

Nursing Process for the Adult Patient

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By

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Client Profile

S.S is a 47 year old male, who was admitted to the facility on 9/23/10 for a left foot infection. Prior to his admission into the hospital he lived with his wife. S.S. came back to the hospital after being admitted for a left ankle Charcot Reconstructial in his left pedal extremity on 3/08/10. Patient stated that, "My ankle problem just won't go away and I'm tired of coming in and out of the hospital." Patient S.S. has no known drug allergies and also does not smoke, drink or do recreational drugs. S.S. is on a full code status and also on a diet of 2000ADA fluid restrictions. S.S complained of a fever 4 days ago and an increase in pain and increased drainage over his left ankle chronic wound. Patient was contemplating surgery to amputate the foot because he stated, "he was tired of the pain and problems." S.S. is on 2 L of oxygen via nasal cannula. And his activity is up as tolerated. Patient has an IV #20 in the right antecubical and it's a hep lock. His blood sugar was checked at 0700 and it was 265. Patient is also on fall risk precautions.

The patient's family history includes the following: Diabetes, Heart Disease, Hypertension and Hypercholesterolemia. The patient's own history includes the following: End-stage renal disease (on hemodialysis), Left Ankle Osteomyelitis, Diabetes Type II (insulin dependent), Hypertension, Hypercholesterolemia, and Congestive Heart Failure. The patient's surgical history is as follows: Right Knee Replacement (after growth plate arrest as a teenager), amputation (below the knee) and Left AV Shunt (for hemodialysis).

Admitting Diagnoses and Chief Complaint: Left Foot Infection (Osteomyelitis) and Chief Complaint is Pain.

Left Foot Infection (Osteomyelitis)

Osteomyelitis is a severe pyogenic infection of bone and surrounding tissues.

Osteomyelitis can either be caused by a virus or a fungus with *Staphylococcus aureus* is the most common infecting organism but *Escherichia coli*, *Pseudomonas*, *Klebsiella*, *Salmonella*, and *Proteus* organisms may also be found (Black & Hawk, 499). If Osteomyelitis is left untreated or undiagnosed severe complications can result such as chronic infection accompanied by continuing pain, chronically draining sinuses, loss of function, amputation, or death. People who have diabetes may develop Osteomyelitis in their feet if they have foot ulcers. Most people require surgery to remove parts of the bone that have died — followed by strong antibiotics, often delivered intravenously, typically for at least six weeks. (Mayo Clinic).

Osteomyelitis the patient would exhibit fever or chills, malaise, pain in the area of infection, and/or swelling, warmth, and redness over the area of the infection. There are also different causes as to how a germ to enter a bone in a variety of ways. One way being through the bloodstream, other infections elsewhere in the body can make their way into soft spots into the bones. Another is by a nearby infection, with severe puncture wounds germs can be carried deep within the body and can spread to the nearby bone. Another is through direct contamination, with a compound fracture the bone which is usually in a sterile environment, comes through the skin and is exposed to the outside world and all the germs in it. This can

also happen during surgeries such as knee/hip replacements, or when fractures are repaired. Complications of Osteomyelitis are bone death due to blood circulation being impeded within the bone. Septic arthritis which is when the infection spreads to nearby joints in the body. Impaired growth in children at the growth plates which would interrupt normal growth. And Skin cancer, which results after an open sore that is draining pus which leads the surrounding skin to be at a higher risk for developing squamous cell cancer

Osteomyelitis is again managed with long course antibiotics. Antibiotic spacers would be placed where the infection is and they would be left in there for up to 1 to 2 years depending on the severity of the infection. If the antibiotics do not clear the infection surgery is scheduled to go in and remove the infected bone to try and control the spread of the infection. And if the infection continues to spread then amputation would be the final option. As with any disease there are certain risks that make a person more susceptible to getting a disease. With Osteomyelitis, a patient is at risk for getting Osteomyelitis if they have had any recent injury or orthopedic surgery. Circulation problems such as Diabetes, Peripheral Arterial Disease and Sickle Cell Disease can lead to Osteomyelitis:

“When blood vessels are damaged or blocked, the body has trouble distributing the infection-fighting cells needed to keep a small infection from growing larger. What begins as a small cut can progress to a deep ulcer that may expose deep tissue and bone to infection.” (Mayo Clinic)

When it comes to invasive medical tubing such as dialysis machines, urinary catheters, and long-term intravenous tubing (central lines) which can remain implanted in the body for months or years, the medical tubing connects the outside world with the internal organs which

serve as an expressway for germs. Another risk is intravenous street drugs due to the fact that people usually use non-sterile needles and don't sterilize the skin before the injections.

Other Diagnosis: Diabetes Type II

Type 2 diabetes is both a disease of genetics and environment. Type II Diabetes Mellitus differs significantly from Type I. With type II the body is resistant to the effects of insulin — a hormone that regulates the movement of sugar into your cells — or your body doesn't produce enough insulin to maintain a normal glucose level. Untreated, the consequences of type 2 diabetes can be life-threatening (Mayo Clinic). A limited beta-cell response to hyperglycemia appears to be a major factor in its development. Beta cells chronically exposed to high blood levels of glucose become progressively less efficient when responding to further glucose elevations. A second pathophysiologic process in type 2 diabetes mellitus is resistance to the biologic activity of insulin in both the liver and peripheral tissues. Symptoms of diabetes are increased thirst and frequent urination, increased hunger, weight loss, fatigue, blurred vision, slow-healing sores or frequent infections. Foot infections are one of the most frequent and severe complications of diabetes. Diabetic patients with foot infections may develop osteomyelitis and progress to amputation (Ertugrul,2006).

Risk factors for Diabetes are: weight, inactivity, family history, race, age, prediabetes, and gestational diabetes. Diabetes affects many major organs, including your heart, blood vessels, nerves, eyes and kidneys. Complications from diabetes can be heart and blood vessel disease, will dramatically increase the risk of various cardiovascular problems, including coronary artery disease with chest pain, heart attack, stroke, narrowing of the arteries and high blood pressure. Also nerve damage may be a complication due to excess sugar that can injure

the walls of the tiny blood vessels that nourish the nerves, especially in the legs. It causes tingling, numbness, burning or pain that usually begins at the tips of the toes or fingers and gradually spreads upwards. Eventually complete loss of sensation and feeling can occur if blood sugar levels are poorly controlled.

Other Diagnosis: Congestive Heart Failure

“Heart Failure is a physiologic state in which the heart cannot pump enough blood to meet the metabolic needs of the body (determined as oxygen consumption)” (Black & Hawk, 1430). When it comes to heart failure it results from changes in systolic and diastolic function of the left ventricle. Heart failure is basically the heart not being able to handle a normal blood volume or cannot tolerate a sudden expansion in blood volume. Heart disease is not a disease itself; instead, the term refers to a clinical syndrome characterized by manifestations of volume overload, inadequate tissue perfusions, and poor exercise tolerance (Black & Hawk, 1430). The term Congestive Heart Failure is no longer used by cardiac specialists, they however use the terms such as, chronic heart failure, cardiac decompensation, cardiac insufficiency, and ventricular failure. Most common cause of heart failure is coronary artery disease. This reduces flow through the coronary arteries. Another cause is myocardial infarction, during this myocardium is starved of blood and the tissue dies.

Other Diagnosis: Hypertension

Hypertension is high blood pressure. It is defined as, “a persistent elevation of the systolic blood pressure (SBP) at a level of 140mm Hg or higher and diastolic blood pressure (DBP) at a level of 90 mm Hg or higher” (Black & Hawk, 1290). The cause of Primary Hypertension remains to be established, but any factor that produces a change in peripheral

vascular resistance, heart rate, or stroke volume affects systemic arterial blood pressure (Black and Hawk, 1292). Primary hypertension most likely results from a defect or malfunction in some or all of the systems in the body. Secondary hypertension results from chronic glomerulonephritis and renal artery stenosis. It has been clearly demonstrated that left ventricular (LV) hypertrophy is a strong blood pressure independent risk factor for cardiovascular morbidity and mortality in the general population, in primary and secondary hypertension and in cardiac patients (Schmieder & Messerli, 2000).

Other Diagnosis: Hypercholesterolemia

Cholesterol is carried through the blood, attached to proteins. This combination of proteins and cholesterol is called a lipoprotein. Cholesterol is a waxy substance that's found in the fats (lipids) in the blood. While the body needs cholesterol to continue building healthy cells, having high cholesterol can increase the risk of heart disease. When a person has high cholesterol, they may develop fatty deposits in their blood vessels. Eventually, these deposits make it difficult for enough blood to flow through the arteries. The heart may not get as much oxygen-rich blood as it needs, which increases the risk of a heart attack. Decreased blood flow to the brain can cause a stroke. High cholesterol (hypercholesterolemia) can be inherited, but is often preventable and treatable. A healthy diet, regular exercise and sometimes medication can go a long way toward reducing high cholesterol. The levels of cholesterol are: total cholesterol is: below 200 mg/dl is best, 200-239 mg/dl is borderline high, and 240 mg/dl and above is high. Broken down into LDL, HDL and Triglycerides, LDL is: below 70 mg/dl is best for people at high risk of heart disease, below 100 mg/dl is best for people at risk for heart disease, 100-129 mg/dl is near ideal, 130-159 mg/dl is borderline high, 160-189 mg/dl is high and 190

mg/dl and above is very high. The HDL levels are: below 40 mg/dl (men) and below 50 mg/dl (women) is poor, 50-59 mg/dl is better and 60 mg/dl and above is best. And the Triglyceride levels are: below 150 mg/dl is best, 150-199 mg/dl is borderline high, 200-499 mg/dl is high and 500 mg/dl and above is very high. (Mayo Clinic, 2010)

Other Diagnosis: End-Stage Renal Disease

End-Stage Renal Disease (ESRD) is also called Chronic Kidney Disease (CKD). Chronic Kidney Disease is irreversible and progressive reduction of functioning renal tissue. The pathophysiologic of ESRD involves the deterioration and destruction of nephrons with progressive loss of renal function.

“Various injuries and disease processes that may result in kidney failure are, chronic glomerulonephritis, ARF (Acute Renal Failure), polycystic kidney disease, obstruction, repeated episodes of pyelonephritis, and nephrotoxins are examples of causes. Systemic diseases, such as diabetes mellitus, hypertension, lupus erthematosus, polyarteritis, sickle cell disease, and amyloidosis, may cause CKD (Black & Hawk, 816).

As the total GFR decreases and clearance is reduced, serum urea nitrogen and creatinine levels increase. Remaining functioning nephrons hypertrophy as they filter a larger load of solutes. The consequence is that the nephron loses the ability to concentrate urine adequately (Black & Hawk, 816). If this disease isn't treated by dialysis or transplantation, the outcome of ESRD is uremia and death.

Surgeries: Right Knee Replacement (after growth plate arrest as a teenager)

A total knee arthroplasty (TKA), or replacement, allows resurfacing of the arthritic joint with the use of metal and polyethylene prosthetic components. The surgeon attempts to

recreate the motions of flexion, extension, rotation, abduction, and adduction that may have been lost with progressive arthritis. Total knee replacement is the relining of the joint with artificial parts called prostheses. There are three components used in the artificial knee. The femoral component is made of metal and covers the end of the thigh bone. The tibial component, made of metal and polyethylene, covers the top end of the tibia. The metal forms the base of this component, while the polyethylene is attached to the top of the metal to serve as a cushion and smooth gliding surface. The third component, the patella may be polyethylene or a combination of metal and polyethylene. During the procedure, the knee is flexed about 90 degrees and the lower portion of the leg, including the foot, is placed in a special device to securely hold it in place during the surgery. Usually a tourniquet is then applied to the upper portion of the leg to help slow the flow of blood during the surgery. The damaged bone surfaces and cartilage are then removed by the surgeon.

Surgeries: Amputation (below the knee)

Amputation is the oldest operation known to man. Today's amputations are used to treat injuries, cancers, overwhelming limb gangrene, and limb-threatening arterial disease or rest pain (Black & Hawk, 1317). The way the level of amputation is decided is a test called transcutaneous oxygen tension (tcpO₂). This test measures how much oxygen is actually being diffused to certain areas of the body. Electrodes are placed on the patient's skin that measures the oxygen levels in the top layer of skin. Levels for healing have two different categories, one has levels of oxygen on room air, the other has levels of oxygen on a non-rebreather mask. The levels on room air consist of: > or equal to 50 is normal, > or equal to 40 is capable of healing, < or equal to 40 is diabetic hypoxia, < or equal to 30 is non-diabetic hypoxia, and < or equal to 20

is severe hypoxia. The patient goes for 20 minutes to get a baseline of measurements. My patient's baseline measurements were 1) 32, 2) 28, 3) 3, 4) 2 and 5) 27. Then the patient is put on a non-rebreather mask for 10 minutes. The levels of oxygen for this time is 0-50 Severe Ischemia, 51-100 Limb-Threatening Ischemia, 101-200 Adequate Response, >300 Excellent. My patient's second measurements were 1) 245, 2) 320, 3) 215, 4) 194 and 5) 203. So my patient over all had adequate response with hyperbaric treatment but without the hyperbaric treatment the patient's lower limb was severely hypoxic in electrodes 3 and 4, and diabetic hypoxic in others.

Surgeries: Left AV Shunt (for Hemodialysis)

Hemodialysis is used for clients with acute or irreversible renal failure and fluid and electrolyte imbalances. The internal arteriovenous fistula (AVF) is the access of choice for clients receiving chronic dialysis. The AVF is created through a surgical procedure in which an artery in the arm is anastomosed to a vein in an end-to-side, side-to-side, side-to-end, or end-to-end fashion. The result is an opening or fistula between a large artery and a large vein. These are then used during hemodialysis, the client's toxin-laden blood is diverted into a dialyzer, cleaned, and then returned to the client. (Black & Hawk, 825)

Medications for My Patient

Medication (Generic /or Trade)	Classification & Action	Why is your patient taking this drug?	Nursing Implications	Side Effects
Loratadine	<ul style="list-style-type: none"> • Antihistamin- es - Blocks peripheral effects of histamine released during allergic reactions - decreased symptoms of allergic reactions 	For Allergies (hay fever)	-assess allergy symptoms before and periodically through therapy - assess lung sounds and character of bronchial secretions. Maintain fluid intake of 1500-2000 ml/day -may cause false negative result on allergy skin testing	CNS: confusion, drowsiness, paradoxical excitation EENT: blurred vision GI: dry mouth, GI upset DERM: photosensitivity, rash METAB: weight gain
Lanthanum Carbonate (Fosrenol)	<ul style="list-style-type: none"> • Hypophosphat emics -reduction of serum phosphate levels associated with end-stage renal disease 	End- stage renal disease	-Assess patient for nausea and vomiting during therapy -LAB TESTS: monitor serum phosphate levels prior to and periodically during therapy	GI: nausea, vomiting, diarrhea
Ascorbic Acid	<ul style="list-style-type: none"> • Vitamins -treatment and prevention of vitamin C deficiency • Water soluble vitamins 	Vitamin C replacement & Wound Healing	-	CNS: drowsiness, fatigue, headache, insomnia GI: cramps, diarrhea, heartburn, nausea, vomiting GU: kidney stones

				<p>DERM: flushing</p> <p>HEMAT: deep vein thrombosis, hemolysis, sickle cell crisis</p> <p>LOCAL: pain at subcut or IM sites</p>
<p>Docusate Sodium (Colace)</p>	<ul style="list-style-type: none"> • Laxatives • Stool Softeners <p>-Promotes incorporation of water into stool, resulting in softer fecal mass.</p> <p>-May also promote electrolyte and water secretion into the colon</p> <p>-Softening and passage of stool</p>	<p>Relieve Constipation</p>	<p>This medication does not stimulate intestinal peristalsis</p> <p>PO administer with a full glass of water or juice. May be administered on an empty stomach for more rapid results</p> <p>-DO NOT administer within 2 hr of other laxatives, especially mineral oil. May cause increased absorption</p>	<p>EENT: throat irritation</p> <p>GI: mild cramps</p> <p>DERM: rashes</p>
<p>Neurontin (Gabapentin)</p>	<ul style="list-style-type: none"> • Analgesic adjuncts, anticonvulsant, mood stabilizers 	<p>Used for Chronic Pain</p>	<p>-seizures: assess location, duration, and characteristics of seizure activity</p> <p>Chronic pain: assess location characteristics</p>	<p>CNS: confusion, depression, drowsiness, sedation, anxiety,</p>

	<p>-decreased incidents of seizures</p> <p>-chronic pain, prevention of migraine headache, bipolar disorder, anxiety</p>		<p>and intensity during therapy</p> <p>-migraine: monitor frequency and intensity of pain on scale</p> <p>-lab tests: may cause false positive readings when testing for urinary protein</p> <p>-may cause leukopenia</p>	<p>concentration difficulties, dizziness, emotional lability, hostility, hyperkinesias, malaise, vertigo, weakness</p> <p>EENT: abnormal vision, nystagmus</p> <p>CV: hypertension</p> <p>GI: weight gain, anorexia, flatulence, gingivitis</p> <p>MS: arthralgia</p> <p>NEURO: ataxia, altered reflexes, hyperkinesias, paresthesia</p> <p>MISC: facial edema</p>
Zinc Sulfate	<ul style="list-style-type: none"> Mineral and electrolyte replacements/ supplements <p>- replacement therapy for patients at risk for zinc deficiency</p> <ul style="list-style-type: none"> Trace metals <p>- serves as a cofactor for many enzymatic reactions</p> <p>- required for normal growth and tissue repair, wound healing, and senses of taste and smell</p>	Mineral Deficiency	<p>- monitor progression of zinc deficiency symptoms</p> <p>- lab tests: serum zinc levels may not accurately reflect zinc deficiency</p> <p>- long-term high-dose therapy may cause decrease in serum copper concentrations</p> <p>-monitor serum alkaline phosphatase concentrations monthly, may increase with zinc therapy</p> <p>-monitor HDL concentrations monthly in patients on long-term high-dose therapy, serum concentrations may be decreased</p>	GI: gastric irritation, nausea, vomiting
Aspirin (Acetylsalicylic Acid, ASA, Bayer Aspirin, Aspirin)	<ul style="list-style-type: none"> Antipyretics <p>-Decreases platelet aggregation</p> <p>-Reduction of fever</p> <p>-Reduction of</p>	Pain Management	<p>Use lowest effective dose for shortest period of time</p> <p>PO administer after meals or with food or an antacid to minimize gastric irritation. Food slows but does not alter the total amount</p>	<p>EENT: tinnitus</p> <p>GI: GI bleeding, dyspepsia, epigastric distress, nausea, abdominal pain,</p>

	<p>inflammation</p> <p>-Analgesia</p> <ul style="list-style-type: none"> • Nonopioid analgesics • Salicylates <p>-Produce analgesia and reduce inflammation and fever by inhibiting the production of prostaglandins</p>		<p>absorbed</p> <p>-DO NOT CRUSH OR CHEW ENTERIC-COATED TABLETS</p> <p>Do not take antacids within 1-2 hrs of enteric-coated tablets</p>	<p>anorexia, hepatotoxicity, vomiting</p> <p>HEMAT: Anemia, hemolysis</p> <p>DERM: rash, urticaria</p> <p>MISC: allergic reactions including anaphylaxis and larynxgeal edema</p>
<p>Levothyoxine (Levothroid)</p>	<ul style="list-style-type: none"> • Hormones <p>- replacement in hypothyroidism to restore normal hormonal balance</p> <p>-suppression of thyroid cancers</p> <ul style="list-style-type: none"> • Thyroid preparations <p>-replacement of supplementation to endogenous thyroid hormones</p>	<p>Hormone replacement</p>	<p>- assess apical pulse and blood pressure prior to and during therapy assess for tachyarrhythmias and chest pain</p> <p>- lab tests: monitor thyroid function studies prior to and during therapy</p> <p>- monitor TSH concentrations in adults 8-12 wk after changing from one brand to the other</p> <p>-monitor blood and urine glucose in diabetic patients</p> <p>-OVERDOSE: is manifested as hyperthyroidism. Normal treatment is to withhold dose for 2-6 days</p>	<p>CNS: nervousness, headache, insomnia, irritability</p> <p>CV: arrhythmias, angina pectoris, hypotension, tachycardia</p> <p>GI: cramps, diarrhea, vomiting, TABLETS—choking, gagging, dysphagia</p> <p>DERM:hair loss, increased sweating</p> <p>ENDO: hyperthyroidism, menstrual irregularities</p> <p>METAB: heat intolerance, weight loss</p>

				MS: accelerated bone maturation in children
Metolazone (zaroxolyn)	<ul style="list-style-type: none"> • Antihypertensive • Diuretic <p>-lowers blood pressure</p> <p>-decreases edema associated with CHF</p> <p>-Effect may continue in renal impairment</p>	Hypertension	<p>-Monitor blood pressure, intake and output, and daily weight, and assess feet, legs, and sacral area for edema daily</p> <p>-assess patient , especially if taking digoxin, for anorexia, nausea, vomiting, muscle cramps, paresthesia, and confusion. Notify physician or other health care professionals if these signs of electrolyte imbalance occur. Patients taking digoxin are at risk of digoxin toxicity because of the potassium-depleting effect of the diuretic.</p> <p>-assess patient for allergy to sulfonamides</p> <p>-HYPERTENSION: monitor blood pressure before and periodically during therapy</p> <p>-monitor frequency of prescription refills to determine compliance</p> <p>-LAB TEST: monitor electrolytes (especially potassium), blood glucose, BUN, serum creatinine, and uric acid levels before and during therapy</p> <p>-may cause increase in serum and urine glucose in diabetic patients</p> <p>-may cause an increase in serum bilirubin, calcium, creatinine, and uric acid, and a decrease in serum magnesium, potassium, and sodium and urinary calcium concentrations</p> <p>-may cause decrease serum protein-bound iodine PBI concentrations</p> <p>-may cause increase serum cholesterol, low density lipoprotein, and triglyceride concentrations</p>	<p>CNS: drowsiness, lethargy</p> <p>CV: chest pain, hypotension, palpitations</p> <p>GI: anorexia, bloating, cramping, drug-induced hepatitis, nausea, vomiting</p> <p>DERM: photosensitivity, rashes</p> <p>ENDO: hyperglycemia, hypercalcemia, hypochloremic alkalosis, hypomagnesemia , hyponatremia,, hypophosphatemia , hypovolemia</p> <p>HEMAT: blood dyscrasias</p> <p>METAB: hyperuricemia</p> <p>MS: muscle cramps</p> <p>MISC: chills, pancreatitis</p>
Vitamin B complex (folic Acid)	<ul style="list-style-type: none"> • Antianemics • Vitamins <p>- restoration and maintenance of normal hematopoiesis</p>	Vitamin replacement	<p>-assess patient for signs of megaloblastic anemia (fatigue, weakness, dyspnea) before and periodically during therapy</p> <p>-LAB TEST: monitor plasma folic acid levels, hemoglobin, hematocrit, and reticulocyte</p>	<p>DERM: rashes</p> <p>CNS: irritability, difficulty sleeping, malaise, confusion</p>

			<p>count before and during therapy</p> <p>-may cause decrease in serum concentrations of other B complex vitamins when given in high continuous doses</p>	MISC: fever
<p>Norvasc (Amlodipine)</p>	<ul style="list-style-type: none"> • Antihypertensives <p>- systemic vasodilation resulting in decreased blood pressure</p> <ul style="list-style-type: none"> • Calcium Channel blockers <p>- inhibits the transport of calcium into myocardial and vascular smooth muscle cells</p> <p>-inhibition of excitation-contraction coupling and subsequent contraction</p>	Hypertension	<p>-Monitor blood pressure and pulse before therapy and during therapy. Monitor ECG periodically</p> <p>-monitor intake and output ratios and daily weights assess for signs of CHF</p> <p>-Angina: assess location duration intensity and precipitating factors of pain</p> <p>-Lab tests: total serum calcium concentrations are not affected by calcium channel blockers</p>	<p>CNS: headache, dizziness, fatigue</p> <p>CV: peripheral edema, angina, bradycardia, hypotension, palpitations</p> <p>GI: gingival hyperplasia, nausea</p> <p>DERM: flushing</p>
<p>Oxycodone/ Acetaminophen</p>	<ul style="list-style-type: none"> • Opioid analgesics <p>-Moderate to severe pain</p>	Pain reliever	<p>-assess type, location, and intensity of pain prior to and 1 hour after administration. When titrating opioid doses, increases of 25-50% should be administered until there is either a 50% reduction in the patient's pain rating on a numerical or visual analogue scale or the patient reports satisfactory pain relief. A repeat dose can be safely administered at the time of the peak if previous dose is ineffective and side effects are minimal</p> <p>-patients taking controlled-release tablets may require additional short-acting opioid doses for breakthrough pain. Doses should be equivalent to 10-20% of 24 hr total and given every 2 hr as needed.</p> <p>-an equianalgesic chart should be used when changing route or when changing from one opioid to another</p> <p>- assess blood pressure, pulse, and respirations before and periodically during administration. If respiratory rate is <10/min, assess level of sedation. Physical stimulation may be sufficient to prevent hypoventilation. Dose may need to be decreased by 25-50%. Initial drowsiness</p>	<p>CNS:confusion, sedation, dizziness, dysphoria, euphoria, floating feeling, hallucinations, headache, unusual dreams</p> <p>EENT: blurred vision, diplopia, miosis</p> <p>RESP: respiratory depression</p> <p>CV: orthostatic hypotension</p> <p>GI: constipation, dry mouth, nausea, vomiting</p> <p>GU: urinary retention</p> <p>DERM: flushing. Sweating</p>

			<p>will diminish with continued use</p> <ul style="list-style-type: none"> - prolonged use may lead to physical and psychological dependence and tolerance. This should not prevent the patient from receiving adequate analgesia. Most patients who receive oxycodone for pain do not develop psychological dependence. Progressively higher doses may be required to relieve pain with long-term therapy -assess bowel function routinely. Prevention of constipation should be instituted with increased intake of fluids and bulk, and laxatives should be administered routinely if opioid use exceeds 2-3 days, unless contraindicated -LAB TEST: may increase plasma amylase and lipase levels -TOXICITY AND OVERDOSE: if opioid antagonist is required to reverse respiratory depression or coma, Narcan is the antidote. 	<p>MISC: physical dependency, psychological dependence, tolerance</p>
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Deglin, J.H, & Vallerand, A.H. (2009). *Davis's drug guide for nurses*. Philadelphia, Pennsylvania: F. A.

Davis Company.

Adult Course

Lab Interpretation and Other Diagnostic Tests

Lab Test	Result 1	Normal Range	Interpretation
Glucose	265	70-130 ml	Increased d/t type II diabetes
BUN	44	8-20 mg/dl	Increased d/t impaired renal function and congestive heart failure
CREAT	5.8	0.6-1.2 mg/dl	Increased d/t renal failure
Na+	129	135-145 mEq/l	Decreased d/t excessive sweating and renal disease
Cl-	85	98-108 mmol/l	Decreased d/t excessive sweating
CO2	34	35-45 mm Hg	Decreased d/t kidney disease

Cavanaugh, B.M. (2003). *Nurse's manual of laboratory and diagnostic tests*. Philadelphia, Pennsylvania:

F. A. Davis Company.

BRADEN SCALE FOR PREDICTING PRESSURE ULCER RISK

<p>Sensory Perception</p> <p>Ability to respond meaningfully to pressure related discomfort</p>	<p>1. <u>Completely Limited:</u> Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation, <i>OR</i> Limited ability to feel pain over most of body surface.</p>	<p>2. <u>Very Limited:</u> Responds only to painful stimuli Cannot communicate discomfort Except by moaning or restlessness, <i>OR</i> Has a sensory impairment, which limits the ability to feel pain or discomfort over 1/2 of body.</p>	<p>3. <u>Slightly Limited:</u> Responds to verbal commands but cannot always communicate discomfort or need to be turned, <i>OR</i> Has some sensory impairment, which limits ability to feel pain or discomfort in 1 or 2 extremities.</p>	<p>4. <u>No Impairment</u> Responds to verbal command. Has no sensory deficit which would limit ability to feel or voice pain or discomfort</p>
<p>Moisture</p> <p>Degree to which skin is exposed to moisture</p>	<p>1. <u>Constantly Moist:</u> Perspiration, urine, etc keep skin moist almost constantly. Dampness is detected every time patient is moved or turned.</p>	<p>2. <u>Moist:</u> Skin is often but not always moist. Linen must be changed at least once a shift.</p>	<p>3. <u>Occasionally Moist:</u> Skin is occasionally moist, requiring an extra linen change approximately once a day.</p>	<p>4. <u>Rarely Moist:</u> Skin is usually dry; linen requires changing only at routine intervals.</p>
<p>Activity</p> <p>Degree of physical activity</p>	<p>1. <u>Bedfast</u> Confined to bed.</p>	<p>2. <u>Chairfast:</u> Ability to walk severely limited or nonexistent. Cannot bear own weight and/or must be assisted into chair or wheel chair.</p>	<p>3. <u>Walks Occasionally:</u> Walks occasionally during day but for very short distances, with or without assistance. Spends majority or each shift in bed or chair.</p>	<p>4. <u>Walks Frequently:</u> Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.</p>
<p>Mobility</p> <p>Ability to change and control body position</p>	<p>1. <u>Completely Immobile:</u> Does not make even slight changes in body or extremity position without assistance.</p>	<p>2. <u>Very Limited:</u> Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.</p>	<p>3. <u>Slightly Limited:</u> Makes frequent though slight changes in body or extremity position independently.</p>	<p>4. <u>No Limitations:</u> Makes major and frequent changes in position without assistance.</p>
<p>Nutrition</p> <p>Usual food intake pattern</p>	<p>1. <u>Very Poor:</u> Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement, <i>OR</i> Is NPO and/or maintained on clear liquids or IV for more than 5 days.</p>	<p>2. <u>Probably Inadequate:</u> Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement, <i>OR</i> Receives less than optimum amount of liquid diet or tube feeding.</p>	<p>3. <u>Adequate:</u> Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered, <i>OR</i> Is on a tube feeding or TPN regimen, which probably meets most of nutritional needs.</p>	<p>4. <u>Excellent:</u> 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.</p>
<p>Friction and Shear</p>	<p>1. <u>Problem:</u> 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>2. <u>Potential Problem:</u> 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>3. <u>No Apparent Problem:</u> 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>	<p>TOTAL:16</p>

N30030: Nursing of Adults

Nursing Care Plan

Student Name: Nicole Perretta **Age:** 47 **Diagnosis:** Left Ankle Osteomyelitis

<p align="center">Nursing Diagnosis I</p> <p>Acute Pain R/T BKA AEB.....</p>	<p align="center">Nursing Diagnosis II</p> <p>Risk for Falls R/T BKA</p>
<p align="center">Supporting Data</p> <p>-BKA -WGT: 315 -Pain level 2/10 -Oxycodone for pain relief -DOE</p>	<p align="center">Supporting Data</p> <p>-Falls Risk -BKA -Hypertension -WGT: 315 -DOE -BS: 265 fasting -Oxycodone for pain relief -Weakness of left leg</p>
<p align="center">STG & LTG</p> <p>STG: The person will experience a satisfactory relief measure as evidenced by a decrease in rating of pain by end of my morning shift</p> <p>LTG: The person will experience a satisfactory relief measure as evidenced by a decrease in rating of pain 1 month after surgery.</p>	<p align="center">STG & LTG</p> <p>STG: The client will relate controlled falls or no falls during my morning shift</p> <p>LTG: The client will relate controlled falls or no falls 6 months after BKA</p>
<p align="center">Interventions</p> <p>- Acknowledge the pain. Provide pain control. R: If acute pain is not relieved chronic pain will follow(Black & Hawk, 352) - Explain phantom limb sensation if present R: Empathetically reinforce the idea that this sensation is usual and, more importantly, subsides in time (Black & Hawk, 1322) - Effective pain reduction or relief is best achieved through combination of both pharmaceutical and nonpharmaceutical therapies R: Nonpharmacologic are useful as adjuncts to pain reduction or relief, while</p>	<p align="center">Interventions</p> <p>-Fall Risk Bracelet on wrist R: Specific programs to alert staff to high-risk clients are effective (Black & Hawk, 526) - Keep call light in reach for the patient R: This allows the patient to call for help when needed and avoid attempting to get up unassisted (Black & Hawk, 526) -Keep the bed in the lowest position, with the wheels locked R: If the patient does try to ambulate unassisted this will reduce the risk of a fall (Black & Hawk, 526) -Ensure a dry and unobstructed floor in the patient’s room R: This will keep the patient from tripping</p>

<p>the client is waiting for medications to take effect, or when side effects or client concerns make use of medications problematic(Black & Hawk, 371) -Manage breakthrough pain R: Should be treated pharmacologically and nonpharmacologically; the intensity of the pain should drive the choice of medications(Black & Hawk, 372)</p>	<p>or slipping when he does ambulate(Black & Hawk, 527)</p>
<p style="text-align: center;">EBP Citation</p> <p>Black, J.M., & Hawks, J.H. (2009). <i>Medical-surgical nursing</i>. St. Louis, Missouri: Saunders Elsevier.</p> <p>Carpenito-Moyet, L.J. (2010). <i>Nursing diagnosis: application to clinical practice</i>. United States of America: Lippincott Williams & Wilkins.</p>	<p style="text-align: center;">EBP Citation</p> <p>Black, J.M., & Hawks, J.H. (2009). <i>Medical-surgical nursing</i>. St. Louis, Missouri: Saunders Elsevier.</p> <p>Carpenito-Moyet, L.J. (2010). <i>Nursing diagnosis: application to clinical practice</i>. United States of America: Lippincott Williams & Wilkins.</p>
<p style="text-align: center;">Evaluation</p> <p>STG: Goal met. The person experienced a satisfactory relief measure as evidenced by a decrease in rating of pain by end of my morning shift</p> <p>LTG: Goal not met, continue interventions. The person will experience a satisfactory relief measure as evidenced by a decrease in rating of pain 1 month after surgery</p>	<p style="text-align: center;">Evaluation</p> <p>STG: Goal met. The client related controlled falls or no falls during my morning shift</p> <p>LTG: Goal not met, continue interventions. The client will relate controlled falls or no falls 6 months after BKA.</p>

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