

Disease: Open distal comminuted femoral fracture

Student Name: Mary Liesveld

Nursing diagnosis

subjective

Objective

- Acute pain related to movement of bone fragments, edema, and injury to soft tissue as evidenced by pt. reports of pain and guarding and protective behavior.
- Risk for neurovascular dysfunction related to vascular damage, tissue trauma, and excessive edema as evidenced by weak peripheral pulse, skin pallor, cyanosis, cool and clammy skin, numbness, tingling, and delayed capillary refill.
- Risk for infection related to open fracture wound as evidenced by diaphoresis, increased temperature and vital signs, and elevated WBC labs.
- Risk for thromboembolism related to inactivity and femoral vein changes as evidenced by unilateral edema, leg warmth, and positive Homan's sign.
- Risk for injury related to loss of skeletal integrity and impaired mobility as evidenced by limited range of motion, decreased muscle strength, and patient reports of pain in the injured leg.

- Upon arrival to the E.D. the pt. said his pain was 10/10 and "severe, sharp, and unrelenting." On the day of assessment, the pt. rated his pain as 5/10 and 4 hours later at 4/10. Pt. described his pain as "consistent, dull, aching, and sore". Pt. exhibited facial grimacing and guarding.
- Pt. appears to ambulate well and stated he does not need the help of a home health

- X-ray identifying open distal comminuted fracture of the right leg.
- 3 inch deep laceration and open wound with drainage, edema, bruising, and deformity of the leg
- Pt.'s vital signs BP: 120/71, 132/82, HR: 76,72, RR: 18,17, T: 99.7, SPO2:98
- Pt.'s increased WBC lab values and decreased Hgb and Hct levels.

Pt. history

Nursing Interventions

N.C. is a 60 y.o. male who presented to the E.D. on 10/04/2019. He was hit with a high-pressure spring injuring his right leg. Upon arrival to the E.D., the N.C. had a visible deformity to the right thigh. Pt. had a 3-inch laceration with muscle showing. He was not actively bleeding upon arrival to the E.D. X-ray images revealed the pt. has an open distal comminuted femur fracture of the right leg. The patient was taken to the OR and prepped for surgery, where he underwent an open reduction and internal fixation of the right femur. The pt. is awaiting discharge.

Outcomes

- Goal met: By discharge pt. will report improvement of pain, pain score of 3/10, and identify alleviating factors.
- Goal met: By discharge neurovascular assessments will show palpable peripheral pulses throughout, skin is pink, warm, and dry. Pt will report normal sensation and a capillary refill of less than 3 seconds.
- Goal met: swelling of the injured extremity will decrease with time.
- Goal met: Pt. will remain free of infection as evidenced by vital signs and WBC count.
- Goal met: Pt did not exhibit muscle rigidity, difficulty speaking, or abnormal reflexes indicative of tetanus.
- Goal met: Pt. ambulated every two hours and had a negative Homan's sign. Pt. was compliant and wore SCDs
- Goal met: pt. was compliant with plan of care by

- Assess the type, location, and characteristics of the pt.'s pain.
- Provide pain medication before activities and ambulation.
- Conduct frequent neurovascular assessments and monitor for capillary refill, skin color, temperature, and peripheral pulses.
- Assess the injured extremity for edema. Measure and compare it to the uninjured extremity.
- Assess open fracture wound site and skin noting reports of increased pain, burning sensation, presence of edema, erythema, foul odor, or excess drainage.
- Assess muscle tone rigidity, reflexes, and difficulty speaking. Development of these symptoms may indicate tetanus.
- Assess the pt. for a positive Homan's sign in both legs.
- Encourage the patient to ambulate frequently and wear SCDs at rest.
- Maintain limb rest as indicated by supporting the knee joint and areas above and below the fracture site.
- Assess the patient's perception of immobility.

