Surgery and Recovery

- All surgeries are done in the operating room under general anesthesia and after your surgery you will spend the night in the hospital.
- After your surgery you will wear a
 post-operative splint for 2 weeks and
 then be placed in a cast for
 approximately 2 more weeks to
 protect the tendon transfer while it
 heals.
- Your arm will be splinted and then
 casted from your elbow down to your
 hand and you will need assistance
 with transfers and other self-care that
 you may normally perform yourself.
 You will NOT be able to bear any
 weight on this extremity. This is
 different from nerve transfer
 surgery!
- For 3 months after the surgery you will have limited use of your arm with many restrictions in place including no heavy duty use of that arm.

- It is important to be immobilized as movement too early can lead to a rupture of the tendon transfer.
- After the immobilization period it will be essential to work with a therapist in order to retrain and strengthen muscles.
- Therapy will begin at approximately 4
 weeks after your surgery however
 there will still be many restrictions in
 place and you will need assistance
 with transfers and other self-care
 activities for up to 3 months after
 surgery.



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Division of Plastic & Reconstructive Surgery

Tendon Transfer Surgery for Tetraplegia in Spinal Cord Injury



*ADAM

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Tendon Transfer Surgery

WHAT IS A TENDON?

- A tendon is a strong cord that connects muscles to bones and transmits muscle action into movement of the joints where they cross.
- Each muscle has a starting point (origin) and tapers down from the muscle belly into a tendon that attaches onto the bone (insertion).
 When a muscle contracts or fires it causes a specific action.

WHAT IS TENDON TRANSFER SURGERY?

- Tendon transfer surgery is a type of surgery that can improve lost hand function.
- A functioning tendon that is "extra" is shifted from its insertion site to a new attachment to restore function.
- This new attachment site belongs to a muscle that is no longer working and once transferred this "extra" tendon can restore function to the muscle that was previously not functioning.

WHY HAVE TENDON TRANSFER SURGERY?

- Tendon transfer surgery can help restore critical functions of the upper extremity and can lead to an increase in independence and self-care.
- Some functions that may be able to be restored through tendon transfer surgery include...
 - 1. The ability to bend and straighten the wrist.
 - 2. Improve grip and hand function by restoring finger and thumb motion.

Other Procedures

You may be a candidate for other procedures such as nerve transfers, joint fusion, or anti-claw procedures, etc. Talk to your doctor about these other options.

PRIOR TO SURGERY...

 Identify which muscles work, measure how well they work to determine if they can be used in the transfer. A test called an EMG or nerve conduction study may be required to help obtain this information.

- Your doctor will assess your joints to ensure they are supple and not stiff.
- It will be important to undergo an assessment with the therapists at Milliken Hand Therapy to assess your current functions and see what functions could be gained by surgery.
- Match available muscles with functional requirements.
- Verify that a strong support system is in place to help with the rehabilitation process.
- Determine what surgeries need to be performed, when, and in what

APPOINTMENTS

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