Management of Amputations

ACS Guidelines
Patient Selection

Patients with amputations of the following are all potential candidates for reimplantation:

- Scalp
- Hand or Foot
- Arm or Leg
- Fingers or Toes
- Penis
Examples of Amputations

Before: Amputation at wrist
After: Re-implantation
Examples of Amputations

Amputated Nose
Examples of Amputations

Re-implanted Nose
Strong Indications for Reimplantation

- Clean Guillotine Amputation
- Amputation through the Middle Phalanx of Digit
- Bilateral Amputations of Hand
- Multiple Digit Amputations
- Thumb Amputations
Contraindications to Reimplantation

- Severe crushing injury
- Avulsion
- Multiple level amputations of same extremity
Initial Care of the Patient

- Examine for other injuries - Trauma ABCDEs
- Direct pressure to control hemorrhage
- Splint digit in physiologic position
- Gentle exam of proximal stump ok, but cleaning and debridement should occur in operating room.
Preservation of the Amputated Parts

1. Clean of surface dirt by gentle rinse with lactated ringers solution.
2. Wrap the parts in sterile gauze moistened with lactated ringers.
3. Place in a sealable plastic bag or water proof container.
4. Place bag or container in an outer container filled with crushed ice.
5. Always label the container and transport with the patient.
Do's and Don'ts

Never freeze the amputated part by putting it in direct contact with ice.

Never macerate the amputated part by soaking it in water.

Don't try to debride the amputated part.

Place bag or container in an outer container filled with crushed ice.
Communicate with Medical Control

Amputations are either complete or incomplete (partial).

A. Complete amputation - there are no tissue, ligament, muscle or other human tissue connecting the amputated part to the body.

B. Partial/Incomplete amputation - any human tissue such as a ligament, tendon or muscle connects the body and the amputated part. In a partial amputation, every effort should be made to preserve this connection.
Remember the ABCDEs of Trauma

In the heat of the moment it is easy to forget the ABC's of trauma management and focus on the amputated part.

Take a moment to do the ABCs, assess vital signs and assess for other injuries.

Even if the amputation is the only injury, you will only know the patient is in hemorrhagic shock from assessing the vital signs and other things like skin signs, mentation, etc.
Time is the enemy to success

The longer it takes to get the patient and the part to an institution with an experienced reimplantation team the less likely the operation will be successful.

Immediate cooling decreases tissue death and bacterial growth.

The larger the amputated part the shorter the amount of time it takes for tissue death to start.