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Gerontological/Adults with Rehabilitation Needs Case Study

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Client Profile

Admission Diagnosis

P.M. is a 56-year-old Caucasian female currently residing in a long-term care nursing facility. P.M. was admitted to the facility on May 29th, 2009 with a primary medical diagnosis of Multiple Sclerosis. According to Joyce M. Black and Jane Hokanson Hawks in *Medical-Surgical Nursing: Clinical Management for Positive Outcomes* (2009), Multiple Sclerosis is a chronic demyelinating disease that affects the myelin sheath of neurons in the central nervous system. Multiple Sclerosis (commonly known as MS) slowly deteriorates patches of myelin irregularly along the axon of the nerve. Because the myelin sheath of the nerve axons are essential for the normal conduction of nerve impulses (Black & Hawks, 2009), the tale-tell symptoms of shakiness, progressive immobility, and rigid muscle movement of MS occur when this nerve impulse conduction is interrupted.

MS is usually diagnosed in patients between 20 and 40 years of age (Black & Hawks, 2009), and it is twice as common in women as it is in men. The exact cause of the disease is currently unknown, though most theories suggest that it is an immunogenetic-viral disease, meaning that the demyelination is initiated by the immune system after being exposed to a viral infection (Black & Hawks, 2009). The viral infection most widely accepted to be the trigger of this immune response is Epstein-Barr virus. A genetic component is thought to be responsible for weakening the immune system of patients presenting with MS. Multiple genes are believed to be involved, but the only consistently identified focus point is identified to be the human leukocyte antigen gene complex on chromosome 6 (Black and Hawks, 2009).

P.M. was admitted with several secondary diagnoses. The first the researcher will address is the patient's history of severe depression. Patricia A. Tabloski states in her text *Gerontological Nursing* (2010) that "depression is the mental health problem of greatest frequency and magnitude in the older population." The precise definition of depression is that it is a clinical syndrome characterized by low mood tone, difficulty thinking, and somatic changes precipitated by feelings of loss or guilt (Tabloski, 2010). Depression is thought

to be a direct result of abnormal serotonin neurotransmission in the central nervous system (Black & Hawks, 2009). This imbalance of serotonin may be genetic, but can be induced by other unknown etiologies. Other neurotransmitters, such as gamma-amino-butyric acid (GABA) and norepinephrine have also been closely linked in anxiety and hence may also be associated with depression (Black & Hawks, 2009).

P.M. is also diagnosed as having a neurogenic bladder. The term *neurogenic bladder* refers to several bladder dysfunctions caused by lesions of the central and/or peripheral nervous system (Black & Hawks, 2009). A neurogenic bladder can be classified as one or more of the following types: uninhibited, sensory paralytic (detrusor muscle hyperreflexia), motor paralytic (detrusor muscle areflexia), autonomous, or reflexive (Black & Hawks, 2009). Although P.M.'s diagnosis of a neurogenic bladder is not specified as to what type, after consideration, the researcher believes that the patient has an autonomous neurogenic bladder. This inference is due to the fact that an autonomous neurogenic bladder is said to be caused by the destruction of all nerve connections between the bladder and central nervous system (Black & Hawks, 2009). This destruction of nerve connections would then be due to the demyelination of the nerves as a result of the patient's primary diagnosis of MS. Clinical manifestations of a neurogenic bladder include retention and/or incontinence.

In addition to the neurogenic bladder, P.M. also had an admission diagnosis of nephrolitiasis (kidney stones). Kidney stones are calcifications in the urinary tract that are typically asymptomatic until passing into the lower urinary tract (Black & Hawks, 2009). The two primary causative factors of kidney stones are urinary stasis and super saturation of urine with poorly soluble crystalloids (Black & Hawks, 2009). The researcher believes that the patient's stones were caused by the former factor of urinary stasis, which is a product of the patient's neurogenic bladder.

The last diagnosis P.M. was admitted to the long term care facility that will be discussed in detail is that of a stage IV sacral decubitus ulcer. A stage four decubitus ulcer shows full-thickness tissue loss with exposed bone, tendon, or muscle (Black & Hawks, 2009). This type of ulcer, also called a pressure ulcer, develops when soft tissues are compressed between a bony prominence and a firm surface for an extended period of time

(Black & Hawks, 2009). Immobility and inactivity are the major risk factors for pressure ulcers. Because P.M. is chair-fast and requires total assistance for movement, it is not surprising that she was admitted to the facility with an existing pressure ulcer.

Surgical History

P.M's chart stated that she'd had a total hysterectomy prior to being admitted. There was no indication as to how far in advance this procedure had taken place, and although it is not directly related to any of the patient's physical diagnosis, it could have an effect on how the patient views herself. The more relevant surgery the patient underwent was that of a urostomy. This urostomy was surgical treatment for the patient's neurogenic bladder. Although the type of procedure performed while creating this urostomy was not stated in the patient's chart, a common procedure is called the ileal conduit. An ileal conduit is created by using a segment of the intestine as a conduit (Black & Hawks, 2009). The ureters are then attached to the conduit and urine continuously empties into the segment of intestine, which then drains to the outside of the body through the stoma the surgeon creates. The urine is collected in an ostomy bag and completely by-passes the bladder all together.

Assessment

On February 11, 2010, P.M. was assessed by the researcher. The patient was found resting in her geri-chair, and a complete head-to-toe assessment was conducted. P.M. was found to be A & O X 2. She was oriented to person and place, but not time. Her pupils were equal and reactive to light and accommodation. Her blood pressure was 110/70, her radial pulse was 54 beats per minute, and her respirations were 16 per minute. Her pulse oxygen saturation was 94% at room air, and her temperature was 97.7 degrees Fahrenheit when taken orally. P.M's apical pulse was 65, and the rhythm was irregular and muffled. Her anterior lung sounds were clear, but a minimal expiratory wheeze was heard in the posterior right middle lobe. Bowel sounds were heard in all four abdominal quadrants, and the patient's abdomen was firm, flat, and non-tender to palpation. Her skin was warm and dry, capillary refill was less than 2 seconds and turgor was lets than 3 seconds bilaterally. Hand

grasps were strong (+2) bilaterally. Foot pushes were weak (+1) on the patient's right side and absent on the left side. Pedal pulses were strong (+2) bilaterally.

Gordon's functional Health Patterns Assessment

The following chart is a database consisting of information obtained on the health patterns of P.M. Information was gathered objectively, subjectively, and indirectly.

Area of Health	Subjective Data	Objective Data	Indirect Data	Interpretation
Health/Perception Health Management	Pt. states that she feels that she is in good health despite her chronic illnesses.	Pt. has a variety of health problems that put her at risk for other illnesses.	Pt's nurse states that she hardly ever gets ill and is in good health relative to her conditions.	Patient is in acute good health, but chronically battles multiple conditions which ultimately decrease her health status.
Nutritional/Metabolic	Pt. says she is a very good eater and likes to eat all types of food.	Pt. ate very well at supper time and consumed an adequate amount of fluids. Pt. is very thin despite her large appetite, but her skin turgor is WNL.	Pt's STNA says that she always eats very well and that she always drinks adequate amounts of fluids as well.	The Patient does have an adequate nutritional status. The patient has slowly been gaining weight since admission, which is a positive outcome.
Elimination	Pt. says she cannot tell when she has to have a bowel movement.	Pt. has a urostomy due to her neurogenic bladder and she is incontinent of the bowel.	Pt's chart says that she is frequently constipated.	Pt. has inadequate elimination patterns.
Activity /Exercise	Pt. states she does not do any type of physical activity or therapy.	Pt. seems to have a completely sedentary life-style. Due to her immobility this is not a surprise.	Pt's chart indicates that she was seen by occupational therapy for awhile after being admitted. Goals were to increase range of motion, increase, strength increase sitting balance, and increase grooming ability. Pt. was d/c from therapy services. Pt. did not meet goals.	Pt. does not meet any activity/exercise standards. Though she is mostly immobile, there are still activities that she can do to improve her health status.

Sexuality/ Reproduction	Pt states that when she was married she felt she had a fairly "normal" sex life. Pt. says she is not currently involved in a relationship.	Pt. is not currently sexually active as she is bed bound and has severely limited mobility.	Pt. has had a hysterectomy (chart) and can no longer reproduce.	Pt. is not comfortable discussing sexuality, and this could be due to her condition or due to what she was taught growing up.
Sleep/Rest	Pt. says she sleeps very well and takes naps during the day.	Patient has been sleeping every time researcher has first come in to observe her.	Pt's nurse says she has never had problems with the pt. not wanting to sleep at night.	Pt. likely sleeps more than the average person should. This is most likely due the extensive fatigue MS causes.
Cognitive/ Perceptual	Pt feels she is still very intelligent and has good cognitive ability.	Pt seems a little forgetful but is oriented to person and place. She is not oriented to time.	Pt's chart also says she is not oriented to time.	Pt. is starting to lose some cognitive ability. There are varying factors that could be causative of this.
Role/ Relationship	Pt. states she has a good relationship with her sister, mother and children. She also says she likes her caretakers at the facility.	Pt. does interact well with family and staff, but does not seem to have any socialization with other residents.	Pt's activities charting says she has poor eye contact and does not interact with other residents.	Pt. seems to be very family oriented, but it's as if she doesn't feel she belongs at the nursing facility. She seems to have no close friends at the facility.
Self-perception/ self-concept	Pt. says she likes herself and thinks she is "cute."	Pt. seems to be self conscious at times. She does not like to answer questions about herself.	Pt's chart states that she is severely depressed.	Pt. seems to go in and out of self acceptance. The deterioration of her body has taken a toll n her self-perception.
Coping/stress tolerance	Pt. states she has no set way to deal with stress, but just "rides it out."	Pt. seems to have a flat affect and does seem somewhat depressed and withdrawn. She needs help developing coping skills.	Pt's chart says she is tearful at times, but her psychology notes state that she is cooperative and is progressing well with her coping skills.	Patient needs to develop better stress management. It seems as if the patient keeps everything inside, as if not talking about it will make things go away.
Value/belief	Pt. says she is Catholic but that she is no longer practicing.	Pt. does not want to discuss her beliefs. This causes the researcher to wonder if she could possibly have lost some of her beliefs due to her life events.	Pt's chart also states that she is Catholic.	Patient did not want to go into detail about her spiritual beliefs. This could possibly indicate that her chronic illnesses have altered her beliefs.

Medications

Baclofen 20 mg po bid

(for treatment of muscle spasms and rigidity)

Citalopram 60 mg po daily

(for depression)

Daily Vite tab 1 tab po every other day

(To prevent vitamin deficiencies)

Docusate Sodium 100 mg 1 capsule po daily (To prevent constipation)

Acetaminophen 325 mg 2 tabs po q4h prn (for pain)

Diphenhydramine 25 mg 1 capsule po q4h prn (For allergy, cold, or cough symptoms)

Hydrocodone 5/5oo mg 1 tab po prn 30 minutes prior to wound procedures

(To prevent pain associated with sacral wound procedures)

Milk of Magnesia 400mg/5mL 30 mL po daily prn

(To promote regular bowel functioning)

Famotidine 20 mg 1 tab po @ HS

(To treat/prevent acid reflux/duodenal ulcers/ indigestion)

Past Medical /Surgical History

Hysterectomy

Urostomy (Ileal conduit)

N20030 Concept Map

Student Name _J. Varnell____ Client Initials _P.M.__ Date _02/11/2010__

Age __56_ Gender _F__ Room # _107__ Admit Date _05/29/2009___

Admitting Diagnoses/Chief Complaint

Multiple Sclerosis

Physical Assessment Data

56 yr. old. Caucasian Female w/ Multiple Sclerosis. Pt. is chair-fast and a total X2 assist for ADL's. Pt. A & O X 2 (not oriented to time) PERRLA, Pain 0/10. VS 110/70-54-16. POX 44% @ RA and Temp. 97.7 degrees Fahrenheit orally. Apical pulse rate 65, cardio rhythm is irregular and muffled. Ant. lung sounds clear, min. expiratory wheeze present in post. R mid. lobe. BS X 4, abd. Firm, flat, & non-tender. Skin warm & dry, cap. refill < 2 sec, turgor non-tenting & < 3 sec. Hand grasps +2 bilaterally, foot pushes + 1 on R, absent on L. Pedal pulses +2 bilaterally.

Lab Values/Diagnostic Test Results

PTINR- 27.4, 2.6

WBC -7.3

RBC- 4.82

Hemoglobin- 12.8

Hematocrit- 41

Platelets- 235

Creatinine- 0.6

Glucose- 76

Sodium- 141

Chloride-106

Potassium-4.2

BUN- 21

Calcium- 8.8

CO2- 29

Treatments

Topical skin treatment to coccyx: cleanse w/ NS & apply Aquacel AG, Cover w/ ABD. Change every other day & prn.

TAO to L Ant. Distal malleus daily. Cover w/ Band-Aid.

Urostomy bag changed/cleaned weekly & prn. Cleanse around stoma w/ skin prep pads, apply Eakins moldable adhesive, apply ostomy bag.

Primary Nursing Diagnosis
Impaired Physical Mobility r/t chronic illness

Supporting Data
Pt. dx w/ Multiple Sclerosis
Pg. cannot walk
Pt. cannot feed self
Pt. is confined to bed & geri-chair
Pt. exhibits an extreme minimum amount of controlled movement.

STG
Pt. will not be left to struggle with ADL's d/t mobility issues during my shift.
LTG
Pt. will report an increase in strength & endurance of limbs w/in 3 months.

Interventions with Rationale

Position pt. in proper alignment to prevent complications.

Perform passive ROM exercises tid. This should be performed slowly and supportively to not damage joints. These exercises will prevent contractures and lessen rigidity of muscles.

Turn patient at a minimum of q2h while in bed. This prevents skin breakdown.

EBP Citation
Carpenito, 2008. Handbook of Nursing Diagnoses. Digital Version.

Evaluation

Pt. was properly assisted during shift and was did not have to struggle due to immobility. I was unable to observe the outcome of my long term goal, but I do believe that if done properly ROM exercise will help pt. to decrease muscle spasms and prevent further contractures.

Nursing Diagnosis #2

Impaired Skin Integrity r/t effects of pressure & immobility secondary to chronic illness.

Supporting Data
Pt. has a stage IV pressure ulcer on sacral area.
Pt. has a Braden score of 14.
Pt. has a small open wound on L Ant. Distal malleus.
Pt. has an altered immune system r/t chronic illness, which puts her at risk for more episodes of impaired skin integrity.
Pt. is completely immobile.

STG
The pt. will exhibit progressive healing of tissues during researcher's next two visits.
LTG
Pt. will have Sacral wound healed w/in 9 months.

Interventions with Rationale
Cleanse wound every other day w/ dressing change and prn as ordered by physician. This prevents infection and promotes healing of the wound.
Massage non-reddened area around the wound daily. This stimulates circulation to the affected area, hence promoting healing.
Continue the use of hydrocolloid dressing as ordered by physician. Hydrocolloids are more effective than gauze dressings in ulcer healing, pain involved, and time needed for dressing changes. Hydrocolloids have a higher absorption capacity and fewer side effects than other types of dressings.

EBP Citation
Heyneman Et. Al. 2008. *A systematic review of the use of hydrocolloids in the treatment of pressure ulcers.*

Evaluation
There was evidence of healing and an increase of new tissue growth upon reexamination of the pt's sacral wound. I am not going to be able to observe if the wound will completely heal, but if proper cleansing and dressing techniques are adhered to, with the improvement seen in 2 weeks, 9 months should be an adequate amount of time for complete wound healing.

Nursing Diagnosis #3

Ineffective coping r/t chronic mood disorder secondary to chronic illness.

Supporting Data
Pt. is dx w/ sever clinical depression.
Pt. states that she has no formal way to deal with stress.
Pt. exhibits a flat affect when speaking with researcher.
Pt. does not socialize with other residents and has a withdrawn attitude.
Pt. states that she no longer practices the Catholic faith that she had prior to becoming ill.

STG
The pt. will identify the she has a problem w/ coping w/ her conditions.
LTG
The pt. will exhibit improved coping skills and stress management after 3 months.

Interventions with Rationale
Maintain an environment with low levels of stimuli. Excessive stimulation could cause pt. to become more agitated/stressed than usual.
Create a care-program that allows the pt. to participate in self-care to her highest possible level. The application of a self-care program can be an effective method for improving self esteem in MS patients.
Find outlets that foster feelings of personal achievement and Self-esteem. The pt. will feel good about herself if she has done something constructive during the day rather than leading a continuous sedentary life style.

EBP Citation
Madani, H. et al. 2009. **Effect of Self-care program on the Self-Esteem of Multiple Sclerosis Patients.**

Evaluation
The patient did not identify as having a coping problem. The patient seems to be in denial that she has poor coping skills. I believe with family support and psychological counseling, pt. can overcome her poor coping skills and improve stress management.

Gero-Rehab Course
NPR Medication Sheet

Drug Name (generic/trade name)	Drug Action/ Purpose	Normal Dose Range	Major side Effects	Nursing Considerations
Baclofen	Inhibits reflexes at the spinal level. Results in decreased muscle spasticity, and bowel and bladder function may also be improved.	PO: 5 mg tid. May increase q 3 days up to 80/mg per day.	Fatigue, weakness, depression, headache, nasal congestion, tinnitus, edema, hypotension, constipation.	Administer w/ milk or food to minimize gastric irritation. Watch for allergies.
Citalopram	Selectively inhibits the reuptake of serotonin in the central nervous system. Results in an antidepressant action..	PO: 20 mg once daily initially, may be increased by 20 mg/day at weekly intervals, up to 60 mg/day.	Apathy, confusion, drowsiness, agitation, amnesia, decreased libido, impaired concentration, increased depression, migraine headache, abnormal accommodation.	Do NOT confuse w/ Celebrex, Cerebyx, Zyprexa, or Lexapro. PO: Administer as a single dose in the morning or evening without regard to food. Monitor for allergies.
Daily Vit tab	Contain fat and water soluble vitamins. Vitamins are necessary for many metabolic processes.	1 dosage unit/day or amount recommended by individual manufacturer.	In recommended doses, adverse reactions are rare. However, urine discoloration can occur, as well as allergic reactions to preservatives, additives, or colorants.	Forms are not standardized. Chewable tablets should be crushed or chewed before swallowing. Combinations w/ > 1mg folic acid require a prescription. Watch for allergic reactions.
Docusate Sodium	Promotes incorporation of water into stool, resulting in softer fecal mass. Results in softening and passage of stool.	PO: 50-400 mg in 1-4 divided doses.	Throat irritation, mild cramps, rashes	Administer with a full glass of water of juice. May be administered on an empty stomach for more rapid results. Do not administer w/in 2 hr of other laxatives. Monitor for allergies.

Acetaminophen	Inhibits synthesis of prostaglandins that may serve as mediators of pain and fever. Results in an analgesic and antipyretic effect.	325-650 mg q4-6 hr or 1 g 3-4 times daily or 1300 mg q8h. Not to exceed 4g/ 24 hrs, or 2.5 grams/ 24 hrs in patients w/ hepatic/renal impairment.	Hepatotoxicity, renal failure w/ chronic use, neutropenia, pancytopneia, leucopenia, rash, urticaria.	When combined w/ opioids do not exceed the maximum recommended daily dose of acetaminophen. Administer w/ a full glass of water. May be taken w/ food or on an empty stomach. Watch for allergies.
Diphenhydramine	Antagonizes the effects of histamine at H1-receptor sites, does not bind to or inactivate histamine. Results in decreased sneezing, rhinorrhea, and congestion.	25-50 mg q 4-6h. Not to exceed 300 mg/day.	Drowsiness, dizziness, blurred vision, tinnitus, hypotension, anorexia, dry mouth, constipation, dysuria, urinary retention, photosensitivity	Do not confuse w/ dextromethorphan, desipramine, or dimenhydrinate. Administer w/ meals or milk to minimize GI irritation. Capsule may be emptied and contents taken w/ water or food. Watch for allergies.
Hydrocodone	Binds to opiate receptors in CNS. Alters the perception of and response to painful stimuli.	2.5-10 mg q3-6h prn, if using combination products, acetaminophen or aspirin dosage should not exceed 4g/day.	Confusion, dizziness, sedation, euphoria, hallucinations, unusual dreams, diplopia, urinary retention, constipation, dyspepsia, sweating, physical dependence, tolerance.	Before administering, clarify all ambiguous orders and have second practitioner independently check original order and dose calculations. Do not confuse w/ hydrocortisone. Monitor respirations and for allergies.
Milk of Magnesia	Are osmotically active in the GI tract, drawing water into the lumen and causing peristalsis. Promotes evacuation of the colon.	30-60 mL single of divided dose or 10-20 mL as concentrate.	Diarrhea, flushing, sweating	To prevent tablets entering small intestine in undissolved form, they must be chewed thoroughly before swallowing. Follow with ½ glass of water. Administer on empty stomach for more rapid result. Watch for allergies.

Famitodine	Inhibits action of histamine at the H2-receptor sites located primarily in gastric parietal cells, resulting in inhibition of gastric acid secretion.	20 mg once daily at bedtime.	Confusion, drowsiness, hallucinations, arrhythmias, agranulocytosis, aplastic anemia, constipation, nausea.	Administer w/ meals or immediately afterward and at bedtime to prolong effect. Shake oral suspension prior to administration and discard unused suspension after 30 days. Monitor for allergies.
Floranex (Lactinex)	Lactobacilus supplement used to replace normal gut flora.	OTC, follow instructions on package.	No major side effects except allergic reactions, especially if lactose-intolerant.	Monitor for allergies.
Metoprolol	Blocks stimulation of beta1-adrenergic receptors. Results in decreased blood pressure and heart rate.	25-100 mg/day as a single dose initially or 2 divided doses. May be increased q 7 days as needed up to 450 mg/day.	Fatigue, weakness, bronchospasm, bradycardia, CHF, pulmonary edema, hypotension, nervousness.	Do not confuse w/ misoprostol. Take apical pulse before administering and hold med if < 50 bpm or if arrhythmia occurs. Administer w/ meals or directly after eating. Monitor for adverse reactions and allergies.
Premarin	Restoration of hormonal balance in various deficiency states and treatment of hormone-sensitive tumors.	0.3-1.25 mg daily or in a cycle.	Headache, insomnia, lethargy, MI, thromboembolism, edema, hypertension, nausea, weight changes, oily skin.	Estrogens should be used in the lowest doses for the shortest period of time consistent w/ desired therapeutic outcome. Administer with or immediately after food to reduce nausea. Monitor for allergies.
Warfarin	Interferes w/ hepatic synthesis of vitamin K-dependent clotting factors. Prevents thromboembolic events.	2.5-10 mg/ day for 2-4 days, then adjust daily dose by results of PT or INR. Initiate therapy w/ lower doses in geriatric of debilitated patients.	Cramps, nausea, dermal necrosis, bleeding, fever.	Before administering, evaluate recent INR or PT results and have second practitioner independently check original order. Careful monitoring is recommended when new agents are started or other agents are d/c. Administer med. At same time each day. Medication requires 3-5 days to reach effective levels. Monitor for adverse reactions or allergies.

Lab Test	Result 1	Result 2	Normal Range	Interpretation
PT	23.5	27.4	9.5-11.3	Time is slower than average. This is due to the patient being on an anticoagulant.
INR	2.2	2.6	2.0-3.0 for patients on anticoagulants.	Patient's INR is WNL.
RBC	4.42	4.82	4.2-5.4	Patient's RBC count is WNL.
WBC	7.4	7.3	5-10	Patient's WBC count is WNL.
Hemoglobin	11.2	12.8	12-16	The patient's first Hgb reading was slightly lower than average. The value is not critically low, but could be an indication of anemia.
Hematocrit	35.8	41	38-47%	The patient's first Hct reading was a little low. This could be an indication of hemodilution or anemia.
Platelets	374	235	150-450	Platelet count is WNL.
Creatinine	0.5	0.6	0.8-1.7	Patient's values are slightly decreased. This is indicative of renal impairment. This Most likely occurs b/c of the patient's neurogenic bladder.
Glucose	75	76	70-110	Patient's glucose levels are WNL.
Sodium	140	141	135-145	Patient's sodium levels are WNL.
Chloride	104	106	95-105	The patient's 2nd Chloride value was 1 unit higher than the normal range. While this is not a critical value, the miniscule elevation could be due to the patient's urinary problems.
Potassium	4.3	4.2	3.5-5	Patient's potassium levels are WNL.
BUN	15	21	5-20	The patient's 2nd BUN level is elevated one unit from the normal range. This is not a critical value, but once again could be caused by the patient's urinary problems or by the patient's usage of Acetaminophen.
Calcium	8.7	8.8	4.5-5.5	The patient's calcium levels are above average for an adult woman. This indicates that the patient's body is breaking down the calcium in her bones. It is caused by prolonged immobility.
pCO2	27	29	35-45	The patient's pCO2 is lower than average. This indicates that the patient may be in compensated respiratory acidosis.

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