

Presenter: Dr Pramod

AMPUTATIONS

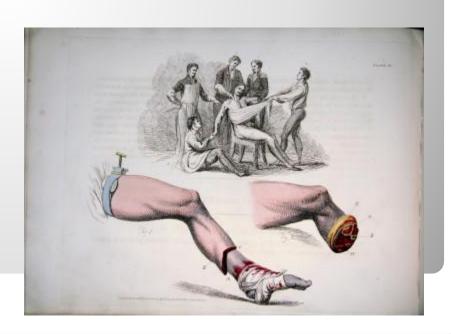
Mrs. Holland **HOC 49**

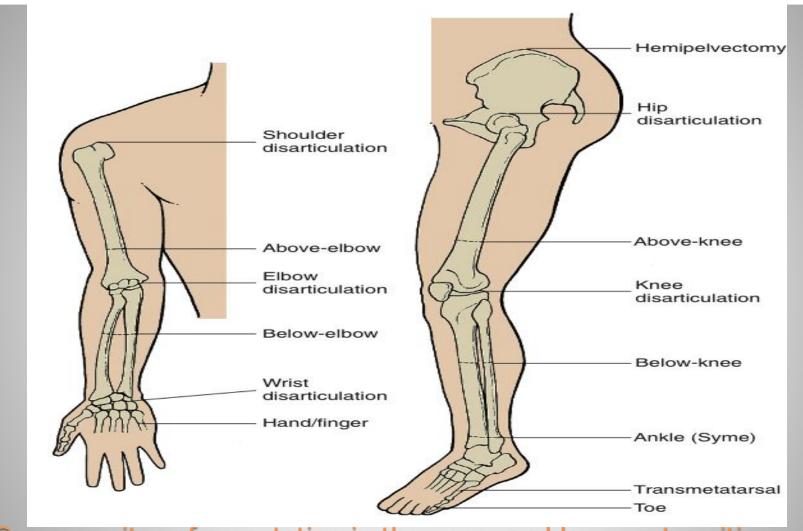
- Identify the clinical indications for amputations.
- Describe the different types of amputations.
- Discuss the medical and surgical management of the amputation patient.

Learning Objectives

- Can occur through a joint (between the bones) or through a bone itself
- Disarticulation: term used for an amputation through the joint
- The general site of the amputation is described by the joint nearest to it

Amputation





Common sites of amputation in the upper and lower extremities.

Trauma

 Common types of accidents and injuries leading to amputation include those involving motorcycles and automobiles, farm machinery, firearms and explosives, electrical equipment, power tools, and frostbite

Disease

- Peripheral vascular disease, diabetes mellitus, arteriosclerosis, and chronic osteomyelitis
- Account for majority of lower extremity amputations
- Gas gangrene- tissue death d/t inadequate circulation leads to infection

Indications and Incidence



Self Amputation of a digit

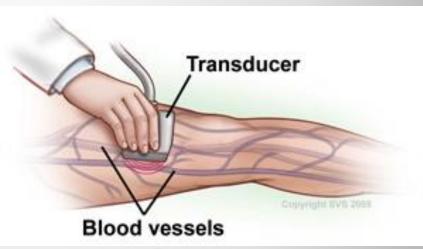
- Tumors
 - Bone tumors that are very large and invasive



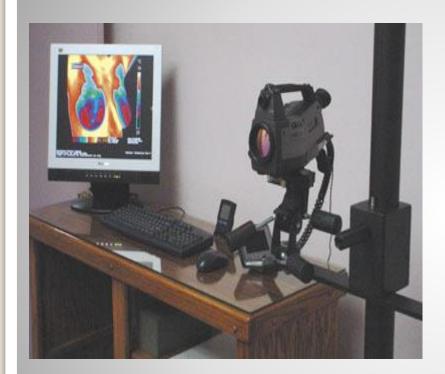


- Congenital defects
 - Congenital amputation- d/t limb (or part of) missing or deformed at birth

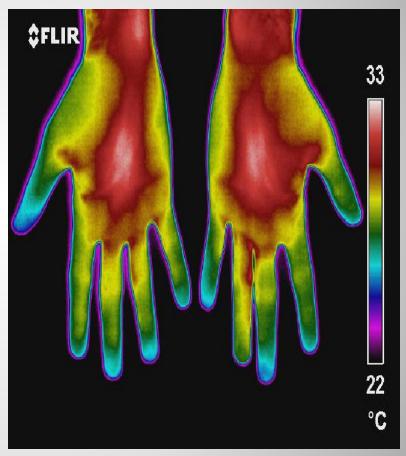
- Vascular studies, Angiography
- Thermography



Diagnostic Tests and Procedures



Thermography



- Amputation at the lowest level that will preserve healthy tissue and favor wound healing
- Surgeon chooses one of two procedures, depending on condition of the extremity and the reason for the surgery
 - Closed amputations
 - Create a weight-bearing residual limb
 - Open amputations
 - The severed bone or joint is left uncovered by a skin flap











Open

- Prosthetist creates and supervises use of prosthesis
- A limb prosthesis may be placed while the patient is still in the operating room
- With lower extremity amputations, older or debilitated patients, and infection, prosthesis fitting delayed until residual limb heals

Prostheses









- Hemorrhage and hematoma
- Necrosis
- Wound dehiscence
- Gangrene
- Edema
- Contracture
- Pain
- Infection
- Phantom limb sensation
- Phantom limb pain

Complications

 Usual occupation and responsibilities to determine how amputation will affect their lifestyle

Assessment pre-op

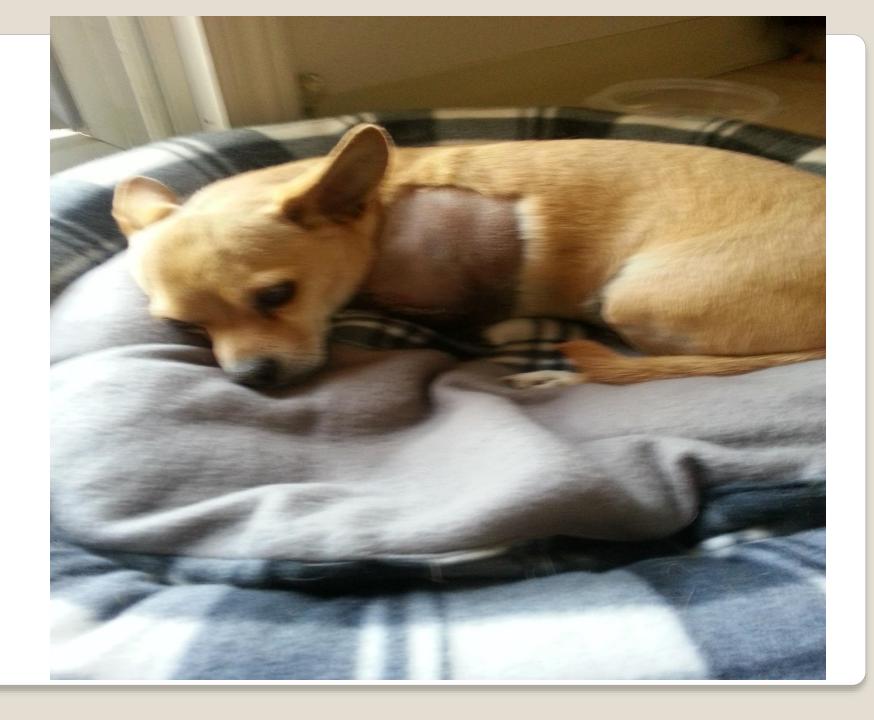
- Anxiety
- Anticipatory grieving
- ***patient should be instructed on upper body strengthening prior to amputation of lower ext

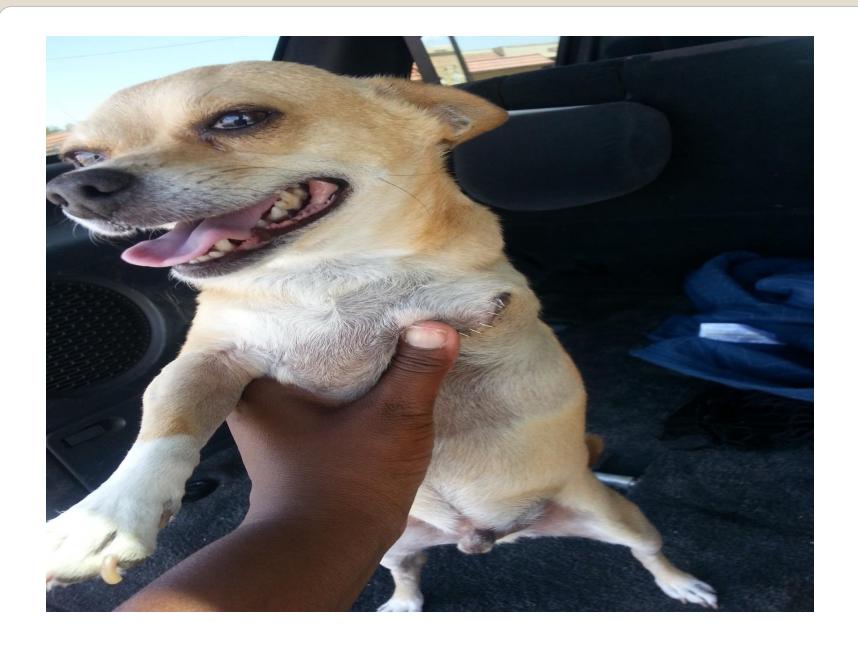
Interventions

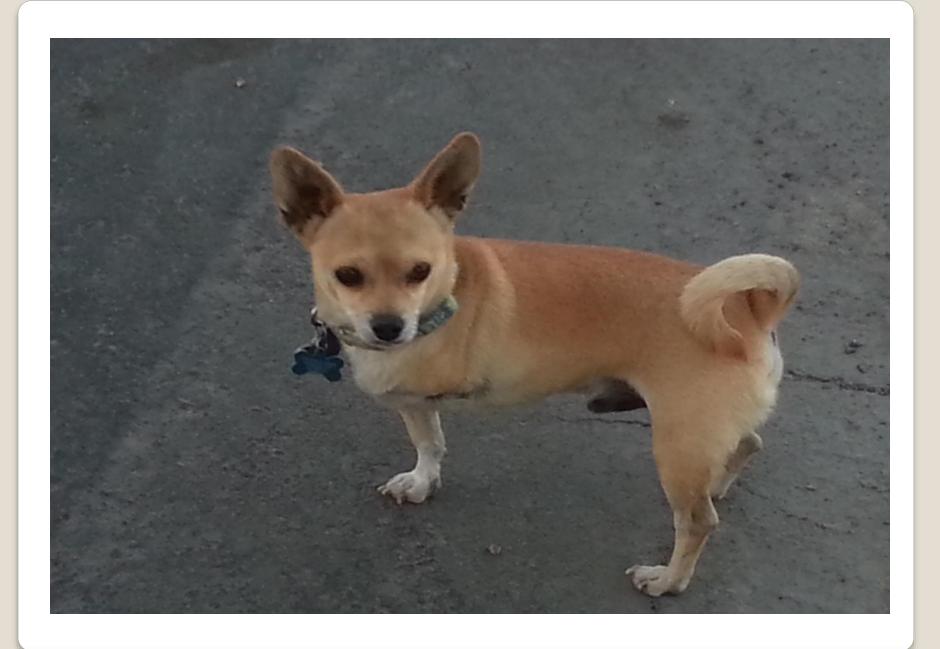












Interventions

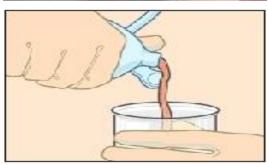
- Decreased Cardiac Output
- Pain
- Risk for Infection
- Impaired Skin Integrity and Risk for Impaired Skin Integrity
- Disturbed Sensory Perception
- Risk for Injury
- Impaired Physical Mobility (flexion contracture)
- Activity Intolerance
- Self-Care Deficit
- Anxiety, Fear, and Ineffective Coping
- Disturbed Body Image

Postoperative Nursing Care cont'd



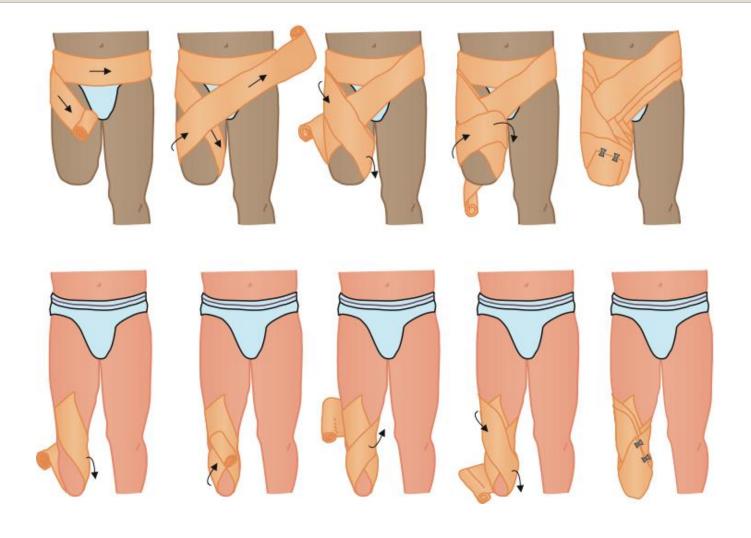








Jackson-Pratt and Hemovac wound suction systems



Proper techniques for wrapping a lower extremity residual limb Figure 43-4

- 1. May have needs that should be taken into consideration when planning and providing care
- 2. May not report phantom sensations because it appears foolish
- 3. Many have one or more chronic health problems
- 4. The loss of a limb can be especially difficult; it is important to provide psychological support

The Older Adult Amputee

- Involves the use of a microscope and highly specialized instruments to reconnect blood vessels and nerve fibers in a severed limb
- Limb sutured into its correct anatomic position
- Advances in microsurgical techniques and preservation of severed limbs have made this technique increasingly successful

Replantation

- For amputations through the hand or wrist
- Amputated thumbs are reattached whenever possible because of their importance in hand function
- In severely injured hand in which two or more fingers are detached, surgeon restores as many fingers as possible
- Amputations above the wrist do not lend themselves as readily to replantation because of the extensive tissue, muscle, and bone damage accompanying the injury

Indications

- Direct contact between the amputated part and the ice can lead to further tissue damage and cell death
- Partially amputated parts should remain attached to the patient and be kept cool if possible
- Extra care to avoid detaching any parts since even small connections increase the chances for successful repair
- Patient may require treatment for shock due to blood loss
- Tourniquets should not be used unless absolutely necessary

Emergency Care

- Http://www.youtube.com/watch?v=ICmmaIRNnAU
- https://www.youtube.com/watch?v=4zyM_6VyDAk (new)

Emergency care cont

Interventions

- If the dressing becomes saturated with blood, reinforce the dressing
- Report continued or excessive bleeding to the physician
- Even though preparations for replantation are hurried, be sensitive to the patient's fear and anxiety
- Accept the patient's feelings
- Provide brief, simple explanations

Preoperative Nursing Care

- Elevate the limb
- Abstain from nicotine- and caffeinecontaining products for 7 to 10 days postoperatively
- Administer ordered drugs; monitor effects

 Discuss thoughts and feelings about the replantation, disfigurement, and loss of

function



http://www.youtube.com/user/ClevelandClinic?v=cDDWvj_q-o8 **Empathy: The Human Connection to Patient Care**