

Adult/Geriatric Critical Thinking Worksheet

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Unit:

Pt. Initials:

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1. Disease Process & Brief Pathophysiology

A fracture is a break in the continuity of a bone. A fracture occurs when stress is placed on the bone that exceeds its biologic loading capacity. Most commonly the stress is the result of trauma. Pathologic fractures can occur when the bone's decreased loading capacity cannot tolerate even normal stress, as with osteoporosis. A delayed union is failure of bone fragments to unite within the expected time frame. Lack of bony union is known as nonunion which is demonstrated by nonalignment and lost function secondary to lost bony rigidity. Pseudoarthrosis is a state in which the fracture fails to heal and a false joint develops at fracture site. Avascular necrosis occurs when the fracture interrupts blood supply to a segment of bone, causing bone death. Myositis ossificans involves heterotrophic bone formation (abnormal out of the normal area).

4. Diagnostic Tests pertinent or confirming of diagnosis

Fractures are identified with standard anteroposterior (AP) and lateral radiographic examination. X-rays are used to confirm the location of the break and locate any loose bony pieces. Magnetic resonance imaging may be useful in evaluating complicated fractures, but its ability to identify different bone densities is limited. Intraarticular fractures may be diagnosed with arthroscopy. Bone scans, computed tomography

Adopted: August 2016

2. Factors for the Development of the Disease/Acute Illness

Fractures are usually associated with trauma or physical stress such as jogging, strenuous exercise, or a fall. Other risk factors include age (P), nutritional status, smoking status, alcohol use (P), type 1 or type 2 diabetes, use of non-steroidal anti-inflammatory drug within 12 months, recent motor vehicle accident, estrogen-containing hormone therapy and comorbidities.

5. Lab Values that may be affected

Health care provider may order blood test such as:
Kidney Function test (P)
Calcium levels
vitamin D levels
Blood test (P)

3. Signs and Symptoms

Fractures cause either insidious and progressive pain or sudden onset of severe pain. In the event of a pathologic fracture, the patient typically describes signs and symptoms associated with underlying pathology.

Signs and symptoms of a fracture include:

A visibly out-of-place or misshapen limb or joint
swelling, bruising, or bleeding (P)
intense pain (P)
Numbness and tingling (P)
Broken skin with bone protruding

6. Current Treatment

Treatment may include:
Splint/cast
Medication to control pain (P)
Traction
Surgery - internal fixation (P) or external fixation

(CT) scans, tomography, stereoscopic films, and arthrograms can also be used.

7. Focused Nursing Diagnosis:

Risk for acute pain and infection

8. Related to (r/t):

Related to open reduction and internal fixation surgery

9. As evidenced by (aeb):

As evidenced by presence of invasive procedure

10. Desired patient outcome:

Desired outcomes for the patient would be a decrease in the subjective preception of pain indicated by a lower pain intensity rating by Wednesday December 9, 2020. After pain management intervention and rehabilitation

11. Nursing Interventions related to the Nursing Diagnosis in #7:

1. Ensure the patient receives the prescribed treatment for pain.

Evidenced Based Practice:

Unmanaged pain can severely limit attempts to mobilize, making performance of self-care tasks difficult or impossible.

2. Teach the patient to identify possible indicators of infection including persistent redness, swelling, drainage, increasing pain, local warmth, an body temperature greater than 100.4 degress Fahrenheit. Instruct the patient to report abnormal findings immediately.

Evidenced Based Practice:

Early recognition of signs of infection and prompt reporting of possible infection leads to prompt assessment and treatment.

3. Assist the patient with coordinating the time of peak effectiveness of analgesics with periods of exercise or ambulation.

Evidenced Based Practice:

Careful timing of analgesics enables the patient to achieve optimal pain management before exercise

12. Patient Teaching:

1. Proper education on medications and supplements, including name, dosage, purpose, schedule and potential side effects. Educate patient on the importance of taking the dose of antibiotics as prescribed by health care provider, even if they are feeling better or if signs of infection subside.

2. Educate patient on how to care for the wound, noting signs of wound infection, and to follow proper weight-bearing prescription.

3. Teach the patient about the importance of proper support of the extremity. The use of pillows, slings, two hands, and other devices may be necessary to provide adequate support.

13. Discharge Planning/Community Resources:

1. Importance of follow-up care, date of next appointment, importance of attending follow-up appointment, and telephone number to call if questions arise.

2. Ensure patient can perform demonstrations and is independent with devices/aids before hospital discharge.

3. Ensure the patient has materials necessary for wound care at home, with names of agencies that can provide additional supplies. Consult case management if patient requires assistance with

therapy, the patient will demonstrate ability to perform activities of daily living with minimal complaints of discomfort.

or ambulation. Participation in the exercise regimen (physical therapy) contributes to expediency of recovery.

funding for assistive equipment or help at home. Case management may also help patient get in touch with community agencies that loan equipment or offer volunteer services.