

<p><b>1. Disease Process &amp; Brief Pathophysiology-</b>          Osteomyelitis is the inflammation of the fatty tissues within the bone. It is caused by infection of the bone or joint, and can be acute or chronic. Infections are due to many types of bacteria or fungi. It can also be the result of trauma, surgery, joint insertion, fractures, any type of prosthetic material, infection that has spread into the blood stream, or lack of blood flow due to diabetes. Acute osteomyelitis is usually due to trauma or surgery, or an infection that has spread into the bone. Chronic osteomyelitis is prevalent in people who have other chronic illnesses such as diabetes or HIV. Osteomyelitis is a rare, but a very serious condition.</p>	<p><b>2. Factors for the Development of the Disease/Acute Illness-</b></p> <ul style="list-style-type: none"> <li>• diabetes</li> <li>• sickle cell disease</li> <li>• HIV or AIDS</li> <li>• rheumatoid arthritis</li> <li>• IV drug users</li> <li>• alcoholism</li> <li>• long-term use of steroids</li> <li>• hemodialysis</li> <li>• poor blood supply</li> <li>• recent injury</li> </ul>	<p><b>3. Signs and Symptoms-</b></p> <ul style="list-style-type: none"> <li>• fever</li> <li>• irritability</li> <li>• fatigue</li> <li>• nausea</li> <li>• pain at site in infection (P)</li> <li>• tenderness, redness, &amp; warmth in area of infection (P)</li> <li>• swelling around affected bone (P)</li> <li>• loss of range of motion (P)</li> <li>• purulent build up at bone</li> </ul>
<p><b>4. Diagnostic Tests pertinent or confirming of diagnosis-</b></p> <ul style="list-style-type: none"> <li>• Physical exam of site (P)</li> <li>• Blood tests (CBC &amp; Culture) (P)</li> <li>• X-ray (P)</li> <li>• MRI (P)</li> <li>• CT scan (P)</li> <li>• Bone biopsy</li> <li>• CRP</li> </ul>	<p><b>5. Lab Values that may be affected-</b>          CBC, ESR, CRP, ALP, blood cultures</p>	<p><b>6. Current Treatment-</b></p> <ul style="list-style-type: none"> <li>• drain infected area (P)</li> <li>• antibiotic therapy pending results of blood culture and bone biopsy (P)</li> <li>• restore blood flow to bone</li> <li>• debridement (remove diseased bone and tissue) surgery</li> <li>• remove any foreign objects surgically</li> <li>• amputation of infected area</li> </ul>

<p><b>7. Focused Nursing Diagnosis:</b> Patient's blood pressure kept increasing throughout the day</p>	<p><b>11. Nursing Interventions related to the Nursing Diagnosis in #7:</b></p> <p>1. I will measure the blood pressure every 2 hours to see if it decreases after administering prn HTN medication orders, if not then contact HCP. <b>Evidence Based Practice:</b> HTN can be treated/controlled by taking/giving calcium channel blockers and ACE inhibitors.</p> <p>2. Provide social support by talking to patient and calming their nerves. <b>Evidence Based Practice:</b> Universal competencies, nurses should maintain and provide both physical. Talking to patient also can act as a distraction.</p> <p>3. I will suggest ambulating to the patient. <b>Evidence Based Practice:</b> Exercising can lower blood pressure by reducing blood vessel stiffness so blood can flow more easily. This can also be a distraction for the patient.</p>	<p><b>12. Patient Teaching:</b></p> <p>1. Teach patient to rest, immobilize, and not to bear weight on effected limb.</p> <p>2. Teach patient importance of completing entire course of prescribed antibiotics.</p> <p>1. Call HCP if infected site gets worse, or post surgery site has signs of new infection.</p>
<p><b>8. Related to (r/t):</b> Awaiting for diagnosis./lab results from doctor</p>		<p><b>13. Discharge Planning/Community Resources:</b></p> <p>1. Assistive living center/rehab centers (if patient possibly has limb amputated)</p> <p>2. Case manager- for medications or home health</p> <p>3. Follow up with doctor's appointment, do not skip them.</p>
<p><b>9. As evidenced by (aeb):</b> Patient stated being "anxious and concerned" while awaiting to hear from doctor, along with blood pressure increasing.</p>		

**10. Desired patient outcome:**

Measure blood pressure to see if it has decreased and ask the patient if they are still feeling “anxious and concerned “ after they speak to their HCP by 3/03/2021 at 1500

Citations:

Osteomyelitis. (2019, August 13). Retrieved March 07, 2021, from <https://rarediseases.org/rare-diseases/osteomyelitis/>

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health*. St. Louis, MO: Elsevier.