

TENDON TRANSFERS FOR NERVE PALSIES

Nerve recovery	Site of injury Nature of injury Age Surgeon
Timing	Nerve(s) injured Expectation of recovery Tissue equilibrium
External factors	Intellect Motivation Litigation
Splinting	Maintenance of ranges of motion until tissue equilibrium is achieved
Indications	"Internal splint" Replace movement Eliminate deforming force Improve stability
Tenodesis	Simple Crosses 1 joint Profundus tenodesis "Lasso" tenodesis (Zancolli) Opposition transfers (Riordan) Dynamic Crosses >1 joint Direct Reciprocal Crossed
Transfer	Correction of contracture Adequate strength Adequate excursion Straight line of pull One tendon - one function Synergy/retrainable Expendability Tissue equilibrium
Muscle properties	Tension Excursion Visco-elasticity
Mechanics	Excursion : Fibre length Tension : Cross section Work : Mass
Tendon excursion	Wrist tendons 33mm Finger extensors 50mm Finger flexors 70mm

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Transfer action	Power Angle Excursion Insertion
Failure	Lost passive motion Adhesion Technical Non-compliance