TENDON TRANSFERS

GUY BROOME

INTRA-OPERATIVE DECISION MAKING

APPEARANCE OF MUSCLE, BEIGE COLOUR IF DE-INNERVATED

MOTOR NERVE STIMULATOR

ALWAYS HAVE A PLAN B

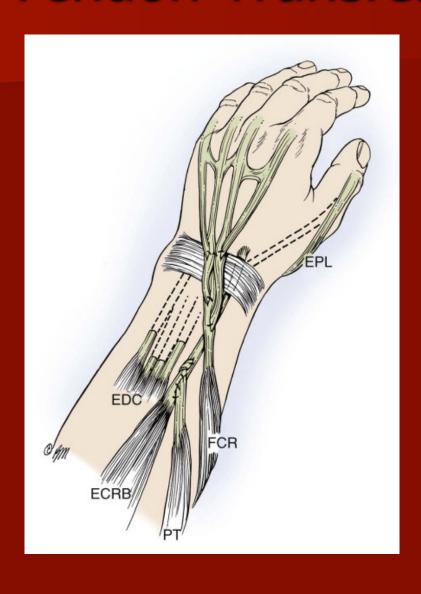
TYPICAL CASE, RADIAL NERVE PALSY

■ PRONATOR TERES TO EXTENSOR CARPI RADIALIS (L OR B)

■ FCR TO EXTESOR DIG COMMUNIS

PALMARIS LONGUS TO EPL

Tendon Transfers – Radial nerve





INDICATIONS

LOWER MOTOR NEURONE PARALYSIS

UPPER MOTOR NEURONE PARALYSIS

■ TENDON RUPTURE

CONGENITAL DEFORMITIES

GENERAL PRINCIPALS ABSOLUTE

NO FIXED DEFORMITY

DONOR TENDON DISPENSIBLE

ADAQUATE POWER OF DONOR

HEALTHY SOFT TISSUE BED

DISPENSIBLE DONORS SHOULDER / ELBOW

PECTORALIS MAJOR, ALL OR HALF

PECTORALIS MINOR

■ LATISSIMUS DORSI

■ TERES MAJOR

DISPENSIBLE DONORS HAND / WRIST

- FLEXOR CARPI RADIALIS
- PALMARIS LONGUS
- EXTENSOR INDICIS
- FLEXOR DIGITORUM SUPERFICIALIS
- PRONATOR TERES
- BRACHIORADIALIS

TENSION / SARCOMERE LENGTH

GENERALLY, SARCOMERE LENGTH CAN BE 1 cm TOO LONG OR TOO SHORT

■ 1 MRC GRADE LOST

■ THE MORE PROXIMAL THE TRANSFER, THE GREATER THE LEVER ARM AND THE MORE POWER IS NEEDED

GENERAL PRINCIPALS LESS IMPORTANT

AGONIST

SAME TYPE OF MUSCLE FIBRE

AVOID RUNNING ROUND CORNERS