AMPUTATION

Definition: It is a result of congenital limb deficiencies or maybe acquired. Acquired amputations are traumatic, ischemic or surgical in cause. 1,6

Causes: The commonest reasons for amputations are: 1. vascular disease 2. Accident or trauma 3. Tumor 4. Infection 5. Thermal, chemical or electrical injury 6. Congenital anomaly. Peripheral vascular disease is the commonest cause for amputation accounting fro 75% of the cases. Almost all amputations involve the lower extremities. 1,4,6

Gas gangrene

Peripheral vascular disease

Tumor of bone

Artificial leg

Pathophysiology: Surgical amputation should be done when in the judgment of the physician and patient that the patient's welfare will be significantly improved by the removal of irreparably damaged, deformed, dangerous, painful or useless part of the body. When the blood supply of the limb is lost and cannot be restored, amputation is almost always necessary.1,7

Medications: Pain relievers such as mefenamic acid and NSAIDS are given to minimize pain after the operation. Anti-biotics are given to control actual or potential infection. Other medications are given based on each patient's medical condition.1,3

Surgery: Amputation performed through a joint is disarticulation. Amputation in which the surface of the wound is not covered is termed open amputation. This is used for control of actual or potential infection. Closed amputation is usually a fixed or definite amputation performed to create a stump that can be used with an artificial arm or leg.1,4,8

Physical Therapy: Intervention begins even before the actual operation by orienting the patient with the use of an artificial arm or leg. After the operation, emphasis is given on maintaining the range of motion of joints by Active range of motion exercises. Strengthening of the residual limb can be achieved by progressive resistive exercises (using weights and dumbbells), proprioceptive neuromuscular facilitation and other devices. If an artificial limb is prescribed, the PT then focuses on training the patient in the use of the artificial limb.1,2,4,5,7,8

References:

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