needle extension tubing.			
3. Exchanged saline syringe for syringe filled with ordered medication.			
4. Unclamped tubing.			
5. Administered medication at prescribed rate.			
6. Flushed port between drugs with 5 mL of saline if giving more than one drug.			
7. Flushed system with saline, then with dilute heparin.			
8. Injected last 0.5 mL of heparin flush while simultaneously withdrawing needle and stabilizing port.			
9. Wiped skin gently with dry swab to remove any solution.			
10. If client was to receive intermittent IV drugs or solutions, after intermittent administration, clamped tubing, inserted new sterile protective cap into extension tubing, opened clamp to flush and heparinize, then reclamped tubing.			
11. Flushed unused port with 5 mL heparin (100 U/mL).			

ADMINISTERING INFUSIONS VIA A SUBCUTANEOUS PORT

Procedure

1. Prepped site and access port using sterile technique as described previously.
2. Secured needle hub with tape chevron style, or secured wings with tape or steri-strips.
3. Placed transparent dressing over insertion site, needle, and proximal IV tubing; dated and initialed.
4. Flushed port with 10 mL saline solution.
5. Proceeded with administration of ordered solution, drug, or blood.
6. Upon completion, flushed with 10 mL normal saline, followed by 5 mL dilute heparin flush.
7. Clamped tubing before removing syringe to maintain positive pressure.
8. For continuous infusion, changed tubing daily and dressing every 72 hours.

DRAWING BLOOD FROM AN IMPLANTED SUBCUTANEOUS PORT

Procedure

	Performed yes	Performed no	Mastered
1. Gathered equipment.			
2. Checked physician's orders for type of blood test ordered.			
3. Explained procedure to client.			
4. Washed hands and donned sterile gloves.			
5. Accessed implanted port using Huber needle with capped extension tubing as discussed previously.			
6. Inserted syringe into hub of extension tubing.			
7. Unclamped tubing.			
8. Withdrew 5–10 mL blood; removed syringe and discarded.			

Performed yes	Performed no	Mastered

9. Maintained aseptic technique, attached new syringe to hub of extension tubing, and withdrew appropriate amount of blood; removed syringe.
10. Filled appropriate type of blood tubing with specified amount of blood, according to blood tests ordered.
11. Placed new cap on extension tubing.
12. Flushed catheter with 10 mL normal saline after obtaining blood specimens. If lumen was not to be used for an infusion, heparinized the catheter as discussed previously.

UNIT SIX Peripherally Inserted Central Catheter (PICC)

UNIT ASSESSMENT

☐ Assessed length of exposed catheter.

☐ Assessed that catheter was secure.

☐ Assessed insertion site.

☐ Assessed catheter patency.

MAINTAINING THE PICC

Procedure

Performed yes	Performed no	Mastered

1. Measured external catheter length daily and compared with previous measurements. If changed, notified person who inserted line.
2. Donned gloves.
3. Swabbed catheter port with antimicrobial swab. Allowed to dry.
4. Injected solution (heparin or saline) slowly; flushed with minimal force using a pulsating motion until syringe was almost empty.
5. Continued to inject flush while removing syringe from catheter port.
6. For intermittent use (e.g., drug therapy).
   a. Flushed catheter with 10 mL normal saline.
   b. Administered infusion or medication.
   c. Flushed catheter with 20 mL normal saline.
   d. Flushed with 3–5 mL dilute heparin (per hospital policy).
7. Flushed nonused catheter daily.
8. Placed discarded equipment in appropriate receptacle. Placed needle and syringe in sharps container.
9. Removed gloves and washed hands.

CHANGING THE PICC DRESSING

Procedure

Performed yes	Performed no	Mastered

1. Washed hands and donned clean gloves.
2. Checked client's identaband.
3. Explained procedure.
4. Very carefully removed old transparent dressing. *Note:* The catheter was secured by tape only and is *not sutured*. Approximately 1 inch of catheter extended from the insertion site.
5. Checked site for bleeding or signs of phlebitis.
6. Discarded old dressing and gloves.
7. Set up sterile equipment.
8. Donned sterile gloves.

	Performed yes	Performed no	Mastered
9. Cleaned exit site and catheter with antimicrobial swabs using circular movement from inner to outer edge three times with three swabs. Carefully stabilized catheter with nondominant gloved hand if necessary.			
10. Allowed time for antimicrobial solution to dry. Did not blow on arm or hasten drying.			
11. Positioned external catheter into an "S" shape or loop with steri-strips, if possible.			
12. Covered exit site with transparent semipermeable dressing.			
13. Removed gloves and washed hands.			
14. Initialed and dated dressing.			
15. Changed initial transparent dressing in 24 hours and then every 7 days or whenever soiled or loose.			

DRAWING BLOOD FROM THE PICC

Procedure

	Performed yes	Performed no	Mastered
1. Stopped all infusions for at least 1 minute before drawing a specimen.			
2. Swabbed catheter cap with antimicrobial swab and allowed to dry.			
3. Used 10-mL syringe and withdrew 5 mL of blood; discarded in biohazard container.			
4. Used 10-mL syringe with needleless cannula and withdrew required amount of blood for laboratory tests. Did not use vacutainer. Changed cap after all blood draws and transfusions.			
5. Flushed with 20 mL saline solution to clear catheter.			
6. Completed procedure with dilute heparin flush (per hospital policy).			
7. Discarded equipment and gloves; washed hands.			
8. Handled blood sample appropriately: transferred to collection tube.			

REMOVING THE PICC

Procedure

	Performed yes	Performed no	Mastered
1. Checked physician's orders and MAR.			
2. Checked client's identaband.			
3. Explained procedure to client.			
4. Washed hands and donned gloves.			
5. Carefully removed dressing, loosening edges toward insertion site.			
6. Grasped catheter at insertion site.			
7. Gradually pulled catheter parallel to skin, one inch at a time.			
8. Continued inching catheter out—stopped and repositioned arm; waited 15 seconds.			
9. NEVER FORCED catheter removal (applied warm moist pack to upper arm to relax vein for approximately 15 minutes).			
10. After removal, measured length of catheter and compared to documented length on chart.			
11. Cut tip with sterile scissors, placed in sterile container, and sent for culture, if necessary.			
12. Held gauze at exit site for hemostasis.			
13. Applied tape to gauze securely.			
14. Disposed of catheter in biohazard container.			
15. Documented length of catheter removed.			

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Orthopedic Interventions

Performance Checklist

UNIT ONE Application of Immobilizing Devices

UNIT ASSESSMENT

- ☐ Recognized need for site immobilization.
- ☐ Determined type of immobilization required.
- ☐ Selected appropriate immobilizing equipment.
- ☐ Assessed status of surrounding tissue.
- ☐ Assessed affected extremity for circulation, movement, and sensation before and after applying modality.

APPLYING A SLING

Preparation

	Performed yes	Performed no	Mastered
1. Checked physician's orders for a sling.			
2. Did not remove clothing.			
3. Assessed injured extremity CMS before sling application.			
4. Explained procedure and purpose of immobilization.			
5. Removed any circumferential jewelry (ring, bracelet).			
6. Had client sit or stand with forearm across chest.			

Procedure

	Performed yes	Performed no	Mastered
1. Placed one end of triangular cloth over shoulder on unaffected arm.			
2. Placed cloth against body and under affected arm.			
3. Placed apex (point) of triangle toward elbow.			
4. Brought opposite end of triangle around affected arm and over affected shoulder.			
5. Tied sling at side of neck.			

	Performed yes	Performed no	Mastered
6. Folded apex of triangle over elbow in front, and secured with safety pin or twisted end and tied a square knot.			
7. Assessed client for comfort and for support of affected arm.			
8. Assessed for neck pressure and adequate circulation every 20 minutes and then every 2–4 hours.			
9. Checked that hand was supported at higher level than elbow.			
10. Taught client to support arm higher than heart level and to perform external rotation shoulder exercises.			

APPLYING A SPIRAL BANDAGE

Preparation

1. Identified client, checked physician's orders, and explained procedure and purpose of immobilization.			
2. Assessed CMS of extremity before bandage application.			
3. Removed any circumferential jewelry (ring, bracelet).			
4. Had client sit or lie with part elevated.			

Procedure

1. Removed existing elastic bandage or used bandage scissors to remove previously applied gauze bandage.			
2. Removed dressing and redressed wound, if indicated.			
3. Placed part to be bandaged in elevated position.			
4. Applied bandage with muscle in full contraction if area was functional or to be exercised.			
5. Held gauze or elastic roll with loose end outer part of bandage facing client's skin, several inches below injury site.			
6. Unrolled bandage twice around extremity to anchor.			
7. Continued wrapping extremity upward, using moderate amount of tension to stretch and applied bandage uniformly.			
8. Progressed wrapping extremity *proximally* with spiral or angled turns.			
9. Made bandage turns that overlapped by at least one half previous wrap to prevent bandage separation.			
10. Finished wrap with couple of wraps directly overlying each other.			
11. Secured bandage by tying, or using tape or safety pin.			
12. Observed that bandage was snug but not tight, free of wrinkles, and not occluding distal circulation.			
13. Assessed distal digits for CMS in 30 minutes and every 2–4 hours initially.			
14. Maintained elevation of involved extremity and encouraged active motion of 4 digits.			
15. Rewrapped bandage at least every 8 hours.			

APPLYING A FIGURE-EIGHT BANDAGE

Preparation

1. Identified client and explained procedure.			

	Performed yes	Performed no	Mastered
2. Provided privacy.			
3. Positioned ankle in neutral alignment, neither overflexed not overextended.			
Procedure			
1. Gathered necessary bandages.			
2. Held roll with outer part next to client's skin.			
3. Anchored bandage by making circular turns around instep.			
4. Made circular turn around ankle (heel) and returned to starting point.			
5. Made spiral turn down over ankle and around foot.			
6. Continued to make alternate turns around ankle and foot. Overlapped preceding bandage by at least two-thirds of bandage.			
7. Wrapped entire area below and above involved point.			
8. Assessed extremity (exposed digits) for circulation and evenness of pressure as well as comfort of client.			
9. Assessed extremity after 20 minutes and then every 2–4 hours, and rewrapped every 8 hours.			

APPLYING A SPLINT

Preparation

	Performed yes	Performed no	Mastered
1. Assessed involved extremity for deformity or soft tissue injury.			
2. Did not remove clothing or shoes (except with scissors).			
3. Removed any jewelry from extremity to prevent circulatory compromise with swelling.			
4. Assessed neurovascular status of distal digits.			
5. Explained need for and purpose of splint to client.			
Procedure			
1. Gathered supplies.			
2. Controlled hemorrhage by applying direct pressure and by using pressure dressings; applied clean covering to any wound.			
3. Explained rationale for intervention to client.			
4. Moved injured extremity as little as possible. a. Splinted legs in extended position. b. Splinted arms in flexed or extended position.			
5. Padded joints, bony prominences, and skin areas as much as possible.			
6. If splint material was not available, used client's body for support. a. Splinted legs together. b. Splinted arm to torso. c. Splinted toes or fingers together.			
7. Used spiral, not circular, technique to wrap splint.			
8. Strapped splint and extremity together securely so that extremity was immobile. Tried to include proximal and distal joints in splint.			
9. Checked client's circulation by assessing pulse, capillary refill, color, and temperature.			
10. Elevated part to prevent edema.			
11. Arranged for transfer of client to medical facility as soon as possible.			
12. Reported specifics to transport personnel.			

APPLYING A CERVICAL COLLAR

Performed		Mastered
yes	no	

Preparation

1. Explained procedure to client.
2. Asked client to sit upright and face directly forward.
3. Measured client's neck from bottom of chin to top of sternum.
4. Measured circumference of client's neck.
5. Used client's measurements to select appropriate size collar.

Procedure

1. Followed manufacturer's instructions to apply collar.
2. Placed back half of collar on client's neck, centering with the spine, arrow pointing up.
3. Centered front half of collar on front of neck so that chin fit into indentation.
4. Lapped front half over back half of collar.
5. Adjusted side fasteners, if necessary, to assure a secure fit.
6. Inspected skin under collar regularly.
7. Assessed neurovascular status of upper and lower extremities every 4–8 hours.
8. Cleaned collar as needed with soap and water and allowed to dry naturally; did not use hairdryer.
9. Maintained collar use 24 hours/day or as ordered, using alternate collar when necessary.
10. Cautioned client that without neck flexion, visibility of stairs or objects on the floor was limited.

APPLYING A JEWETT–TAYLOR BACK BRACE

Performed		Mastered
yes	no	

Preparation

1. Checked physician's orders and determined rationale for brace application.
2. Determined that client's brace had been fit by orthotist (brace fitter).
3. Identified client, explained procedure, or supervised client's application and reinforced previous teaching.
4. Provided privacy.
5. Changed wound dressing, if indicated, before applying brace.

Procedure

1. Washed hands.
2. Put T-shirt on client.
3. Placed bed in flat position. Kept side rail in UP position on side of bed opposite from me.
4. Log-rolled or asked client to roll to side away from me.
5. Positioned brace on back so that struts fit on either side of spine and it fit natural contour of back.
6. Log-rolled client back onto brace to supine position.
7. Placed front section of brace by positioning iliac wings (made of plastic material) over iliac crest. Adjusted triangular sternum piece, and metal struts fell into place.
8. Secured brace with Velcro straps.

Performed yes	Performed no	Mastered

9. Checked under brace for pressure areas. If pressure areas were present, reported to orthotist.
10. Provided client with adaptive aids (i.e., reacher).

UNIT TWO Cast Care

UNIT ASSESSMENT

☐ Identified type of cast applied and rationale for application.

☐ Noted condition for which cast was applied.

☐ Observed condition of cast.

☐ Assessed neurovascular status of involved extremity.

☐ Assessed client's understanding and adherence to care instructions.

CARING FOR A WET CAST

Performed yes	Performed no	Mastered

Preparation

1. Noted physician's orders for any client-specific instructions about positioning and cast handling.
2. Identified client and explained all procedures.
3. Recruited assistant(s) to help turn client.

Procedure

1. Explained to client that cast feels warm as plaster dries; urged client to report undue warmth or burning sensation.
2. Used ONLY palms of my hands on cast when turning and positioning until cast is dry.
3. Avoided handling over joints where nerves and blood vessels are superficial.
4. Supported cast with pillows as necessary, with extremity elevated above level of heart.
5. Maintained contours built into cast; supported leg so heel was free of pressure.
6. Kept wet cast uncovered, turned client to both sides, prone and supine, to expose all surfaces, allowing cast to dry by natural evaporation.
7. Did not try to hasten drying by using artificial measure.
8. Placed ice packs alongside cast, not on cast, if ordered to reduce edema.
9. If cast edges were rough or crumbly, pulled inner stockinette over edge of cast and secured with tape.

ASSESSING A CASTED EXTREMITY

Performed yes	Performed no	Mastered

Procedure

1. Explained rationale for procedure to client.
2. Encouraged client to notify me of any unusual sensations or changes in sensations in casted extremity.
3. Emphasized that a fine margin exists between reversible and irreversible damage to neurovascular structures.
4. Assessed for capillary refill by applying pressure to one of client's toenails or fingernails. After stopping pressure, observed nail to see how rapidly color returned.

	Performed yes	Performed no	Mastered
5. Asked client to move fingers or toes that were affected by cast. Client was able to move them without difficulty.			
6. Checked for any wound drainage. Noted color and amount of drainage.			
7. Reported any unusual odor or increase in drainage.			
8. Checked for redness or skin breakdown around casted area.			
9. Kept dirt and powder away from cast.			
10. Reminded client to not stick objects down cast to scratch skin.			

INSTRUCTING CLIENT IN SELF CARE

Preparation

1. Reviewed client's chart for type of reduction performed (open or closed).
2. Identified client and explained importance of self care to prevent complications.
3. Provided written instructions that reinforce teaching.
4. Provided telephone number of Patient Care Coordinator if relevant for followup concerns.

Procedure

	Performed yes	Performed no	Mastered
1. Demonstrated and taught importance or regular neurovascular checks, comparing with contralateral extremity. (See *Assessing a Casted Extremity.*)			
2. Taught client to keep casted extremity elevated and to actively exercise digits.			
3. Reported any unusual odor, new drainage from cast, or elevated body temperature.			
4. Reminded client to not stick objects into cast to scratch skin. Encouraged client to blow cool air (hair dryer on "cool" or asepto bulb syringe), or to apply pressure over the area to relieve itching.			
5. Taught cast protection. a. Remove stains with nonabrasive powder cleanser and damp cloth. b. Do not shellac or varnish to waterproof cast. It must "breathe." c. Use plastic covering (garbage bag) for showering. Do not cover for prolonged periods as this will cause condensation and weaken the cast. d. Report any cracking or softening of cast, and redness of skin at cast edges. e. Protect cast from urine or stool as odor can't be removed. f. Sleep with casted lower extremity next to wall, if possible.			
6. Cast removal: a. Informed client that cast saw blade is safe—does not cut through material, but vibrates. b. Prepared client that muscle will have atrophied with disuse, joints will be stiff, and bone is vulnerable to re-fracture. c. Taught client to continue to protect, support, and elevate the extremity following cast removal. d. Taught client that skin will be caked with adherent exudate and not to forcibly remove this—soften exudate with olive oil, or use full strength cold water wash (e.g., Woolite, Delicare). Leave on 20 minutes, then rinse in warm water.			

UNIT THREE Traction

UNIT ASSESSMENT

- ☐ Determined type and purpose of traction used.
- ☐ Noted amount of weight ordered.
- ☐ Noted any conditions requiring special treatment (i.e., continuous or intermittent traction).
- ☐ Assessed circulation, notion, and sensation of affected extremity.
- ☐ Assessed pin site for drainage and signs of infection.
- ☐ Assessed neurovascular status of clients with fixation devices.

MONITORING SKIN TRACTION

	Performed yes	Performed no	Mastered
Preparation			
1. Determined if client was preoperative. If so, did not manipulate extremity.			
2. Determined if client had condition (diabetes, peripheral vascular disease) that predisposes to skin damage with traction.			
3. Determined if traction continuous or intermittent.			
4. Recruited assistant to apply manual traction when removing and replacing traction.			
5. Explained purpose of traction to client and family.			
Procedure			
1. Examined type of traction used.			
2. Examined all bony prominences of involved extremity for abrasions or pressure areas.			
a. Traction was removed every 8 hours for skin inspection.			
b. Had assistant apply traction when discontinuing for assessment.			
c. Checked for redness, which, if present, indicates excessive pressure on site.			
3. Examined extremity distal to traction.			
a. Noted edema if present.			
b. Palpated peripheral pulses.			
c. Checked temperature and color to determine if both extremities were normal.			
d. Checked time of capillary refill.			
4. Assessed for possible neurologic impediment from traction slings encroaching on popliteal space or axilla.			
5. Examined rope and weights to see that they hung freely and that pull went directly through long axis of fractured bone.			
6. Checked traction mechanism.			
a. Weights hung freely, off floor and bed.			
b. Weights were 5–10 pounds for adult clients, or as ordered.			
c. Knots were secure in all ropes.			
d. Ropes moved freely through pulleys.			
e. Pulleys were not constrained by knots.			
7. Positioned correctly in bed: client in center of bed, affected leg or arm aligned with trunk of body.			
8. Placed sheepskin or an alternative material under affected extremity, if appropriate.			
9. Provided ordered type of boot to prevent footdrop.			

MONITORING SKELETAL TRACTION

Performed yes	Performed no	Mastered

Preparation

1. Checked physician's orders regarding pin site care and client positioning.
2. Checked client's identaband.
3. Gathered necessary equipment.
4. Washed hands.
5. Provided privacy and explained procedure to client.

Procedure

1. Checked pin and pin site surrounding pin.
2. Assessed for infection at pin site. Noted any local pain, redness, heat, or drainage.
3. Provided pin site care if ordered.
   a. Opened applicator sticks and gauze package.
   b. Opened prescribed cleansing agent and poured into cup.
   c. Donned sterile gloves.
   d. Cleaned area with prescribed cleansing agent. Soaked cotton-tipped applicators. Dipped stick into solution bottle, or poured solution over sticks.
   e. Cleaned pin site starting at insertion area and worked outward.
   f. Used new applicator stick for cleaning each pin site.
   g. Loosely dressed site with separate gauze sponge.
   h. Removed gloves and discarded sticks.
   i. Washed hands.
4. Examined all bony prominences for signs of pressure areas or abrasions.
5. Checked for circulation, motion, and sensation in affected extremity.
6. Assessed distal extremity for color and edema.
7. Checked ropes and weights to make sure pull went directly through long axis of fractured bone.
8. Checked traction mechanism.
   a. Weights hung freely, off floor and bed.
   b. Knots were secure in all ropes.
   c. Rope moved freely through pulleys.
   d. Pulleys were not constrained by knots.
9. Instructed client to use trapeze to assist in moving in bed during linen change and back care.
10. Made sure client was positioned correctly in bed.
11. Checked placement of footrest. Client's foot was correctly positioned to prevent foot drop.
12. Changed bed linen in a top to bottom manner, while client used trapeze to lift buttocks.

Performed yes	Performed no	Mastered

MAINTAINING AN EXTERNAL FIXATOR DEVICE

Procedure

1. Followed steps 1–5 of previous skill.
2. Assessed neurovascular status of affected limb every 4 hours.
3. Provided client teaching before discharge.
   a. Instructed client on the importance of and how to perform neurovascular checks and when to call physician.

	Performed yes	Performed no	Mastered
b. Demonstrated pin site care. Had client return demonstration.			
c. Reinforced physician's instructions regarding activity level. Discussed weight-bearing on affected limb if appropriate.			
d. Explained that fixator device is not to be used as a handle.			
4. Demonstrated range-of-motion exercises, if appropriate, and had client perform return demonstration.			
5. Instructed client to continue to elevate extremity if edema occurred in affected limb.			
6. Taught appropriate use of assistive devices as necessary.			

MAINTAINING HALO TRACTION

Preparation

	Performed yes	Performed no	Mastered
1. Reviewed client's history to determine level and type of spinal injury and purpose of halo brace immobilization.			
2. Determined specific assessment required for client (depends upon level of client's spinal injury).			
3. Gathered necessary equipment.			
4. Washed hands.			

Procedure

	Performed yes	Performed no	Mastered
1. Evaluated client's understanding of halo traction and its purpose.			
2. Assessed client's respiratory status regularly.			
3. Performed complete neurologic assessment (cranial nerves, peripheral nerves motion and sensation).			
4. Checked alignment of traction-brace system—client's neck should not be flexed or extended.			
5. Discussed safety issues.			
a. Client is top heavy and has limited view of surrounding environment. Pathways for walking must be clear of obstacles.			
b. Consult PT and OT for adaptive aids and tips for ADLs.			
c. Keep Allen wrench taped to front of vest. Mark anterior screws that attach vertical bars to brace with bright nail polish.			
6. Had emergency tracheostomy tray and bag-valve mask available on unit.			
7. Suggested that client cover bolts/screws with moleskin or tape to protect clothing.			
8. Inspected anterior (above eyebrows) and posterior (above and behind ears) pin sites for signs of drainage, crusting, or inflammation.			
9. Provided skin care under vest.			
a. Opened vest at both sides during bath.			
b. Checked skin at vest edges and where vest overlaps.			
c. Washed and dried skin thoroughly.			
d. Did not use lotion or powder under brace.			
e. Replaced vest liner if it became wet or dirty.			
10. Provided pin site care as prescribed. See steps in previous skill for skeletal traction.			

UNIT FOUR Clients with an Amputation

UNIT ASSESSMENT

- ☐ Determined whether amputation was therapeutic or traumatic.
- ☐ Determined rationale for therapeutic amputation (tumor, peripheral vascular disease, diabetes).
- ☐ Assessed status of stump wound.
- ☐ Assessed stump positioning.
- ☐ Assessed stump for presence of edema.
- ☐ Assessed for phantom sensation or phantom pain.
- ☐ Assessed client's acceptance of amputation.

CARING FOR A CLIENT WITH AN AMPUTATION

	Performed yes	Performed no	Mastered
Preparation			
1. Checked chart for physician's orders.			
2. Identified client and explained purpose of positioning and exercising.			
3. Provided privacy.			
4. Washed hands.			
Procedure			
for Preoperative Care			
1. Evaluated nutritional status and requested nutritional consult, if indicated.			
2. Recruited assistance of OT, PT, physiatrist, and social worker for early multidisciplinary care planning.			
3. Explained importance of exercises to client. Told client that because flexor muscles are stronger than extensors, stump would be permanently flexed and abducted unless client practiced range-of-motion exercises.			
4. If ordered, taught client quadriceps-setting exercises with a below-the-knee amputation .			
a. Extend leg and try to push the popliteal area of the knee into bed; try to move the patella proximally.			
b. Contract quadriceps and hold the contraction for 10 seconds.			
c. Repeat procedure 4–5 times.			
d. Repeat exercise at least 4 times a day.			
5. Taught use of ambulatory aids.			
6. Explained phantom limb sensation—client will continue to "feel" lost limb post surgery.			
7. Counseled family, for they also mourn loss of visible body part.			
for Postoperative Care			
1. Monitored for complications: hemorrhage, infection, unrelieved pain, wound that would not heal.			
2. Assessed for excessive wound drainage. Kept tourniquet at bedside.			
3. Administered ordered pain medication and continually assessed to determine if pain was controlled.			
4. Did not place stump on pillow, but elevated foot of bed for first 24 hours ONLY to reduce stump edema and pain.			
5. Turned client to prone or supine position for at least 1 hour every 4 hours.			

	Performed yes	Performed no	Mastered
6. Avoided dependent positioning of stump.			
7. Tapped and massaged stump skin toward incision line while washing stump.			
8. Taught stump extension exercise. a. Lie in prone position with foot hanging over end of bed. b. Keep stump next to intact leg to extend stump and to contract gluteal muscles. c. Hold the contraction for 10 seconds. d. Repeat this exercise at least 4 times a day.			
9. Taught adduction exercise. a. Place pillow between thighs. b. Squeeze pillow for 10 seconds and then relax for 10 seconds. c. Repeat this exercise at least 4 times a day.			
10. Had client keep track of time spent with stump flexed and then spend an equal amount of time with stump extended.			
11. Encouraged appropriate use of trapeze: use both hands to pull ip with trapeze; place foot flat on mattress to lift body; do not use the heel to push in the mattress.			
12. After stump incision healed, had client begin to bear weight on stump, initially pressing into padded surface (pillow or chair seat).			

SHRINKING/MOLDING THE STUMP

Preparation

	Performed yes	Performed no	Mastered
1. Reviewed client's chart to determine date and type of amputation.			
2. Gathered equipment.			
3. Identified client and explained rationale for procedure.			
4. Washed hands.			
5. Provided privacy.			

Procedure

	Performed yes	Performed no	Mastered
1. Washed stump with soap and water and allowed to dry for at least 10 minutes before bandaging. Did not use lotions, powders, or alcohol.			
2. Inspected and encouraged client to assess stump for circulatory status, pressure areas, wound healing, and edema.			
3. Explained purpose of wrap: to form a conical AKA stump to prepare for prosthesis use.			
4. Explained that wrap was to be worn at all times except during bathing or when wearing a prosthesis.			
5. Started by placing bandage end outer surface on distal stump.			
6. Wrapped bandage medially and diagonally around stump. Had client assist by holding turns. Stretched bandages to two-thirds of the limit of the elastic.			
7. Continued to wrap smoothly up the stump with medially directed spirals or figure eight turns (not circular). Progressed up the stump and well into groin area.			
8. Finished bandaging with a "spica" turn over and around client's pelvis, then back down to stump.			
9. Secured bandage with tape or (*cautiously*) with safety pins. Did not use bandage clips.			

	Performed yes	Performed no	Mastered
10. Reapplied elastic bandage every 4–6 hours, or when loose (never in place for more than 12 hours).			
11. If client had a stump "shrinker sheath," rolled down and stretched the "sheath" using plastic ring. Fitted onto stump end and applied, making sure there were no wrinkles.			
12. Taught client home care of residual limb and prosthesis (washing, assessing for redness, pressure points, irritation, swelling, skin breakdown; socket, stump, socks, liners, mechanical parts, etc.).			

UNIT FIVE Clients with Joint Replacement

UNIT ASSESSMENT

- ☐ Determined type of joint replacement performed.
- ☐ Determined if client had elective surgery with preoperative preparation.
- ☐ Reviewed client's understanding of protective and preventive self-care measures.
- ☐ Assessed client's progress with clinical pathway (pain management, activity, client's understanding of expected progress toward discharge).
- ☐ Assessed that leg position was abducted with pillows or splint.
- ☐ Determined if client used assistive devices appropriately.

CARING CARE FOR A CLIENT WITH HIP ARTHROPLASTY

	Performed yes	Performed no	Mastered
Preparation			
1. Identified client and assessed client's understanding of postoperative expectations.			
2. Reviewed "clinical path" with client each day.			
3. Determined instructions client had received.			
Procedure			
For Bed Positioning			
1. Maintained body in alignment using abductor pillow or wedge.			
a. Placed narrow end of wedge between thighs, above knees, as high as possible.			
b. Placed legs flush with sides of wedge and strapped into place above knee and above ankle.			
c. If abductor had separated leg straps, *unoperated* side was loosened for comfort and to allow range of motion while client was supine.			
2. Placed rolled soft blanket or towel under ankles to free heels from mattress.			
3. Turned client every two hours, keeping legs abducted with both legs strapped. *Reviewed surgeon's orders before turning client to operated side.*			
4. Maintained anti-rotation boot (if indicated) while client was supine, but removed when client was turned.			
5. Encouraged standard postoperative preventive measures, such as deep breathing, foot pumps, and ankle rotations.			
6. Assessed CMS and skin integrity at least q4h.			

Performed yes	Performed no	Mastered

for Strengthening Exercise

1. Placed an exercise reminder sign at foot of bed. Had client hold muscle contraction for a count of 5 and repeat 10 times, then increase hold and number of repetitions each day.
2. Quadricep strengthening—had client push back of knee into bed.
3. Gluteal strengthening.
   a. Had client squeeze buttocks together tightly and hold for a count of 5 and repeat 10 times.
   b. While standing, moved operated leg backward, placing one hand on lower back to prevent arching, then returned leg to starting position.
   c. While standing, moved operated leg laterally (out to side), keeping foot and knee pointing straight forward, then returned to starting position.

for Mobility and Dislocation Prevention

1. Getting out of bed. Note: A physical therapist usually supervises and assists with the first time out of bed.
   a. Raised bed to high position.
   b. Elevated head of bed and instructed client to exit bed from unoperated side.
   c. Keeping legs abducted, had client pivot on hips, and sit on edge of bed with operated leg out in front. Did not allow client to bend forward and push down to stand.
   d. Assisted client by supporting operative leg.
   e. Had client push down with hands on mattress to rise to a standing position. Walker was not to be used for support when rising to a standing position.
   f. Client usually walks first postoperative day with an assistant and a walker with weight bearing as tolerated.
2. Positions to avoid.
   a. Did not cross legs at ankles or knees. Kept knees apart at all times.
   b. Did not stand with toes turned in.
   c. Did not flex hips greater than 90°. Always sat with knees lower than hips. Avoided low chairs and did not bend over. Used toilet seat extender (elevator).
   d. Did not sit in bathtub. Used standing shower or shower/tub chair.
   e. When standing and turning was necessary, turned toward unoperated side.

for Assistive Devices and Adaptive Aids

1. Consulted physical therapy for walker provision, client instruction, and supervised ambulation.
2. Consulted occupational therapy for provision and instruction in use of adaptive aids, such as toilet seat extender, reachers, sock aid, long handled sponge, and shoehorn.
3. Discussed home safety adaptations which client may have already installed in preparation for elective surgery (pillows to elevate chair seats, shower or tub chair, safety rails, removal of loose rugs and electrical cords, placement of frequently used items within easy reach.)

CARING FOR A CLIENT WITH KNEE ARTHROPLASTY

Preparation

(See previous skill.)

Performed yes	Performed no	Mastered

Procedure

for Bed Positioning

1. Positioned for comfort. Client may turn side to side and may have head of bed up or down. Little risk of dislocation of knee prosthesis.
2. Did not place pillows under knee. (Optional: one pillow may be placed lengthwise under lower leg.)
3. Applied soft foam knee immobilizer or brace (if ordered).
   a. Placed wide strap over knee.
   b. Allowed client to direct tightness of fit. If soiling occurred, replaced splint with new one (client will take splint home).
   c. If a hinged splint (Bledsoe) ordered, did not open, adjust, or remove without a physician's order.
   d. Assessed CMS and skin integrity at least q4h.

for Strengthening Exercises

1. A continuous *passive* motion device may have been ordered to gently flex knee by adjusted increments. Settings start at 10–30°, gradually increased until 90° of flexion is achieved.
2. Alternate: client may have used a rocking glider chair.
3. Encouraged foot pumps, straight leg raising, ankle rotations, quadriceps and gluteal sets as for client with total hip replacement.

for Getting out of Bed

1. Assisted client to pivot and sit on side of bed, supporting leg.
2. Unless brace was worn, encouraged client to alternate bending and straightening knee.

Performed yes	Performed no	Mastered

3. Weight bearing as tolerated with an assistant and use of a walker, as allowed first postoperative day.
4. Raised seat assisted client to get in and out of a chair.

Performed yes	Performed no	Mastered

UNIT SIX Stryker Frame

UNIT ASSESSMENT

☐ Determined client's musculoskeletal and neurologic status.

☐ Evaluated client's understanding of turning procedure.

☐ Assessed client alignment and security of device.

☐ Evaluated client's ability to assist with turning.

USING A STRYKER WEDGE TURNING FRAME

Procedure

1. Explained procedure to client.
2. Showed client the Stryker frame before placing on frame.
3. Positioned posterior frame at bottom of turning circle.
4. Placed client supine on posterior frame (using three-person carry transfer method, if necessary.)
5. If client was on backboard, placed client and board on posterior frame.
6. Attached anterior frame.
7. Turned client and removed backboard.
8. Reversed procedure, and turned client to his or her back.

Performed yes	Performed no	Mastered

TURNING FROM SUPINE TO PRONE

Performed yes	Performed no	Mastered

Procedure

1. Explained procedure to client—procedure requires only one person; however, is advisable to have two people when possible.
2. Positioned sheepskin, pillows, or comfort aids on top of client.
3. With client on posterior frame, opened turning circle and put head end of anterior frame on securing bolt and fastened it with nut.
4. Fastened foot end of anterior frame with nut, making sure that client's legs and feet were correctly positioned.
5. Had client clasp hands around anterior frame. If client was unable to do this, put safety strap around whole frame at elbow level to keep arms contained.
6. Closed turning circle until it locked.
7. Moved armrests down out of the way of the turn.
8. Pulled out bed-turning lock.
9. Turned frame toward client's right until it locked automatically.
10. Opened turning circle, unscrewed nuts, and removed upper posterior frame. Relocked turning circle for safety.
11. To turn client on Stryker wedge from prone to supine, reversed procedure for turning from supine to prone.

USING A STRYKER PARALLEL FRAME

Procedure

1. Placed pillow lengthwise over client's legs to prevent moving during turning.
2. Attached anterior frame to main frame using two nuts on turning circle. Made sure client was held firmly between frames.
3. Put three safety straps around frame at level of knees, waist, and elbows. Tightened securely.
4. With person at each end of frame, pulled out locking pins at center of each end, turned frame slightly to hold lock open, and then quickly finished turning client. Bed automatically locked when bottom frame was horizontal.
5. Removed top frame, and repositioned client for comfort.

ASSISTING CLIENT WITH BEDPAN

Performed yes	Performed no	Mastered

Procedure

1. Explained procedure to client.
2. Placed client in supine position.
3. Donned clean gloves.
4. Dropped center section of posterior frame by releasing hooks or rubber bands from sides of frame.
5. Protected linen by putting plastic or towels around edges.
6. Inserted bedpan into opening and held securely with hands or with arm supports.
7. Removed bedpan, cleaned client, and reattached center section of frame.
8. Cleaned bedpan, and replaced in storage area.
9. Removed gloves and discarded.
10. Washed hands.

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Perioperative Care

Performance Checklist

UNIT ONE Stress in Preoperative Clients

UNIT ASSESSMENT

- ☐ Identified if high level of stress existed.
- ☐ Assessed exaggerated anxiety or stress behaviors.
- ☐ Evaluated defensive behaviors.
- ☐ Assessed client's vulnerability to number and significance of changes in life before admission.
- ☐ Evaluated client's level of knowledge and perceptions of impending surgery and perioperative period.

PREVENTING ANXIETY AND STRESS

Procedure

	Performed yes	Performed no	Mastered
1. Established trusting relationship.			
2. Encouraged verbalization of feelings.			
3. Listened attentively.			
4. Communicated acceptance of client as individual.			
5. Identified client's needs and kept charge nurse informed of them.			
6. Gave adequate information regarding hospital procedures.			
a. Hospital environment, including sights, sounds, and equipment			
b. Hospital personnel and routine procedures: mealtimes, telephone usage, call light.			
c. Ordered preoperative procedures: lab tests, diagnostic procedures.			
d. Scheduled time of surgery.			
e. Hospital regulations: visiting hours, children's age for visiting.			
f. Preoperative procedures: skin preparation, NPO, medications, side rails, dentures, nail polish.			

g. Anticipated intraoperative events: monitors, oxygen, masks, IV line, etc.
h. Anticipated postoperative events: recovery room, pain and pain medications, coughing and deep breathing exercises, dressings, IVs, Foley catheter.

REDUCING ANXIETY AND STRESS

Procedure

	Performed yes	Performed no	Mastered
1. Established a trusting relationship.			
2. Encouraged verbalization of feelings.			
3. Used touch to communicate caring and genuine interest.			
4. Avoided false reassurance.			
5. Used realistic outcomes.			
6. Assisted client in exploring effective coping methods to reduce anxiety or stress. a. Asked client or family what method client normally uses to successfully reduce stress. b. Provided activity: walking, range of motion. c. Provided back rub to loosen tense muscles. d. Taught client relaxation techniques.			
7. As client began to relax, reinforced success. Assisted client in recognizing his or her strengths and progress.			
8. Encouraged self-awareness of increasing tension and immediate reversal of escalation.			

ASSISTING THE CLIENT WHO USES DENIAL

Procedure

	Performed yes	Performed no	Mastered
1. Established trusting relationship.			
2. Encouraged verbalization of feelings and used an interpreter, if necessary.			
3. Used touch to communicate caring and genuine interest, if acceptable to client.			
4. Did not attempt to enforce reality. (Client is denying reality to prevent outright panic. Allowed use of this defense.)			
5. Used techniques to reduce anxiety and stress to manageable proportions.			
6. Attempted to determine cause of need for denial.			
7. Listened for cues that indicate readiness to discuss stressors causing need for denial.			
8. Notified physician of findings.			

UNIT TWO Preoperative Teaching

UNIT ASSESSMENT

- ☐ Identified type of surgical procedure planned.
- ☐ Determined if client understood type of anesthesia planned.
- ☐ Assessed client's sociocultural needs.
- ☐ Assessed client's learning needs.
- ☐ Determined most appropriate method of client teaching.
- ☐ Assessed client's willingness and ability to learn.
- ☐ Determined availability of prepared audiovisual material or printed information regarding surgical procedure.

PROVIDING SURGICAL INFORMATION

Procedure

for the Preoperative Client in the Hospital

	Performed yes	Performed no	Mastered
1. Explained necessity for blood work, ECG, urinalysis, and chest x-ray.			
2. Described preoperative skin preparation.			
3. Discussed placement of nasogastric tube, Foley catheter, as indicated.			
4. Described enema or special bowel preparation as ordered.			
5. Explained use of medications preoperatively and postoperatively.			
6. Demonstrated deep breathing and coughing exercises (use of incentive spirometer, if indicated).			
7. Assessed alcohol use and smoking habits. Emphasized smoking cessation techniques.			
8. Demonstrated leg exercises, antiembolic stockings, and sequential stockings.			
9. Demonstrated turning and moving in bed.			
10. Explained use of postoperative medications for pain control; PCA.			
11. Discussed reason for NPO and when it begins.			
12. Explained alterations in diet preoperatively or postoperatively.			
13. Described activities and preparation the morning of surgery.			
14. Stated need for quiet environment after medications have been given.			
15. Stated time of surgery to client and family.			
16. Described information usually provided by anesthesiologist and surgeon.			
17. Offered tour and explanation of monitoring devices and special equipment in ICU if client was to be transferred there postoperatively.			

for the Preoperative Client in an Outpatient Setting

	Performed yes	Performed no	Mastered
1. Called client several days in advance if long-duration surgical preparations needed to be completed before procedure. Called client in afternoon before procedure if short-duration preparations were required.			
2. Assessed client's ability to understand instructions. If necessary, asked to speak to someone else in the home.			
3. Reviewed any lab work that needed to be completed before scheduled surgery. Explained where lab work was to be done.			
4. Answered client's questions regarding surgery and procedures carried out by staff during surgery.			
5. Arranged for preadmission as needed.			
6. Discussed procedure for admission to facility: when to check in at facility, and what documents needed to be available at time of registration.			
7. Discussed procedure-appropriate clothing to be worn to setting.			
8. Explained that all jewelry and valuables should be left at home for safekeeping.			
9. Explained that someone needed to be with client for transportation.			

	Performed yes	Performed no	Mastered
for the Intraoperative Client			
1. Described mode of transportation to operating room.			
2. Discussed procedure in preinduction room or operating room suite in relationship to anesthesia.			
3. Reinforced physician's explanation of surgery.			
4. Described dressings, tubes, or equipment that was to be used postoperatively.			
5. Described postanesthesia room physical environment and procedures.			
6. Explained administration of oxygen.			
7. Explained administration of medications.			
for the Postoperative Client			
1. Described assessment procedures.			
2. Described routine procedures of vital signs.			
3. Demonstrated deep breathing, turning, and coughing exercises.			
4. Described IV therapy if indicated.			
5. Described irrigation of tubes.			
6. Discussed catheter care.			
7. Reviewed dietary alterations.			
8. Described observation and changes of dressing.			
9. Stated ambulation (or restrictions) guidelines.			
10. Defined types of medications.			
11. Provided anticipated discharge and plans for assisted care, if necessary.			

PROVIDING CLIENT TEACHING

Procedure

	Performed yes	Performed no	Mastered
1. Assessed client's knowledge base and readiness to learn.			
a. Determined information provided to client by physician by reading physician's progress notes and asking client specific questions.			
b. Identified client's psychosocial and cultural status and ability to listen to teaching by communicating with client and asking direct questions.			
c. Was alert for cultural or religious beliefs that might have influenced client's surgical experience.			
d. Identified client's perceptions of expected surgical experience and preference for learning.			
2. Developed individualized teaching plan based on client's needs.			
a. Chose appropriate equipment for teaching, based on client's level of understanding, knowledge base, and language of preference.			
b. Reviewed information previously provided.			
c. Chose a quiet environment, and provided for sufficient time to allow client to ask questions.			
d. Was alert for clues indicating client confusion or misunderstanding of information.			
3. Selected appropriate audiovisual materials to assist with teaching.			
4. Demonstrated use of special equipment or devices.			
5. Evaluated client teaching by assessing client's ability to return demonstration of exercises and verbally answer specific questions. Reinforced information or provided additional data as needed.			

PROVIDING FAMILY TEACHING

Procedure

Performed yes	Performed no	Mastered

1. Included family in teaching provided to client.
2. Instructions to family members included:
   a. Visiting hours.
   b. Where to wait during surgery.
   c. Where and when surgeon would meet with them.
   d. Where they could find bathrooms, telephones, and food and beverage service.
   e. When they could see client after surgery.
   f. How to contact a spiritual or religious resource person.
   g. How they could best get information regarding client's condition while they were at home or in hospital.
   h. Whether they would be called if there was a change in client's condition.
   i. What to expect: client's behavior, which may be regressive; attitude, which may be depressed or angry; physical condition, which may appear worse than it is, and post recovery period.

TEACHING FOR LASER THERAPY

Procedure

Performed yes	Performed no	Mastered

1. Determined type of laser to be used for surgery.
2. Identified client and introduced self.
3. Determined client's willingness to accept instruction.
4. Determined most appropriate time and place for instruction.
5. Identified client's level of understanding of surgical procedure and what information physician had provided.
6. Reinforced explanation of surgical procedure by physician as needed.
7. Described operating room setting or outpatient setting, including environment.
8. Explained that client and operating room staff would wear goggles.
9. Explained use of wet drapes placed over client's skin if required.
10. Described that laser machine may be very noisy.
11. Described physician's actions during laser therapy.
12. Cautioned client, if under local anesthesia, he or she may feel heat and smell smoke and burning odor from tissue being lased.
13. Instructed client to tell physician if pain occurred.
14. Instructed client to maintain NPO status 6–8 hours before surgery.
15. Instructed client in postoperative care specific to procedure performed.
16. Instructed client to notify physician if temperature was above 100°F for more than 24 hours following laser therapy.

PROVIDING TEACHING FOR LITHOTRIPSY

Preparation

Performed yes	Performed no	Mastered

1. Identified type of extracorporeal shock wave lithotripsy (ESWL) used: for kidney stones or occasionally, for gallstones.
2. Identified type of anesthesia that would be used: local, epidural, spinal, or general.

	Performed yes	Performed no	Mastered
3. Identified if client would have a urethral stint or Foley catheter inserted after procedure.			

Procedure

1. Identified client and introduced self.			
2. Determined client's knowledge base and information provided by physician.			
3. Reinforced physician's description of procedure, as needed.			
4. Answered client's questions regarding procedure.			
5. Explained that lithotripter discharges a series of shock waves through water or water-filled cushion.			
6. Described to client that he or she may feel fluttering or mild blows where shock waves were beamed.			
7. Discussed use of specialized equipment that was to be used.			
8. Described use of monitoring equipment throughout procedure.			
9. Explained that procedure takes 45 minutes to 2 hours, depending on type of procedure.			
10. Described post lithotripsy care.			
a. Following procedure, client would be removed from tub, covered with warm blanket, and taken to recovery room.			
b. Vital signs would be monitored as with any surgical client.			
c. Urine output would be monitored for hematuria.			
d. Strain all urine at the facility and at home.			
e. Liver function studies would be performed following lithotripsy for gallstones.			
f. Pain management would be monitored and maintained as gravel was passed following disintegration of stones.			
g. Medication would be provided for nausea and vomiting.			
h. Intake and output measurements would be taken.			
i. Catheter care would be provided for kidney clients requiring indwelling catheters.			
j. Exercise would be encouraged to assist with passing gravel.			
k. Ecchymoses and discomfort were possibly felt over area of body that experienced shock waves.			
11. Provided tour of lithotripter room, if possible.			

TEACHING FOR DIAGNOSTIC LAPAROSCOPY

Preparation

1. Identified purpose of diagnostic laparoscopy.			
2. Identified type of anesthesia that would be used.			
3. Determined if ultrasound, CT scan, and/or MRI was done; if so, had results available for physician.			
4. Obtained results of standard blood tests and urine tests, if done.			

Procedure

1. Identified client and introduced self.			
2. Determined client's knowledge base and information provided by physician.			
3. Reinforced physician's description of procedure, as needed.			

	Performed yes	Performed no	Mastered
4. Described equipment used for procedure.			
5. Described procedure to client.			
6. Instructed client that procedure would be done in same day surgery setting and that client would go home same day.			
7. Instructed client to not eat or drink for six to eight hours before procedure.			
8. Explained that client should shower the evening before or the day of surgery with chlorhexidine or agent prescribed by physician, and the umbilicus cleaned with soap, water, and a Q-tip.			
9. Instructed client to be at hospital one to two hours before scheduled surgery, according to hospital policy. Told client to bring someone to drive home.			
10. Had client discuss with surgeon whether to take routine medications the morning of surgery; if medications were to be taken, take only a sip of water to swallow pills.			
11. Instructed client to follow specific orders from physician's office regarding other pre-operative directions.			
12. Explained setting where surgery would be performed. If possible allowed client to visit the area if he or she was anxious.			
13. Described post laparoscopy care to client: a. Following surgery, client would go to recovery room. b. Vital signs would be monitored; dressing would be observed for signs of bleeding; medication for pain may be administered. IV fluids would be infused and monitored until effects of anesthesia dissipated. c. Client would be discharged home as soon as he/she is fully awake and accompanied by someone who can drive home. d. Instructed client that some soreness around incision is normal. e. Instructed client to notify physician if chills, vomiting, redness at incision site, or worsening pain were not controlled by medication, or if unable to urinate. f. Instructed client to schedule a follow-up appointment with physician within two weeks.			

TEACHING FOR ARTHROSCOPY

Preparation

	Performed yes	Performed no	Mastered
1. Determined joint where arthroscopy would be performed.			
2. Identified type of anesthesia that would be used.			
3. Determined if diagnostic tests were done (i.e. MRI, x-rays, or arthrogram). Obtained results for physician.			

Procedure

	Performed yes	Performed no	Mastered
1. Identified client and introduced self.			
2. Determined client's knowledge base and information provided by physician.			
3. Reinforced physician's description of procedure, as needed.			
4. Described equipment used for the procedure.			
5. Described procedure to client.			
6. Instructed client that procedure would be done in an out-patient setting and client would go home same day.			

	Performed yes	Performed no	Mastered
7. Explained preoperative preparation completed before day of surgery: a. Diagnostic tests completed. b. Operative permit signed. c. Physical examination and health history completed. d. Physician informed of routine medications and any allergies. e. Procedure discussed with physician and anesthesiologist. f. Client met with physical therapist to be fitted with crutches and/or knee brace.			
8. Instructed client not to eat or drink anything after midnight, unless otherwise instructed by physician.			
9. Explained skin prep that would be completed that night before surgery.			
10. Instructed client to follow surgeon or anesthesiologist instructions regarding taking routine medications.			
11. Provided instruction to client before admission: a. Remove all nail polish, make-up. b. Bring no jewelry, money, or other valuables to facility. c. Wear comfortable, loose-fitting clothes such as loose-fitting shirts or blouses, draw-string shorts, sweat pants, and boxer-style shorts. d. Bring crutches, brace, sling, or immobilizer to facility. e. Have an adult accompany client to facility to provide transportation home. f. Arrive at the facility 1 1/2 to 2 hours before scheduled surgery, according to facility policy.			

	Performed yes	Performed no	Mastered
12. Described post-arthroscopy care to client: a. Following surgery client would go to the recovery room. b. Vital signs, circulatory assessments, pain management, IV fluid infusion would continue until client fully awake and ready for discharge. c. Pressure dressing, brace, or ice may be applied to joint. d. Discharge instruction based on joint involved with arthroscopy.			
13. Repeated instructions for home care. a. Explained to client that wound and dressing to be kept clean and dry and changed if becomes soiled. b. Instructed client to place a plastic bag over brace and tape it securely when showering. c. Instructed client to apply ice to joint for 24–48 hours after surgery. d. Demonstrated how to elevate joint (leg, ankle, wrist) to reduce pain and edema. e. Explained how pain medication is to be taken. f. Discussed symptoms that indicate complications and should be reported immediately to physician.			

INSTRUCTING IN DEEP BREATHING EXERCISES

Procedure

	Performed yes	Performed no	Mastered
1. Identified client and introduced self.			
2. Explained procedure and purpose of exercise.			
3. Instructed and had client demonstrate deep breathing exercises.			

	Performed yes	Performed no	Mastered
4. Had client sit in upright position.			
5. Placed client's hands along lower borders of rib cage. Instructed client he/she should feel rib cage expand when breathing in.			
6. Instructed client to breathe through nose slowly, take a deep breath, hold 1–2 seconds, and then exhale through mouth.			
7. Repeated exercise sequences three to four times, at least every 2 hours when awake.			

INSTRUCTING IN COUGHING EXERCISES

Procedure

	Performed yes	Performed no	Mastered
1. Identified client and introduced self.			
2. Explained procedure and purpose of exercise.			
3. Instructed and had client demonstrate coughing exercises.			
4. Had client sit in upright position.			
5. Instructed client to splint incision when deep breathing and coughing.			
6. Demonstrated placement of hands on either side of incision. Instructed client to press hands firmly toward incision during exercises.			
7. Instructed in use of cough pillow. Placed folded bath towel in pillowcase. Held pillow directly over incision and pressed on pillow when performing exercises.			
8. Demonstrated technique for inhaling deeply and holding breath for 1–2 seconds.			
9. Instructed client to take two to three breaths slowly and exhale passively; on third breath, hold for 2–3 seconds.			
10. Encouraged client to cough forcefully two to three times by using abdominal and other respiratory muscles to assist with coughing.			
11. Had client cough a second time.			
12. Instructed client to do coughing exercises following deep breathing exercises at least every 2 hours when awake.			
13. Had tissues available for secretions if client had productive cough.			

PROVIDING INSTRUCTION TO TURN IN BED

Procedure

	Performed yes	Performed no	Mastered
1. Identified client and introduced self.			
2. Explained procedure and purpose.			
3. Instructed and demonstrated turning procedure.			
4. Instructed client to splint incision whenever turning.			
5. Had client move to far side of bed with side rails up.			
6. Instructed client to splint incision with hand on side toward which he or she would be turning.			
7. Instructed client to keep leg straight on side to which he or she would turn.			
8. Flexed other leg over straight lower leg.			
9. Instructed client to turn on side and grasp side rail.			
10. Instructed client to move pillow into comfortable position under head and place arm into comfortable position.			

INSTRUCTING IN LEG EXERCISES

Performed yes	Performed no	Mastered

Procedure

1. Identified client and introduced self.
2. Explained procedure and purpose.
3. Placed client in supine or semi-Fowler's position.
4. Instructed client to bend knee, raise foot in air, and hold this position for 2–3 seconds.
5. Had client extend leg and lower it to bed.
6. Repeated procedure with other leg.
7. Completed sequence 5–10 times each hour while awake.
8. Had client extend toes (plantar flexion) toward bottom of bed, then flex (dorsiflexion) toward head of bed.
9. Repeated foot extension and flexion with other side.
10. Repeated sequence five times each hour while awake.
11. Instructed client to make circles with ankle moving first to left and then to right.
12. Repeated sequence five times each hour while awake.

UNIT THREE Preoperative Care

UNIT ASSESSMENT

☐ Assessed type of surgical procedure to be carried out and extent of data base needed.

☐ Evaluated client's ability to provide accurate information.

☐ Assessed level of anxiety present that might have interfered in the transmission of information at that moment.

☐ Identified appropriate physical care needed for the specific surgical intervention.

☐ Assessed special needs for the surgical shave.

☐ Checked if special permit was needed for shaving, such as the head for neurosurgical clients, extremities for orthopedic clients, or children.

☐ Checked for need for special soap or antiseptic scrub prior to shave.

☐ Checked if policy exists in hospital for disposing or handling of scalp hair.

☐ Assessed surgical site before preparing; observed for unusual cuts, abrasions, or markings, and reported findings to charge nurse.

☐ Assessed client's knowledge of side and site of surgical procedure.

OBTAINING BASELINE DATA

Performed yes	Performed no	Mastered

Procedure

1. Established rapport with client.
2. Asked about allergies to drugs or food.
3. Assessed for surgical risk: nutritional status, fluid and electrolyte balance, use of prescribed medications, over-the-counter or complementary medications, and illicit drugs.
4. Assessed for alcohol use and smoking habits.
5. Took and recorded vital signs and weight of client.
6. Checked if client wore dentures, hearing aid, or glasses, or had an artificial eye.
7. Assessed mental attitude and recorded any unusual stress or anxiety exhibited by client.
8. Completed physical assessment and health history. Reported unusual findings to physician.

	Performed yes	Performed no	Mastered
9. Evaluated lab values for abnormalities (ECG, x-rays, blood work, and urinalysis).			
10. Identified areas requiring client teaching.			
11. Determined if skin prep was completed, shower or bath, as designated.			
12. Identified discharge plans.			
13. Determined religious/cultural beliefs that may impact surgical experience.			

PREPARING THE SURGICAL SITE

Procedure

	Performed yes	Performed no	Mastered
1. Referred to physician's orders for specific operative site or area to be prepared. If orders did not state preference for site, referred to procedure manual for appropriate area to be prepared, based on surgical procedure.			
2. Determined type of preparation to be done: clipping of hair, shaving site, or hair removal using depilatory. Gathered equipment.			
3. Explained procedure to client, and provided privacy.			
4. Adjusted light to ensure good visualization.			
5. Washed hands.			
6. Positioned client for maximum comfort and site exposure.			
7. Draped client for comfort and to prevent undue exposure.			
8. Protected bed with absorbent pad.			
9. Arranged equipment for convenience.			
10. Put on clean gloves.			
11. Assessed surgical site before skin preparation for moles, warts, rash, and other skin conditions.			
12. Prepared site using scissors or clippers.			
13. Prepared site using depilatory.			
14. Prepared site using razor.			
15. After removing hair, applied cleansing solution with 4 × 4 pads.			
16. Began at incision site and, with light friction, made ever-widening circles, moving outward from center to most distant line of area. Scrubbed area for 2–3 minutes.			
17. Rinsed area with warm water and blotted dry with 4 × 4 gauze pads.			
18. Removed and disposed of equipment; scissors and razors were disposed of in sharps container.			
19. Removed gloves and discarded.			
20. Washed hands.			
21. Assisted client to put on clean gown.			
22. Positioned client for comfort.			

PREPARING THE CLIENT FOR SURGERY

Procedure

	Performed yes	Performed no	Mastered
1. Obtained client's signature on preoperative permit.			
2. Assisted client to completed anesthesia questionnaires, if required.			
3. Assessed if bowel prep was completed.			

	Performed yes	Performed no	Mastered
4. Assisted client to shower, if not completed at home.			
5. Completed skin prep, if ordered, according to facility policy.			
6. Assessed for latex allergy. If present, ensured allergy band applied, physician notified, and OR staff notified.			
7. Observed for signs of cold or upper respiratory infection.			
8. Explained need for client to be NPO for 8–10 hours preoperatively.			
9. Removed lipstick and nail polish.			
10. Inserted Foley catheter if ordered.			
11. Took and recorded vital signs.			
12. Removed earrings, necklaces, medals, watch, and rings.			
13. Removed contact lenses, glasses, hairpieces, and dentures.			
14. Assisted client to void if catheter not inserted, and recorded time and amount.			
15. Placed surgical cap on client's head. Ensured client wore clean gown.			
16. Put antiembolic stockings on client as ordered.			
17. Administered preoperative medications.			
18. Placed side rails in UP position following administration of medications.			
19. Darkened room, and provided quiet environment following administration of medications.			
20. Checked client 15 minutes after medication administered to observe for side effects.			

ADMINISTERING PREOPERATIVE MEDICATIONS

Procedure

	Performed yes	Performed no	Mastered
1. Completed preoperative checklist.			
2. Checked orders for medication, dosage, route, and time.			
3. Checked history for allergy to ordered medication.			
4. Explained purpose of medication to client.			
5. Warned client that injection may sting or burn.			
6. Followed procedure for administration of injections.			
7. Administered medication.			
8. Raised side rails to UP position.			
9. Explained why client should not get out of bed after medications had been given.			
10. Placed call light within reach, and encouraged client to use it.			
11. Asked if there were any questions or assistance I could offer before leaving room. Darkened room or closed curtains.			
12. Gave client estimated time of surgery.			

UNIT FOUR CONSCIOUS SEDATION

UNIT ASSESSMENT

☐ Assessed type of procedure to be done and determined if conscious sedation was appropriate.

☐ Assessed type of sedation to be used for procedure.

☐ Determined if medication could be administered by nurse or only by physician.

☐ Checked if physician had ordered medication for conscious sedation and if nurse was approved to administer medication.

☐ Determined if history and physical was in client's chart.

☐ Checked that signed consent form was in chart.

☐ Assessed client's American Society of Anesthesiologist (ASA) Classification of Physical Status.

PREPARING CLIENT FOR CONSCIOUS SEDATION

Procedure

	Performed yes	Performed no	Mastered
1. Ensured that client was candidate for conscious sedation. Used ASA Classification of Physical Status.			
2. Determined if nurse or physician would administer medication.			
3. Checked that qualified anesthesia provider had written order for conscious sedation.			
4. Checked that client had been informed about procedure and use of conscious sedation.			
5. Ensured that history and physical had been completed and were on client's chart.			
6. Obtained height and weight.			
7. Asked about allergies, particularly sedatives.			
8. Explained that medication would relax client during procedure, client would feel sleepy but not be asleep, and would be able to communicate during procedure.			
9. Determined gestures that would be used during procedure to indicate if the client was having pain.			
10. Ensured that someone was with client to take him/her home, if discharge was anticipated following procedure.			

MONITORING CLIENT DURING PROCEDURE

Procedure

	Performed yes	Performed no	Mastered
1. Ensured that backup personnel skilled in ACLS were available if needed.			
2. Verified correct client by checking identaband and asking client to state name.			
3. Evaluated ASA Classification of Physical Status again.			
4. Checked that chart contained appropriate documents.			
5. Checked that pre-procedural assessment was completed on sedation record.			
6. Checked that consent form was signed.			
7. Gathered emergency equipment and placed near client.			
8. Determined if pre-medication was ordered and given.			
9. Obtained vital signs and documented findings on procedural sedation record.			
10. Started peripheral IV with ordered solution.			
11. Determined gesture to be used for communication regarding pain and sedation.			
12. Placed ECG leads on, if appropriate.			
13. Administered oxygen via nasal cannula at 2 L/min.			

14. Began administration of medication as ordered.
15. Monitored vital signs, oxygen saturation, sedation level, pain level, ECG rate and rhythm every 1–5 minutes according to facility policy and client condition.
16. Continued to monitor client every 15 minutes until stable following completion of procedure using conscious sedation.

CARING FOR CLIENT FOLLOWING CONSCIOUS SEDATION

Procedure

1. Observed vital signs, oxygen saturation, respiratory rate and rhythm, ECG rate and rhythm every 15 minutes unless more frequent monitoring was required according to client condition.
2. Observed client for patent airway if he/she was intubated during procedure and ensured oxygen cannula was in place immediately following extubation.
3. Assessed client for pain and medicated accordingly.
4. Monitored client and provided Aldrete Score in preparation for discharge. (Client must attain specified score within one hour of completion of procedure.)
5. Provided instructions as needed before client was discharged.
6. Ensured client had someone with him/her if discharged to home.
7. Completed documentation on Procedural Sedation Record.

Performed yes	Performed no	Mastered

UNIT FIVE Postanesthesia Care Unit (PACU) and Discharge

UNIT ASSESSMENT

- ☐ Assessed for patent airway.
- ☐ Assessed for order and type of oxygen administration set.
- ☐ Checked gag reflex, and removed endotracheal tube as ordered.
- ☐ Assessed vital signs and appropriate pulses.
- ☐ Assessed body temperature.
- ☐ Checked all IVs for type, amount of fluid, and infusion rate.
- ☐ Observed all dressings, tubes, and drains.
- ☐ Monitored urine output, color, and consistency.
- ☐ Assessed color, skin temperature, and condition
- ☐ Assessed monitor findings if ordered.
- ☐ Assessed neurological status, if necessary.
- ☐ Assessed heart and lung sounds.
- ☐ Assessed bowel sounds.
- ☐ Assessed residual anesthetic effect.
- ☐ Assessed for postoperative bleeding.

PROVIDING POSTANESTHESIA CARE

Procedure

1. Identified client and determined surgical procedure performed.
2. Obtained report, and reviewed chart with anesthesiologist and operating room nurse.
3. Connected client to monitoring system, if needed.

Performed yes	Performed no	Mastered

	Performed yes	Performed no	Mastered
4. Assessed for patent airway. Left airway in place until gag reflex returned and client attempted to remove it.			
5. Administered humidified oxygen by mask or nasal cannula at 6 L/min or as ordered.			
6. Monitored oxygen saturation using finger probe monitor.			
7. Encouraged client to cough and deep breathe when awake.			
8. Suctioned client as needed.			
9. Positioned client to ensure adequate ventilation.			
10. Monitored vital signs every 5–15 minutes as condition warranted.			
11. Maintained body temperature by applying warm blankets.			
12. Observed for adverse signs of general or spinal anesthesia.			
13. Monitored IV fluids. a. Checked type and amount of solution being administered. b. Set appropriate flow rate using IV pump or controller if needed. c. Observed IV site for signs of infiltration. d. Maintained accurate IV intake record.			
14. Monitored blood or blood component infusions. a. Identified appropriate replacement fluid. b. Checked client's name and identification number with fluid. c. Checked blood type, Blood Bank number, and expiration date. d. Checked time infusion initiated. e. Observed and recorded amount of fluid remaining in bag when admitted to recovery room. f. Determined time frame for completion of fluid.			
15. Monitored and measured urine output hourly if indwelling catheter was in place or before client left recovery room.			
16. Observed surgical dressings and drains hourly. a. Followed hospital policy for marking drainage on dressings. b. Noted color and amount of drainage on dressings and from drains or tubes. c. Checked that dressings were secure. d. Reinforced dressings as needed. e. Reported unusual amount or type of drainage to physician before client left recovery room.			
17. Monitored skin for warmth, color, and moisture.			
18. Checked nailbeds and mucous membranes for color and blanching. Reported unusual findings or signs of cyanosis to physician immediately.			
19. Oriented client to surroundings and relieved anxiety and fear.			
20. Observed for return of reflexes, especially if client received spinal or epidural anesthesia.			
21. Monitored for muscle strength/movement.			
22. Administered all STAT drugs.			
23. Completed PAR record.			
24. Assessed parameters for discharge from postanesthesia room.			

DISCHARGING CLIENT FROM POSTANESTHESIA UNIT TO NURSING UNIT

Procedure

	Performed yes	Performed no	Mastered
1. Assessed that lung sounds were clear to auscultation and airway was maintained without artificial measures (unless client was to remain on mechanical assistance).			
2. Assessed that vital signs were within normal range for at least 1 hour and appropriate for client's condition.			
3. Observed that client was awake, alert, and responded to commands.			
4. Assessed that reflexes were present and that client could move all extremities.			
5. Assess skin color and nail beds for signs of cyanosis.			
6. Ensured IVs were patent, infusing with correct solution and at prescribed rate. Recorded total amount of IV fluid infused and amount remaining in bags. Ensured all IVs and irrigating solutions were in sufficient quantity for transfer and immediate continuity of care.			
7. Checked that all dressings were intact, and there was no excessive drainage from drains or tubes. Reinforced dressings if needed and emptied all drainage collection receptacles before returning to nursing unit.			
8. Ensured urinary output was adequate. Recorded all urine output and emptied drainage bag before transporting to nursing unit.			
9. Recorded all medications administered in postanesthesia room.			
10. Medicated client 1/2 hour before transport if vital signs were stable and client required pain medication.			
11. Called anesthesiologist for discharge orders or used Aldrete Postanesthesia Recovery Scoring System if allowed.			
12. Called for transport assistance if available. Postanesthesia room nurse accompanied client to nursing unit.			
13. Called nursing unit, and provided information on equipment needs for client (e.g., oxygen, IVs).			
14. Documented all findings in computer or in chart before discharge.			
15. Provided report to unit nurse. a. Type of surgical procedure performed. b. Type of anesthesia and length of procedure. c. Length of time in postanesthesia room. d. Condition of client at time of discharge from postanesthesia room. e. Reported on vital signs, IVs, dressings, drains, tubes, need for special equipment, and medications received and time given.			

DISCHARGING CLIENT FROM PHASE II UNIT TO HOME

Procedure

	Performed yes	Performed no	Mastered
1. Followed all actions for *Discharging Client from Postanesthesia Unit to Nursing Unit.*			
2. Assessed for nausea or light-headedness.			

	Performed yes	Performed no	Mastered
3. Provided discharge teaching regarding medications, activity, dressing changes, physician office visit, etc. If client was unable to understand instructions, provided information to person taking client home. Sent written instruction home with client as well.			
4. Assisted client to side of bed and allowed client to dangle feet for a few minutes.			
5. Assessed client's ability to dress self or identified what assistance was needed.			
6. Obtained prescriptions from pharmacy, if needed.			
7. Placed client's equipment, supplies, and medication in a plastic bag and handed to person taking client home.			
8. Transferred client to wheelchair.			
9. Took client to car and assisted with transfer.			
10. Documented all activity related to discharge, including person taking client home and method of transport.			

UNIT SIX Postoperative Care

UNIT ASSESSMENT

☐ Assessed for patent airway.

☐ Checked if oxygen was ordered.

☐ Auscultated lungs.

☐ Checked gag reflex.

☐ Observed for adverse signs of general anesthesia or spinal anesthesia.

☐ Took vital signs (TPR, BP, and pain).

☐ Checked client's temperature for heat control.

☐ Observed dressings and surgical drains.

☐ Checked IVs for type and amount of fluid to be infused.

☐ Observed color and amount of urine.

☐ Auscultated bowel sounds and verified bowel movement and flatus.

☐ Observed client's overall condition.

PROVIDING POSTANESTHESIA CARE

Procedure

	Performed yes	Performed no	Mastered
1. Washed hands prior to each client contact.			
2. Introduced self to client.			
3. Oriented client to time, person, and place. Reoriented as needed.			
4. Assessed for patent airway and level of consciousness; administered oxygen if ordered.			
5. Assessed for effects of anesthesia including general, regional, or local.			
6. Took vital signs including pain assessment: usual orders are every 15 minutes until stable; then every half hour for 2 hours; every hour for 4 hours; then every 4 hours for 24–48 hours.			
7. Checked pulse oximetry every hour for 4 hours and then every 4 hours.			
8. Checked for nausea and vomiting.			
9. Checked IV site and patency frequently.			
10. Observed and recorded urine output, amount and color.			
11. Measured intake and output.			

	Performed yes	Performed no	Mastered
12. Observed skin color and moisture and nail beds.			
13. Positioned client for comfort and maximum airway ventilation according to orders.			
14. Turned every 2 hours and PRN.			
15. Gave back care at least every 4 hours.			
16. Encouraged coughing and deep breathing every 2 hours.			
17. Kept client comfortable with medications.			
18. Monitored for side effects of medication.			
19. Checked dressings and drainage tubes every 2–4 hours; if abnormal amount of drainage, checked more frequently. Emptied drainage system PRN.			
20. Gave oral hygiene at least every 4 hours; if nasogastric tube, nasal oxygen, or endotracheal tube is inserted, gave oral hygiene every 2 hours.			
21. Bathed client when temperature could be maintained.			
22. Kept client warm and avoided chilling, but did not increase temperature above normal.			
23. Irrigated nasogastric tube every 2 hours and PRN, as ordered, with normal saline to keep patent and to prevent electrolyte imbalance.			
24. Maintained dietary intake: type of diet depended on type and extent of surgical procedure.			
25. Placed client on bedpan 2–4 hours postoperatively if catheter not inserted.			
26. Checked physician's orders regarding when to begin client's postoperative activity.			
27. Observed for signs and symptoms of possible postoperative complications, particularly postoperative bleeding and infection.			
28. Dangled or got client up in chair as ordered.			

ADMINISTERING POSTANESTHESIA MEDICATIONS

Procedure

1. Evaluated client's need for pain relief.
2. Provided nonmedication measures for relief of pain, such as relaxation techniques, back care, positioning.
3. Identified pharmacologic action of ordered medication.
4. Reviewed general side effects of medication.
5. Administered medications as ordered, usually at 3- to 4-hour intervals for first 24–48 hours for better action and pain relief. Assessed for pain relief.
6. Instructed in use of PCA pump, if ordered.
7. Knew action of following drugs:
   a. Opiates
   b. Synthetic opiate-like drugs
   c. Nonnarcotic pain relievers
   d. Narcotic antagonists
   e. Antiemetics