

MCPJ ARTHROPLASTY

Swanson Arthroplasty

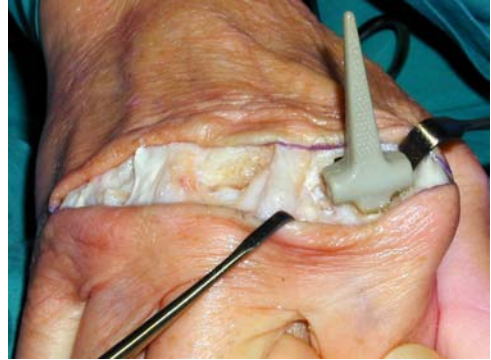
Multiple longitudinal incisions or transverse incision
Preservation of dorsal veins
Approach to ulnar side of extensor tendons
Central capsulotomy
Synovectomy

Soft tissue release
Collaterals, all ulnar contractures
Ulnar intrinsic (preserve length for CIT)
Abductor digiti minimi
Preserve radial structures
Remove metacarpal head
Aim for smooth arcade across hand

Release volar plate and soft tissues from palmar side of proximal phalanx
Should be possible to sublux base of PP dorsal to MC shaft

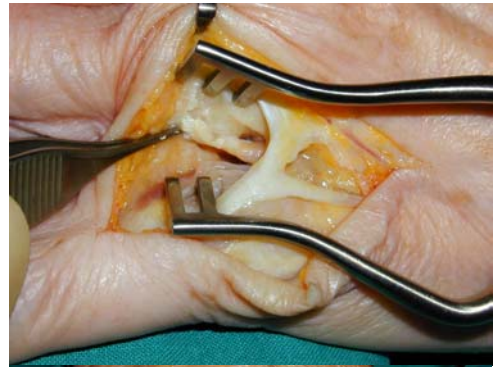
Ream metacarpal shafts
Shaped reamer or power burr
Aim for slight supination on index and middle
Trial for size before reaming phalanx

Trial reduction
Trim MC neck if tight in extension



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Crossed intrinsic transfer
Ulnar intrinsic detached from R/M/I
Swung over to ulnar side of adjacent digit
Sutured into radial collateral insertion
(suture to extensor hood risks swan-neck)
Not possible for index – collateral reefing only



Radial collateral reefing
Twin drill holes to metacarpal neck
Implants inserted and reduced
Suture to radial collateral with 3/0 Ethibond
Slight overcorrection



Implants inserted and reduced
Suture to radial collateral
Slight overcorrection



Capsule closed
Extensors centralized and sutured



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Tupper arthroplasty

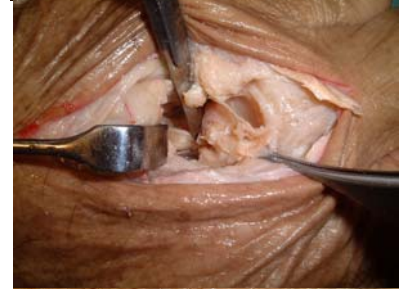
Metacarpal head excised, volar plate exposed
Collateral ligaments detached



Volar plate detached proximally and elevated
Flexor tendons directly beneath



Volar plate drawn up over metacarpal neck



Volar plate sutured to metacarpal neck through drill holes
Radial collateral repair



References

Use of outrigger

Wilson Y G, Sykes P J, Niranjana N S: JHS 18B 81-91 (1993)

Crossed intrinsic transfers

Clark DI, Delaney R, Stilwell JH et al: 2001 JHS 26B 565 – 567 (2001)

Pereira JA, Belcher H: JHS 26B 229 – 234 (2001)

Tupper arthroplasty

Weilby A: Scand J Plast Reconstr Surg 11 239 – 242 (1977)

Swanson technique

Millender LH, Nalebuff E A: Orth Clinics of N America 4 349 – 371 (1973)