Asuhan Keperawatan Pada Klien dengan Osteomyelitis

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Osteomyelitis

- is an infection of the bone that occurs most frequently in the lower extremities. Most commonly, it develops after severe local trauma with an associated open fracture.
- The adjacent soft tissue structures are injured together with the bone, and can form a poorly vascularized and scarred tissue bed. Simple debridement and antibiotic therapy are often unsuccessful in treating lower extremity osteomyelitis. As a result, patients frequently present after multiple failed treatments and with resistant or polymicrobial bacterial infection.
Osteomyelitis

- is an infection of bone, usually caused by pyogenic bacteria or mycobacteria. It can be usefully subclassified on the basis of the causative organism, the route, duration and anatomic location of the infection.
Etiology

- Acute osteomyelitis almost invariably occurs in children. When adults are affected it may be because of compromised host resistance due to debilitation, intravenous drug abuse, disease or drugs (e.g. immunosuppressive therapy).
Causes

- The vast predominance of hematogenously seeded osteomyelitis is caused by *Staphylococcus aureus*. *Escherichia coli*, and *streptococci* are other common pathogens. In some subpopulations, including intravenous drug users and splenectomized patients, *Gram negative* bacteria, including enteric bacilli, are significant pathogens.

- *Staphylococcus aureus* is also the most common organism seen in osteomyelitis seeded from areas of contiguous infection, but here Gram negative organisms and *anaerobes* are somewhat more common, and mixed infections may be seen.

- In osteomyelitis involving the vertebral bodies, about half the cases are due to *Staphylococcus aureus*, and the other half are due to *tuberculosis* (spread hematogenously from the *lungs*). Tubercular osteomyelitis of the spine was so common before the initiation of effective antitubercular therapy that it acquired a special name, *Pott's disease*, by which it is sometimes still known.
Successful treatment for chronic osteomyelitis in this setting requires:

- Effective debridement
- Antibiotic therapy and
- Vascularized soft tissue coverage - preferably with a muscle flap
Successful treatment for chronic osteomyelitis in this setting requires:

- Osteomyelitis often requires prolonged antibiotic therapy, lasting a matter of weeks or months, and may require surgical debridement. Severe cases may lead to the loss of a limb. Initial first line antibiotics is determined by the patient's history and regional differences of common infective organisms. For example, in a 1 year old child, it would be appropriate to start a combination of Flucloxacillin and Fusidic Acid.
a chronic osteomyelitis of 20 years duration. The patient had multiple surgical procedures and treatments with antibiotics, but continued to have a draining sinus in the lower leg. In the area adjacent to the draining sinus, soft tissue swelling and signs of chronic infection and previous surgical treatment can be seen. X-rays revealed the presence of chronic osteomyelitis in the tibia. Areas of radiolucency are present at the base of the wound that are compatible with erosion of bone due to infection. Although the bone is stable with no evidence of fracture or non-union, the extent and chronic nature of the infection may have required debridement that would weaken or destabilize the tibia.

A debridement was performed to remove the bulk of the surrounding inflammatory tissue and infected bone. This left a defect of soft tissue and a raw surface of tibia. Enough bone was still present to provide lower extremity stability. Some scarring was left behind to minimize the size of the open wound and to reduce post-operative discomfort. The bulk of the unstable and thin scar would be excised at the flap procedure.

A latissimus muscle flap was used to fill the defect in the tibia and resurface the area of scar tissue that was removed. The latissimus muscle has a long vascular leash and could reach proximal to the point where the patient's anterior tibial artery showed evidence of injury.
Asuhan keperawatan pada klien dengan osteomyelitis:

- Pengkajian:
- Riwayat jatuh?
- Riwayat fraktur?
- Riwayat infeksi?
- Riwayat penggunaan antibiotik yang lama?
Tujuan

- Infeksi dapat diatasi ditandai dengan leukosit kurang dari atau = 11.000mg/dL
- Hasil kultur menunjukkan *Staphylococcus aureus*, *Escherichia coli*, dan *streptococci* pasif
- Bone scan menunjukkan matriks tulang rapat
- X-ray menunjukkan pertumbuhan calleus
intervensi

- Nutrisi adekuat
- Pengetahuan yang signifikan
- Antibiotik continues
- Support psikososial
Terima Kasih