

Midwest Hand Center at Research Medical Center Replantation Policy and Patient Information Sheet

The Midwest Hand Center at Research Medical Center is staffed by hand surgeons trained to care for adult (age 16 and over) hand injuries and trauma. Some of these injuries involve the traumatic loss (amputation) of a part or all of the thumb or fingers. Most of these injuries are treated by surgically cleaning and removing dead tissue and sewing the remaining skin and tissue closed. This is known as completion amputation.

Some patients may be candidates for surgical replantation where an amputated finger or thumb is surgically re-attached. This involves repairing bones, tendons, nerves and blood vessels. The surgery typically takes many hours to complete and requires the use of a microscope to bring together the tiny nerves and blood vessels. There can be drawbacks or downsides to this surgery.

- Blood transfusions can be necessary during or after surgery.
- If the finger survives the re-attachment it must undergo months of rehabilitation for tendon healing and movement, swelling management and scar care. Return to work averages 5 months instead of 2-3 weeks for completion amputation.
- Sensation can take up to a year to recover, is never the exact same and usually patients are cold sensitive.
- Additional surgeries are often necessary during the recovery phase.
- The overall cost is on average 10-15 times more than completion amputation.

Patients who can benefit from replantation include:

- Clean cut amputation of the thumb or finger or multiple fingers
- Partial hand amputation (through the palm)

Patients who are not candidates for replantation include:

- Severely crushed or mangled parts
- Amputations in patients with multiple trauma
- Patients with severe medical problems (heart disease, diabetes, peripheral vascular disease)
- Smoking and other tobacco use
- Intoxication
- Amputations over 12 hours

Care of the amputated part at home or in the emergency room is best done by wrapping in a saline soaked sponge and place in a zip-lock baggy. This baggy is then placed in a small container of crushed ice. Never should the amputated part be placed directly in ice or dry ice.