

Tendon Transfers

Nerve dysfunction (congenital, injury, stroke) can result in paralysis of muscle groups that control wrist, hand and finger motion. Although the nerve dysfunction is permanent, a highly skilled and experienced hand surgeon can transfer tendons from functioning muscle tendon groups to nonfunctioning ones restoring lost function. Although never “normal,” a useless hand may be made to function again.

This requires careful, meticulous planning of transfers, meticulous surgical technique, sometimes staged procedures and expert hand therapy in order to obtain the best possible result. The transfers require four weeks healing time followed by months of therapy. Miraculously, the brain somehow adapts and controls the transferred tendons learning their new function. For example, a tendon that once extended the index finger

may now oppose the thumb and the brain “learns” the new function and position of the muscle tendon unit.



Hypoplastic adducted thumb deformities



No ability to oppose the thumb



Tendon transfers: Opponensplasty



Thumb opposition restored