Meet the Client: Donna KingDonna King is an 80-year-old female with coronary artery disease and hypertension. Her daughter brought her to the Emergency Department because she has become increasingly weak and confused and was found by a neighbor wandering her neighborhood unable to locate her home. Donna's daughter tells the nurse that her mother takes a "water pill" for her blood pressure 2 or 3 times a day. The label on the medication bottle that she brought to the hospital states, "hydrochlorothiazide (HydroDIURIL). Take 1 tablet daily." Donna is admitted with fluid volume deficit.

Since Donna has a fluid volume deficit, the nurse anticipates a decrease in which vital sign when Donna changes position?

 Blood pressure.

The nurse plans to assess Donna for orthostatic vital sign changes. Which action will the nurse take first?

Position Donna in a supine position.

The nurse takes the first blood pressure measurement. After recording the first blood pressure measurement, what action will the nurse take?

Count the client's radial pulse rate.

In addition to obtaining Donna's vital signs, the nurse performs additional assessments.

For ongoing evaluation of Donna's fluid volume status, it is most important to obtain which assessment data?

Body weight.

The nurse continues to assess the client and observes that Courtney's skin tents when a fold of skin over her sternum is pinched.

Document the presence of inelastic skin turgor.

Donna's daughter reports that her mother usually weighs about 137 lbs. and is 5 feet, 3 inches in height. The nurse weighs Donna and obtains a measurement of 60 kg.

The nurse explains to Donna's daughter that Donna has lost approximately how many pounds?

5.

The nurse discusses factors that contributed to Donna's fluid volume deficit with Donna and her daughter.

Which problem often occurs in the elderly and may have contributed to the fluid volume deficit Donna is experiencing?

Decreased hepatic blood flow.

The nurse is aware that the elderly often experiences an increase in the amount of free, unbound drug molecules, which has the potential to increase the pharmacological effects of the drug.

Which lab test will the nurse monitor to determine if this may be a factor contributing to Donna's problem?

Serum protein.

The nurse starts an intravenous line to administer fluids. The prescription states, "3% Normal Saline to infuse at 100 mL/hour." The client's most recent serum sodium level is 135 mEq/L.

What action should the nurse take?

Obtain appropriate IV fluid prescription.

A short while later, a prescription for 0.9% Normal Saline at 100 mL/hour is received. Donna's primary nurse is at lunch, so another nurse hangs the solution. When checking Donna upon returning from lunch, the primary nurse observes that a solution of 5% Dextrose and 0.9% Normal Saline is infusing at 125 mL/hour.

What action should the primary nurse implement?

Change the currently infusing solution to 0.9% Normal Saline and change the rate to 100 mL/hour.

After hanging the correct IV solution at the correct rate of infusion, the nurse discusses the error with the nurse who hung the first IV solution. Together, the nurses complete a variance (incident) report.

What additional action should the primary nurse take?

Notify the healthcare provider of the error in treatment that occurred.

The nurse who made the errors is very upset about writing a variance (incident) report and states, "I've never made an error before. What if I get fired?"

How should the primary nurse respond?

"Variance reports are used to find ways to prevent further errors."

Later that day, Donna's IV pump alarm sounds. The nurse notes that the IV is not infusing in the right antecubital area, and the alarm indicates an obstruction is present. The nurse determines that all the clamps are open and there are no kinks in the tubing.

Which intervention should the nurse take next?

Straighten the joint above the site.

The nurse resolves the obstruction, and the IV solution begins to infuse. The next day the nurse observes that the IV insertion site is inflamed and tender. The label on the IV site indicates the current IV has been in place for 36 hours.

Which action should the nurse take?

Remove the IV and restart it in a different location.

The nurse used the nursing process in deciding to remove Donna's IV and restart it in a new location.

When assessing the IV site, what step of the nursing process did the nurse use?

Analyze the data.

Which problem did the nurse identify as most pertinent in that situation?

Risk for injury (thrombus formation).

Donna continues to receive 0.9% Normal Saline at a rate of 100 ml/hour. She is stronger and has started taking oral food and fluids well. She receives a regular no-added-salt diet. Her breakfast includes one cup of scrambled eggs, one bowl of oatmeal, a fresh orange, apple juice, and a carton of milk.

Which items should be measured as fluid intake?

Milk. Apple juice.

When Donna was first admitted, the healthcare provider did not include intake and output measurement in the initial prescriptions, but the primary nurse initiated this assessment activity.

Now that Donna is taking oral fluids well, what action should the nurse implement?

Continue the measurement of the client's fluid intake and output.

Donna's intake and output measurements indicate her intake is greater than her output. The nurse is concerned that Donna may develop fluid volume excess.

Which assessment is important for the nurse to perform?

Auscultate the client's breath sounds.

The nurse also observes that Donna's feet and ankles are swollen. When the nurse presses a finger over the client's ankle (bony prominence), an 8 mm indentation appears.

How will the nurse document this finding?

4+ pitting edema present around ankles and feet.

Donna has abnormal breath sounds, bilateral pitting edema, and jugular vein distention.

Which change in Donna's pulse will the nurse anticipate?

Increase in rate and volume.

Further findings include oxygen saturation level of 90%, serum sodium of 140 mEq/L, serum chloride 105 mmol/L, albumin 4 g/dL, AST 30 IU/L, and serum potassium of 3 mEq/L.

The nurse reviews the client’s laboratory results. Which laboratory result is critical and should be reported to the healthcare provider?

Potassium 3.

The nurse reports the findings to the healthcare provider and receives several prescriptions. Which prescription should the nurse question?

Potassium chloride 40 mEq PO.

Donna's fluid volume excess improves and the prescription for hydrochlorothiazide (HydroDIURIL) 12.5 mg PO daily is restarted.

Which lab values are most important for the nurse to monitor? (Select all that apply).

Serum potassium.

Magnesium.

The nurse will emphasize the importance of taking this medication only once a day, on what schedule?

With breakfast.

Before Donna's discharge, the nurse provides client teaching related to the prescribed hydrochlorothiazide (HydroDIURIL).

Since Donna is receiving a diuretic that contributes to the loss of potassium, the nurse must provide dietary teaching. Which foods selected by the client indicate an understanding of potassium-rich foods?

 Baked potato.

Chicken breast.

Grapefruit juice.

**Medication Administration: Oral Tablets**

In preparing to administer the hydrochlorothiazide, the nurse notes that the prescribed dose is 12.5 mg, and the tablet available is 25 mg.

Which action should the nurse take?

Observe the tablet to see if it is scored.

Upon entering Donna's room with the medication, the nurse checks Donna's identification band. Donna states, "You take care of me every day. Why do you keep looking at my identification?"

What is the best response by the nurse?

"This is a double-check to ensure that no errors occur."

Which identifiers are acceptable for the nurse to use when verifying the right client prior to medication or treatment administration?

Client full name.

Date of birth.

Current photograph.

The nurse is preparing discharge instructions for Donna. Which signs and symptoms of fluid volume deficit should the nurse include when educating the client and her daughter prior to discharge?

Changes in mental status.

Change in urine output.

Presence of tachycardia.

Longitudinal furrows on the tongue.

Donna's fluid balance is restored. She is taking oral fluids well, her IV solution has been discontinued, and she has received client teaching about fluid balance and the correct administration of her diuretic. The nurse observes that Donna is able to break the scored medication tablet without difficulty. Donna is discharged home, accompanied by her daughter.