

Nursing Process Paper - Gerontology

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## **Client Profile**

A 78 year old widow was admitted to a long-term care facility on 8/12/2010. The patient was admitted from an acute care facility for rehabilitation of a right femur fracture and atrial fibrillation. The patient has a history of type II diabetes, coronary atherosclerosis, and hypertension. The patient also had an ORIF (open reduction internal fixation) surgery.

## **Admission Medical Diagnosis and Chief Complaint**

The patient was admitted with a right femur fracture and atrial fibrillation.

## **Primary Medical Diagnosis**

### **Fx Femur**

According to Black and Hawk, a fracture is the disruption in the normal continuity of a bone. (pg 507) A fracture can result from more stress being put on the bone than what the bone can hold. The severity of a fracture depends on what cause the fracture to happen. Depending on the type of accident, the bone can just crack to completely shatter. When a bone is fractured, the muscles that attach to the end of the bone are disrupted. Bleeding also occurs from the damaged ends of the bone and from the soft tissue. (Black & Hawk, pg 508)

The most common way to diagnose a bone fracture is by using x-ray. The x-ray technologist must take the x-ray at the correct spot and the correct angle in order for a

fracture to be properly diagnosed. The x-ray also needs to include the joints surrounding the bone to identify any other complications that could occur. Some abnormal findings on the x-ray would include soft tissue edema or air displacement due to the shift of the bone. (Black & Hawk, pg 509)

There are two types of classifications of fractures, closed and open fractures. Closed fractures has skin intact over the injury site. Open fractures do not have skin intact over the injury site. Open fractures are classified as grade I, grade II, or grade III depending on their severity. Grade I open fractures are smaller than 1cm and have little to no contamination. Grade II open fractures has a wound larger than 1cm and have a moderate amount of contamination. Grade III open fractures has a wound greater than 6cm and there is extensive damage involved. (Black & Hawk, pg 510)

### **Atrial Fibrillation**

Atrial fibrillation (AFib) is when the heart's two upper chambers called the atria do not beat properly. The improper beating does not allow the blood to be pushed completely out of the atria so it can pool or clot. If a piece of the clot breaks off, it can follow an artery to the brain and cause a stroke. (AHA, 2010)

Symptoms of Afib include heart palpitations, decreased blood pressure, generalized weakness, lightheadedness, confusion, shortness of breath, and chest pain. There are two types of Afib, occasional and chronic. Occasional Afib, also called paroxysmal atrial fibrillation, is when the symptoms come and go. They could last for minutes to several hours. Chronic Afib is when symptoms persist usually until treated.

Many people do not even know they have Afib until they are diagnosed during a physical examination. There are many different causes of atrial fibrillation that include high blood pressure, heart attacks, smoking, lung disease, and viral infections. Risk factors for atrial fibrillation include smoking, drinking excessive amounts of alcohol, high blood pressure, and family history. (Mayo Clinic, 2010)

## **Other Medical Diagnoses**

### **Type II Diabetes**

Type II diabetes is the most common form of diabetes. Millions of people have type II diabetes, but some are more at risk to have it. Type II diabetes is more common in African Americans, Latinos, Native Americans, and Asian Americans, Native Hawaiians and other Pacific Islanders, as well as the aged population. In Type II diabetes the body does not produce enough insulin or the cells ignore the insulin. Insulin is needed so the body can take the glucose into the cells and use it as energy. Some symptoms of Type II Diabetes are: frequent infections, blurred vision, cuts/bruises that are slow to heal, tingling/numbness in the hands/feet, recurring skin, gum, or bladder infections. Often people with type II diabetes have no symptoms. The best way

to prevent diabetes is to live a healthy lifestyle. This includes maintaining a healthy weight, changing your diet, and increasing your physical activity level.

Another way to prevent diabetes is to have your blood glucose checked yearly if you are 45 and overweight and if under the age of 45, overweight, and have a family history of diabetes. (Diabetes, 2010)

### **Coronary atherosclerosis**

Coronary atherosclerosis is a type of arteriosclerosis (meaning thickening or hardening of the arteries). Atherosclerosis is caused by the build up of plaque on the lining of an artery. Plaque is deposits of fatty substances, such as cholesterol, calcium, and fibrin. This causes the artery wall to thicken and loose its elasticity. Atherosclerosis is a disease of arteries only, it does not occur in veins. It usually starts late in childhood and progressively gets worse as one ages. It is usually asymptomatic. It can become symptomatic if it interferes with blood to the brain. It can cause stroke, heart attacks, and heart failure. Symptoms of atherosclerosis include chest pain and abnormal heart rhythms. (Heart Disease, 2005)

### **Hypertension**

Hypertension is when your blood pressure stays in the high blood pressure range (usually 140/90). When your blood pressure is not under control it can cause damage to your blood vessels, heart, and kidneys. It can cause stroke and/or MI. HTN doesn't usually have signs or symptoms while it is doing the damage. There is no exact cause of HTN but being overweight, eating unhealthy, smoking, drinking, too much Na in your

diet, family history of HTN are all risk factors. Very high blood pressure can cause headaches, blurry vision, nausea, and vomiting. Most people are diagnosed with HTN when they go to the doctor for their routine visit. You must have a blood pressure of 140/90 three consecutive times and usually it is 1 to 2 weeks apart (Mayo Clinic, 2010).

### **Surgical History**

#### **ORIF**

ORIF (open reduction internal fixation) is the surgical repair of a fracture. As soon as you are medically stable, you will be prepared for surgery. First, you will be given a general anesthesia. The doctor will then make an incision at the hip area and realign your bones. The bones are then held in place by surgical fixations. For a femur fracture, the doctor will use multiple screws to hold the bones in place for proper healing. After the surgery, you will be taken to the post-op area for observation. Once you are stable, you will then be admitted to an orthopedic floor in the hospital. You will spend a few days in the hospital. You will be provide physical therapy and occupational therapy. Once the doctor sees that you are fit to be discharged, you will either be discharged to home or to a rehabilitation facility depending on your needs. (dcorthodocs, 2010)

**Medication Prep Sheet**

\*Medication information obtained from Davis’s Drug Guide for Nurses 11<sup>th</sup> edition

<b>Medication</b>  <b>(Generic /or Trade)</b>	<b>Classification</b>  <b>&amp;</b>  <b>Action</b>	<b>Why is your patient taking this drug?</b>	<b>Nursing Implications</b>	<b>Side Effects</b>
Lisinopril  40 mg Po qd 8:00 am	Therapeutic: antihypertensives  Pharmacologic: ACE inhibitors  Lowering of blood pressure in hypertensive patients.	Hx of hypertension	Monitor BP and pulse frequently during initial dose adjustment and periodically throughout therapy. Notify health care professional of significant changes. Monitor frequency of prescription refills to determine adherence. Assess patient for signs of angioedema (dyspnea, facial swelling).	Dizziness, drowsiness, fatigue, headache, insomnia, cough, vertigo, weakness, cough, dyspnea, hypotension, chest pain, edema, tachycardia, hyperuricemia, taste disturbances, abdominal pain, anorexia, constipation, diarrhea, nausea, vomiting, erectile dysfunction, proteinuria, renal dysfunction, renal failure, hyperkalemia.
Lovenox  30 mg SQ BID 8 am & 8 pm	Therapeutic: anticoagulants. Pharmacologic: antithrombotics.  Prevention of thrombus formation.	Dx of femur fracture	Assess for signs of bleeding and hemorrhage. Notify health care professional if these occur. Assess patient for evidence of additional or increased thrombosis. Symptoms will depend on area involvement. Monitor patient for hypersensitivity reactions. Observe pts with catheters for neurological effect SC: observe injection sites for hematomas, ecchymosis, or inflammation.	Dizziness, headache, insomnia, edema, constipation, nausea, reversible increase in liver enzymes, vomiting, urinary retention, ecchymoses, pruritus, rash, urticaria, bleeding, anemia, thrombocytopenia, erythema at injection site, hematoma, irritation, pain, fever
Metoprolol  25 mg PO BID 8	antianginals, antihypertensives, beta blockers, Hypertension, angina pectoris, prevention of	Hx of hypertension	Monitor vital signs and ECG every 5-15 minutes during and for several hours after parenteral administration. Monitor	Fatigue, weakness, anxiety, depression, dizziness, drowsiness,

am & 4 pm	MI and decreased mortality in patients with recent MI.		intake and output ratios and daily weights. Assess routinely for signs and symptoms of CHF (dyspnea, rales/crackles, weight gain, peripheral edema, jugular venous distention. Monitor frequency of prescription refills to determine compliance.	insomina, memory loss, mental status changes, nervousness, nightmares, blurred vision, stuffy nose, bradycardia, Pulmonary edema, hypotension
Norvasc  5 mg PO qd 8am	Therapeutic: antihypertensives  Pharmacologic: calcium channel blockers  Systemic vasodilation resulting in decreased blood pressure. Coronary vasodilation resulting in decreased frequency and severity of angina attacks.	Hx of hypertension	Monitor blood pressure and pulse before therapy, during dose adjustment, and periodically during therapy. Monitor ECG periodically during prolonged therapy. Monitor I&Os and daily weight. Assess for signs of CHF (peripheral edema, rales/crackles, dyspnea, weight gain, and jugular vein distention). Assess location, duration, intensity, and precipitating factors of pt's angina pain.	Headache, dizziness, fatigue, peripheral edema, angina, bradycardia, hypotension, palpitations, gingival hyperplasia, nausea, flushing
Novolog  Sliding scale  SQ qid 6 am, 11 am, 4 pm, 8 pm	Therapeutic: antidiabetics, hormones  Pharmacologic: pancreatics  Control of hyperglycemia in diabetic patients.	Hx of type 2 diabetes	Assess patient periodically for symptoms of hypoglycemia and hyperglycemia during therapy. Monitor body weight periodically. Changes in weight may necessitate changes in insulin dose.	hypoglycemia, lipodystrophy, pruritus, erythema, swelling, allergic reactions including anaphylaxis
Tylenol  650 mg PO PRN	Therapeutic: Antipyretics, nonopioid analgesics  Analgesia  Antipyresis	Pain r/t femur fx	Assess overall health status and alcohol usage before administering acetaminophen. Patients who are malnourished or chronically abuse alcohol are at higher risk of developing hepatotoxicity with chronic use of usual doses of this drug.  Pain: assess type, location, and intensity prior to and 30-60 min following administration.  Fever: assess fever; note	hepatic failure, hepatotoxicity (overdose), renal failure (high doses/ chronic use), neutropenia, pancytopenia, leucopenia, rash, urticaria

			presence of associated signs (diaphoresis, tachycardia, and malaise)	
<p>Coumadin</p> <p>1 mg PO BID 8 am &amp; 4 pm</p>	<p>Anticoagulants</p> <p>Coumarins</p> <p>Prevention of thromboembolic events.</p>	<p>Dx of femur fracture</p>	<p>Assess patients for signs of bleeding and hemorrhage (bleeding gums, nosebleed, unusual bleeding, tarry black stools, hematuria, fall in hematocrit/BP, guaiac positive stools, urine, or nasogastric aspirate. Assess patient for evidence of additional or increased thrombosis. Before administering, evaluate recent INR or PT results and have second nurse independently check order and dosage calculations. Carefully monitor when new agents are started or other agents are discontinued. Administer medications at same time each day. Medication requires 3 to 5 days to reach effective levels, usually it is begun while patient is still on heparin</p>	<p>Cramps, nausea, dermal necrosis, bleeding, fever</p>
<p>Vicodin</p> <p>5-500 mg PO PRN</p>	<p>Therapeutic: allergy, cold, and cough remedies, opioid analgesics</p> <p>Pharmacologic: opioid agonists/nonopioid analgesics combinations</p>	<p>Pain r/t femur fracture</p>	<p>Assess BP, pulse, and respirations before and periodically during administration. If respirations are &lt;10/min, assess level of sedation. Assess bowel function routinely. Assess type, location, and intensity to pain prior to and 1 hour following administration. Assess cough and lung sounds during antitussive use.</p>	<p>Confusion, dizziness, sedation, euphoria, hallucinations, headache, unusual dreams, blurred vision, diplopia, misos, respiratory depression, hypotension, bradycardia, constipation, dyspepsia, nausea, vomiting, urinary retention, sweating, physical dependence, psychological dependence, tolerance</p>

**Laboratory Analysis**

<b>Test Date</b>	<b>Test Name</b>	<b>Normal Range</b>	<b>Client Results</b>	<b>Interpretation of Abnormal Results For Your Client</b>
9-16-2010	PT	9.5-11.3 sec	11.4 ↑	Pt is taking coumadin/lovenox
9-16-2010	INR	2.0-3.0 sec	1.1 ↓	Pt is taking coumadin/lovenox

\* Normal range values and interpretation obtained from Nurse's Manual of Laboratory and Diagnostic Tests 4<sup>th</sup>

**Braden Risk Assessment Scale**

<b>Sensory Perception</b>	<b>1 - Completely Limited</b>	<b>2 – Very Limited</b>	<b>3 – Slightly Limited</b>	<b>4 – No Impairment</b>	<b>Score</b>
Ability to respond meaningfully to pressure-related discomfort	Unresponsive (does not moan, flinch or grasp) to painful stimuli, due to diminished level of consciousness or sedation OR limited ability to feel pain over most of the body surface.	Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness. OR has a sensory impairment which limits the ability to feel pain or discomfort over half of body.	Responds to verbal commands, but cannot always communicate discomfort or need to be turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.	<b>4</b>
<b>Moisture</b>	<b>1 – Constantly Moist</b>	<b>2 – Very Moist</b>	<b>3 – Occasionally Moist</b>	<b>4 – Rarely Moist</b>	
Degree to which skin is exposed to moisture	Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	Skin is often, but not always, moist. Linens must be changed at least once a shift.	Skin is occasionally moist, requiring an extra linen change approximately once a day.	Skin is usually dry. Linen only requires changing at routine intervals.	<b>4</b>
<b>Activity</b>	<b>1 – Bedfast</b>	<b>2 – Chairfast</b>	<b>3 – Walks Occasionally</b>	<b>4 – Walks Frequently</b>	
Degree of physical activity	Confined to bed.	Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.	<b>4</b>

<b>Mobility</b>	<b>1 – Completely Immobile</b>	<b>2 – Very Limited</b>	<b>3 – Slightly Limited</b>	<b>4 – No Limitations</b>	
Ability to change and control body position	Does not make even slight changes in body or extremity position without assistance.	Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	Makes frequently though slight changes in body or extremity position independently.	Makes major and frequent changes in position without assistance.	<b>3</b>
<b>Nutrition</b>	<b>1 – Very Poor</b>	<b>2 – Probably Inadequate</b>	<b>3 – Adequate</b>	<b>4 - Excellent</b>	
Usual food intake pattern	Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 services or less of protein per day. Takes fluids poorly. Does not take a liquid dietary supplement OR is NPO and/or maintained on clear liquids or IVs for more than 5 days.	Rarely eats a complete meal and generally eats only about half of any food offered. Protein intake includes only 3 services of meat or dairy products per day. Occasionally will take a dietary supplement OR receives less than optimum amount of liquid diet or tube feeding	Eats over half of most meals. Eats a total of 4 services of protein each day. Occasionally will refuse a meal, but will usually take a supplement if offered. OR is on a tube feeding or TPN regimen which probably meets most of nutritional needs.	Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	<b>4</b>
<b>Friction and Shear</b>	<b>1 – Problem</b>	<b>2 – Potential Problem</b>	<b>3 – No Apparent Problem</b>		

	<p>Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction</p>	<p>Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair restraints, or other devices. Maintains relatively good position in chair or bed most of the time, but occasionally slides down.</p>	<p>Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair at all times.</p>		<h1>2</h1>
<h1>Total Score</h1>					<h1>21</h1>

Patients with a total score of 16 or less are considered to be at risk of developing pressure ulcers. (15 or 16=low risk; 13 or 14-moderate risk; 12 or less=high risk)

Retrieved from [www.stjohnhealthsystem.com/upload/file/Hospice/Braden%20Risk%20Assessment%20Scale.doc](http://www.stjohnhealthsystem.com/upload/file/Hospice/Braden%20Risk%20Assessment%20Scale.doc)

[20Scale.doc](#)

### GERIATRIC DEPRESSION SCALE (GDS, SHORT FORM)

Choose the best answer for how you felt over the past week.

1. Are you basically satisfied with your life?

**Yes/No**

2. Have you dropped many of your activities and interests?

**Yes/No**

3. Do you feel that your life is empty?

**Yes/No**

4. Do you often get bored?

**Yes/No**

5. Are you in good spirits most of the time?

**Yes/No**

6. Are you afraid that something bad is going to happen to you?

**Yes/No**

7. Do you feel happy most of the time?

**Yes/No**

8. Do you often feel helpless?

**Yes/No**

9. Do you prefer to stay at home, rather than going out and doing new things?

**Yes/No**

10. Do you feel you have more problems with memory than most?

**Yes/No**

11. Do you think it is wonderful to be alive now?

**Yes/No**

12. Do you feel pretty worthless the way you are now?

**Yes/No**

13. Do you feel full of energy?

**Yes/No**

14. Do you feel that your situation is hopeless?

**Yes/No**

15. Do you think that most people are better off than you are?

**Yes/No**

Score 1 point for each bolded answer. A score above 5 suggests depression. A score greater than 10 almost always indicates depression

**Score= 1**

### Katz Index of Independence in Activities of Daily Living

<b>Activities</b>  Points (1 or 0)	<b>Independence</b>  (1 Point)  NO supervision, direction or personal assistance	<b>Dependence</b>  (0 Points)  WITH supervision, direction, personal assistance or total care
BATHING  Points: <u>  1  </u> <u>      </u>	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity	(0 POINTS) Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing
DRESSING  Points: <u>      1      </u>	(1 POINT) Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING  Points: <u>      1      </u>	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TRANSFERRING  Points:	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.

<u>1</u> <b>CONTINENCE</b>  Points: <u>1</u>	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder
<b>FEEDING</b>  Points: <u>1</u>	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.

Total Points: 6

Score of 6 = High, Patient is independent.

Score of 0 = Low, patient is very dependent.

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[www.cvtc.edu/MSDocs/AcademicProgramPage/Nursing/Katz\\_Index\\_of\\_Independence](http://www.cvtc.edu/MSDocs/AcademicProgramPage/Nursing/Katz_Index_of_Independence)

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