HAND and WRIST QUIZ - ANSWERS

Please note!

My Answers are

- Final.
- Not up for debate.

- Prize for highest mark.
- Tie breaker if more than 1 winner.

The extended FCR Approach involves release of:

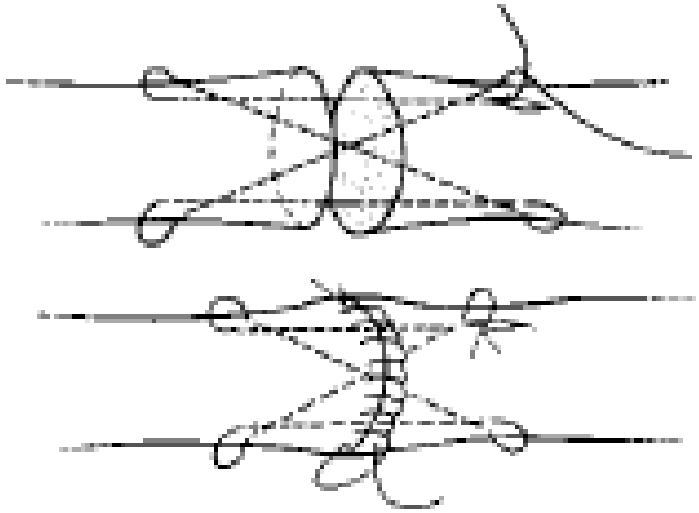
a. Carpal Tunnel
b. ECRL
c. Brachioradialis
d. FPL
e. DRUJ

Concerning the philosophy of volar distal radius fixation:

a. Distal row supports dorsal subarticular surface
b. Proximal row supports volar subarticular surface
c. Styloid screws to maintain volar tilt
d. Proximal row supports dorsal subarticular surface
e. Act as a Buttress plate in dorsally displaced fracture

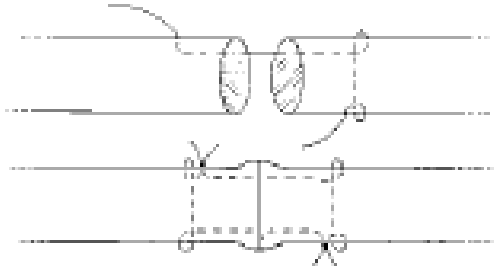
Which is a four strand core suture construct?

a. Cruciate
b. Kessler
c. Kessler-Tajima
d. Bunnell
e. Mason Allen

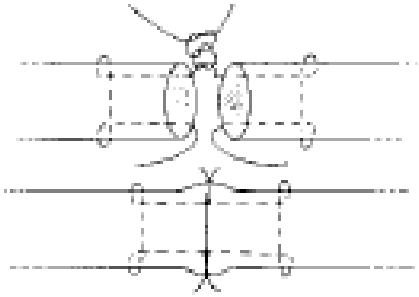


4-Strand Cruciate Repair
(McLarney et al[107])

Bunnell Stitch
(Bunnel[112])



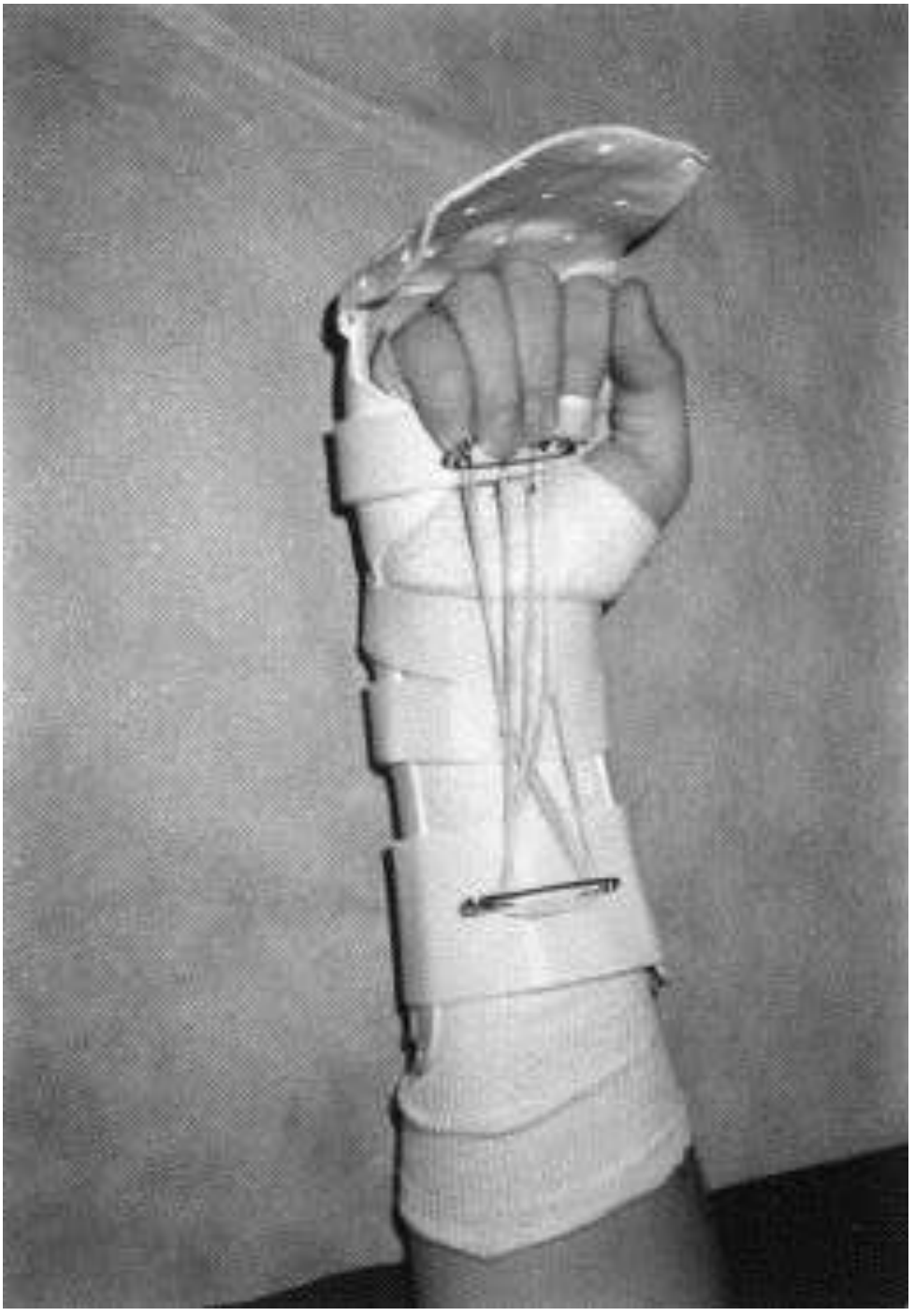
Kessler Grasping Stitch
(Kessler[3])



Kessler-Tajima Stitch[7]

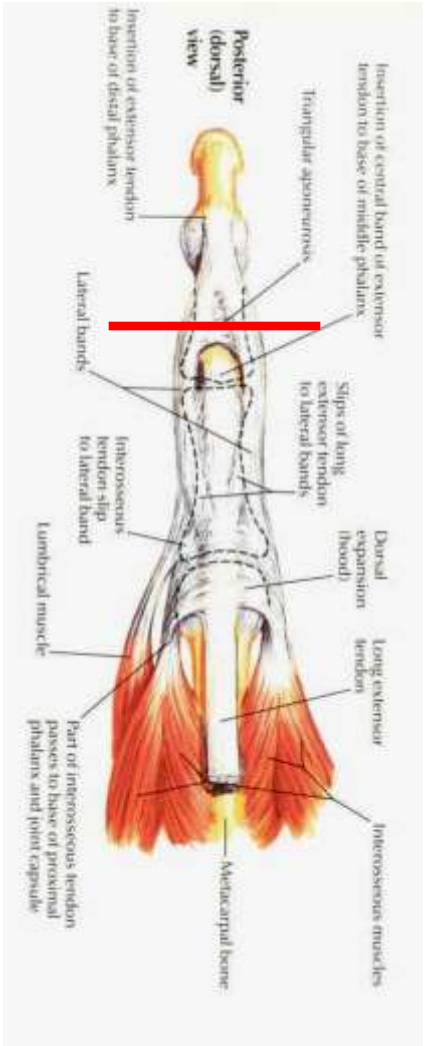
Which of the following is not part of standard flexor tendon rehab in first 6 weeks after flexor tendon repair:

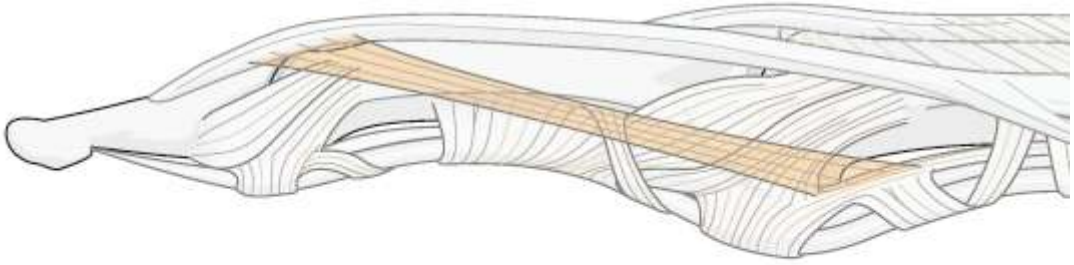
a. Rubber band traction
b. Passive Extension
c. Passive Flexion
d. Active Extension
e. Active Flexion



Division of the extensor tendon in zone II might NOT stop DIPJ extension because of:

a. Lumbricals
b. Interossei
c. Sagittal bands
d. Oblique retinacular ligament
e. Volar plate





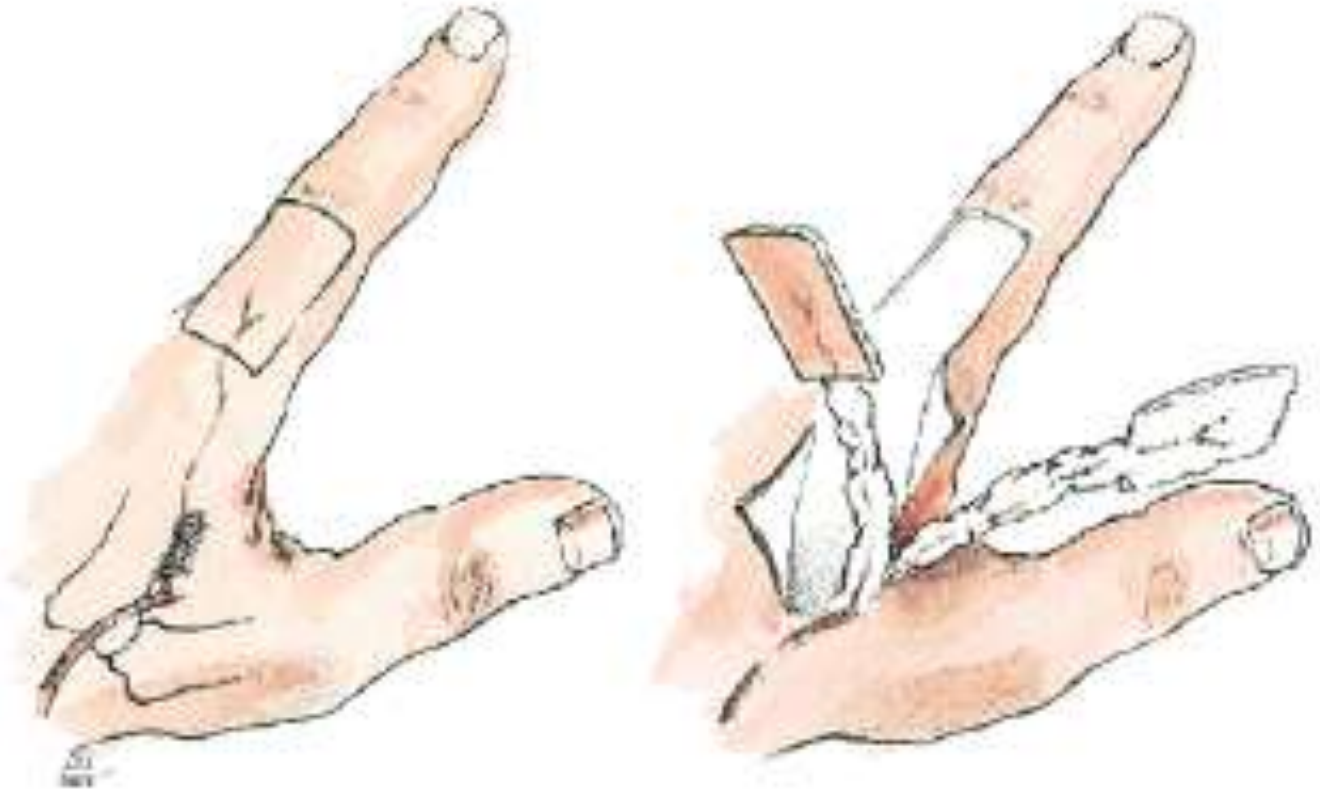
Which of the following are Kanavel's sign?

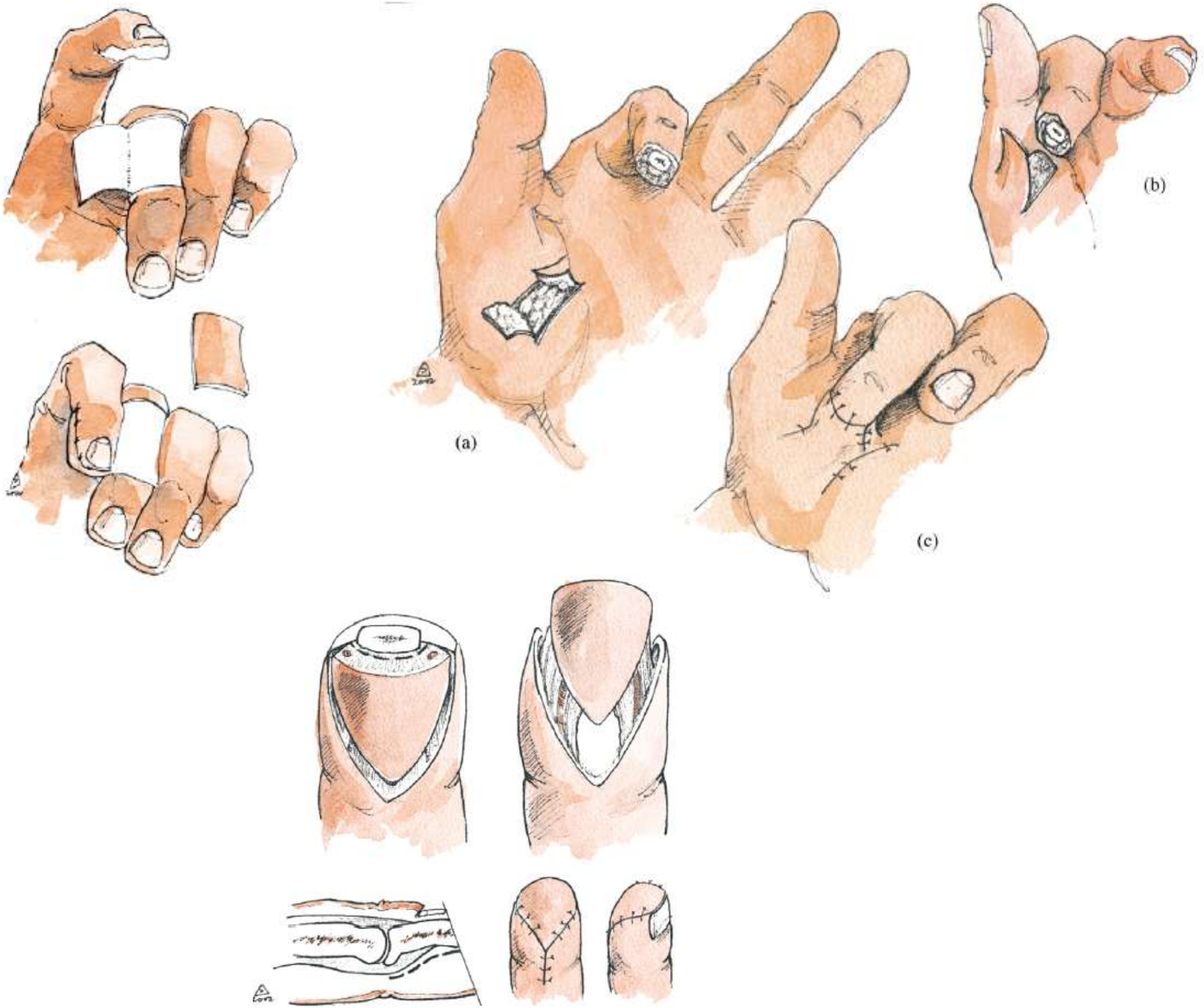
a. Sausage digit, Pain on Passive Flexion, Paraesthesia
b. Pain on extension, Paraesthesia, Pallor
c. Sausage digit, Flexor Sheath tenderness, Pain on passive extension, Flexed posture of digit
d. Pain on Passive Flexion and Flexed Posture
e. Sausage digit, Paraesthesia, Flexor Sheath tenderness, Flexed Posture of digit

Which of the following is NOT an option for cover of an index finger tip amputation?

a. Thenar flap
b. Cross finger flap
c. Foucher (Kite) Flap
d. Atasoy Flap
e. Venkataswami Flap

Kite Flap




(a)
(b)
(c)

Vaughan Jackson syndrome is:

a. Rupture of FPL
b. Subluxation of carpus
c. Progressive rupture of Extensors from degenerate DRUJ
d. Posterior Interosseous Nerve Compression in Rheumatoid Arthritis
e. Multiple Z deformities in digits

Assessing the severity of Swanneck deformity is by:

a. Elson's test
b. Table top test
c. Bunnell-Finochetti test
d. Mannerfelt Manouvre
e. Hippocratic manouvre

The most appropriate surgical procedure from the following in this case is:

a. Total Wrist replacement only

b. Sauve Kapandji procedure and Radioscapholunate fusion

c. Darrach's and Chamay Fusion

d. Total Wrist fusion and Darrach's

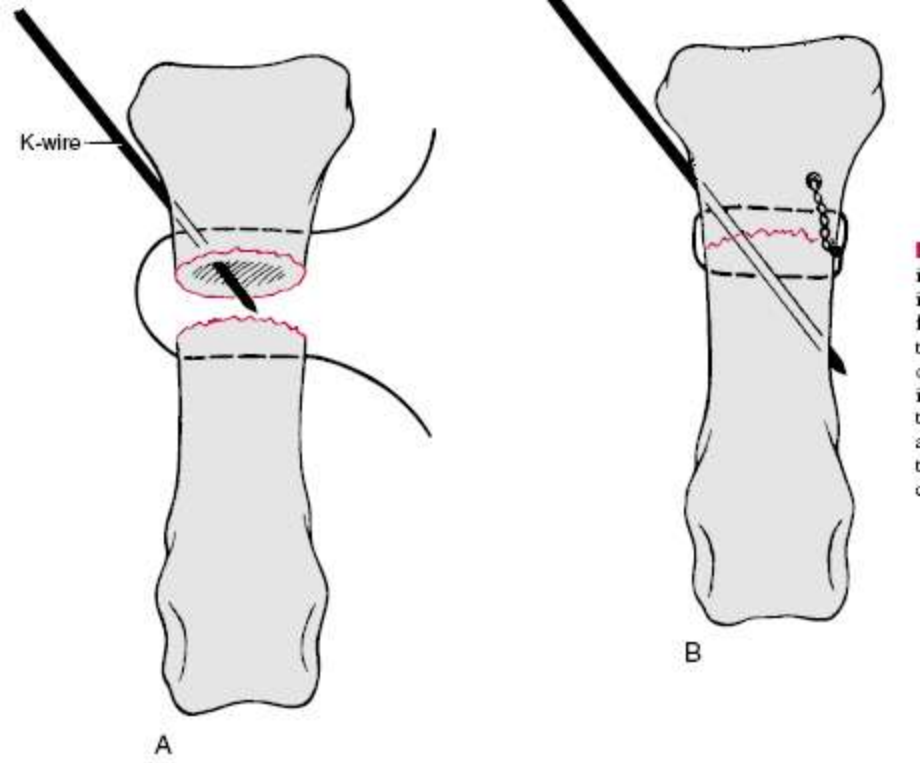
e. 4 corner fusion

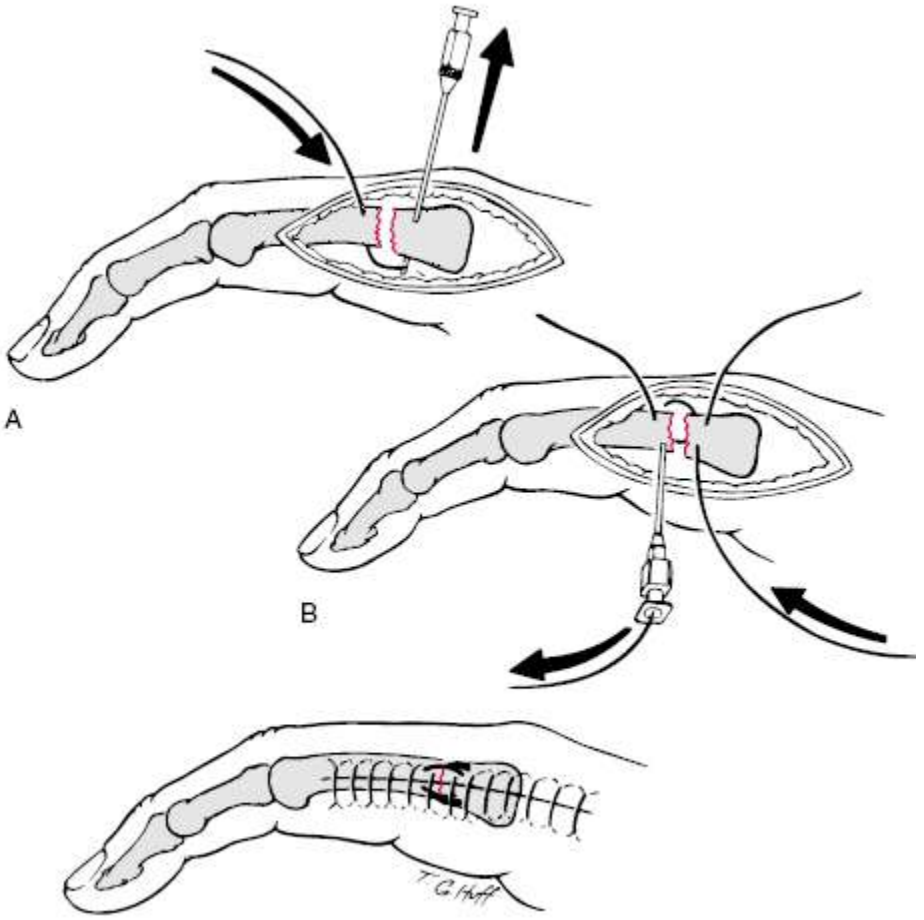
Most likely Diagnosis is:

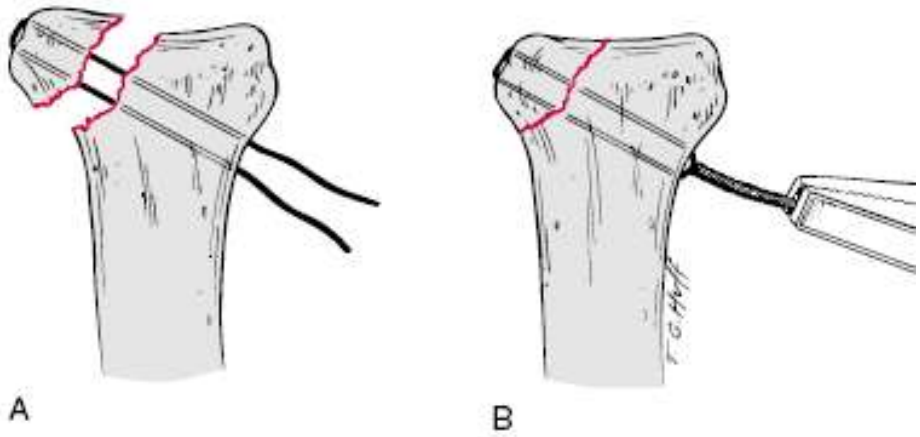
a. Exostosis
b. Giant Cell Tumour
c. Osteochondroma
d. Enchondroma
e. Osteosarcoma

Concerning constructs for PIPJ fusion, the biomechanically strongest method is:

a. Plate fusion
b. Cross K-wire
c. Tension Band Wiring
d. Type A Lister Wiring
e. 90/90 Wiring


K-wire
A
B


A
B
C


A
B

Which cell type is implicated in the pathophysiology of Dupuytren contracture?

a. T Lymphocyte
b. Fibroblast
c. B Lymphocyte
d. Eosinophils
e. Myofibroblast

Abnormal structures involved in Dupuytren include the following except?

a. Grayson's ligament
b. Pretendinous band
c. Spiral band
d. Cleland ligament
e. Lateral digital sheet

Four corner fusion involves

a. Scaphoid, Lunate, Distal Radius, Capitate
b. Lunate, Triquetrum, Distal Radius, Distal Ulna
c. Lunate, Capitate, Scaphoid, Trapezoid
d. Lunate, Triquetrum, Hamate, Capitate
e. Capitate, Trapezoid, 2nd Metacarpal, 3rd Metacarpal

Regarding Kienbock Disease which of the following is correct:

a. Lichtman stage II means loss of carpal height and a flexed scaphoid
b. Is more common with an X type vascular pattern of the lunate
c. Is more common in ulnar plus
d. Is more common in ulnar minus
e. Ulnar shortening is a method of treatment

Stage 1
Acute

Stage 2
Density Changes

Stage 3A and 3B
Collapse of Lunate

Stage 4
Pan Carpal Arthrosis

Concerning acute scaphoid fixation which is correct?

a. Herbert screw is cannulated
b. Dorsal percutaneous screw insertion is not suitable for waist fracture
c. Fully threaded headless screws have differential pitch
d. Herbert screw has same pitch in both parts
e. Should not be fixed in conjunction with perilunate dislocation to avoid devascularisatoin

Which is incorrect regarding Ulnar impaction syndrome?

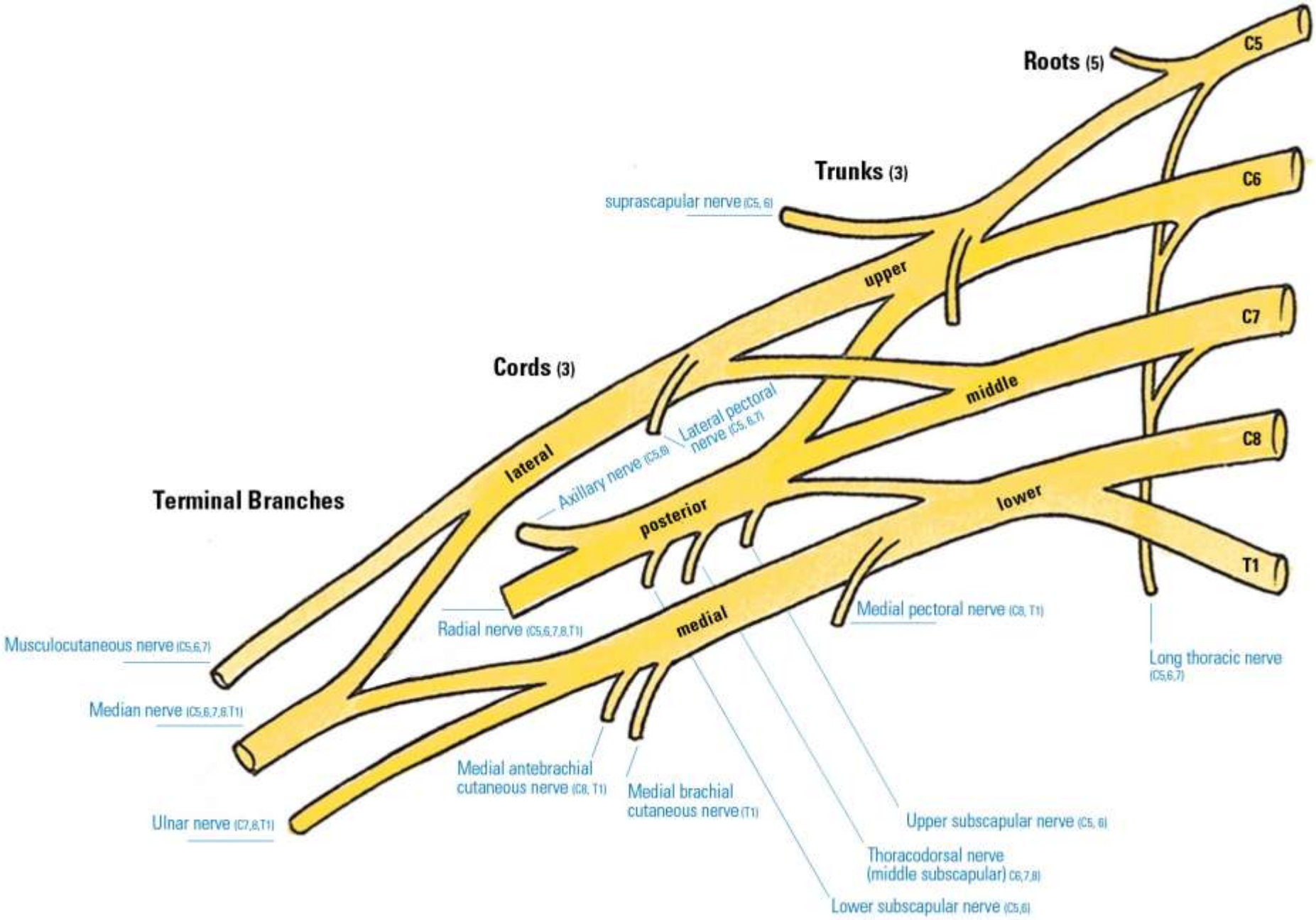
a. Can lead to Lunotriquetral instability
b. Can cause lunate cyst
c. Can be treated with ulnar lengthening
d. Can be treated with arthroscopic wafer procedure
e. Can occur after distal radius fracture malunion

The following can be use for opponensplasty except:

a. Palmaris longus
b. FDS Ring
c. EIP
d. Brachioradialis
e. Abductor Digiti Minimi

Regarding Brachial Plexus which is correct?

a. Radial nerve is a branch of lateral cord
b. Ulnar nerve is a branch of posterior cord
c. Cords are name in relation to subclavian artery
d. Median nerve has contribution from medial and posterior cord
e. The Radial nerve and musculocutaneous nerve supply the Brachialis muscle


Roots (5)
C5
C6
C7
C8
T1
Trunks (3)
upper
middle
lower
suprascapular nerve (C5, 6)
Cords (3)
lateral
posterior
medial
Lateral pectoral nerve (C5, 6, 7)
Axillary nerve (C5,6)
Terminal Branches
Radial nerve (C5,6,7,8,T1)
Musculocutaneous nerve (C5,6,7)
Median nerve (C5,6,7,8,T1)
Ulnar nerve (C7,8,T1)
Medial antebrachial cutaneous nerve (C8, T1)
Medial brachial cutaneous nerve (T1)
Medial pectoral nerve (C8, T1)
Long thoracic nerve (C5,6,7)
Upper subscapular nerve (C5, 6)
Thoracodorsal nerve (middle subscapular) C6,7,8)
Lower subscapular nerve (C5,6)

Regarding electrophysiology testing which is correct?

a. Loss of amplitude means there is a loss of Schwann cells
b. Fasciculation potentials are normal
c. F waves are present in neurotmesis
d. Decreased conduction velocity means there is compression neuropathy
e. F waves are only present in lower limb nerves

You have a child with a mild hypoplastic thumb. You are going to treat it with a Huber transfer. This is transfer of:

a. EIP to restore Thumb adduction
b. Brachioradialis to restore Thumb IPJ flexion
c. ADM to restore Thumb opposition
d. PL to restore Thumb Extension
e. EIP to restore thumb retropulsion

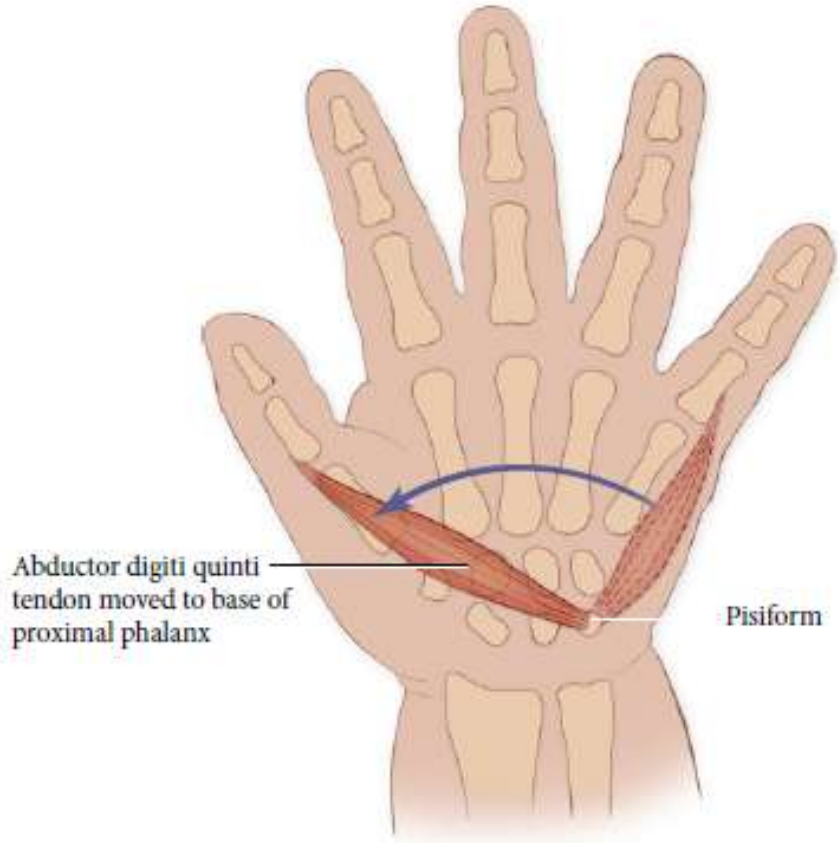


FIGURE 4: Huber opposition transfer

Differentiation of limb bud to ulnar and radial side depends on

a. HOX genes
b. Apical Ectodermal Ridge
c. BMP 2
d. Zone of Polarising Activity
e. Wingless gene

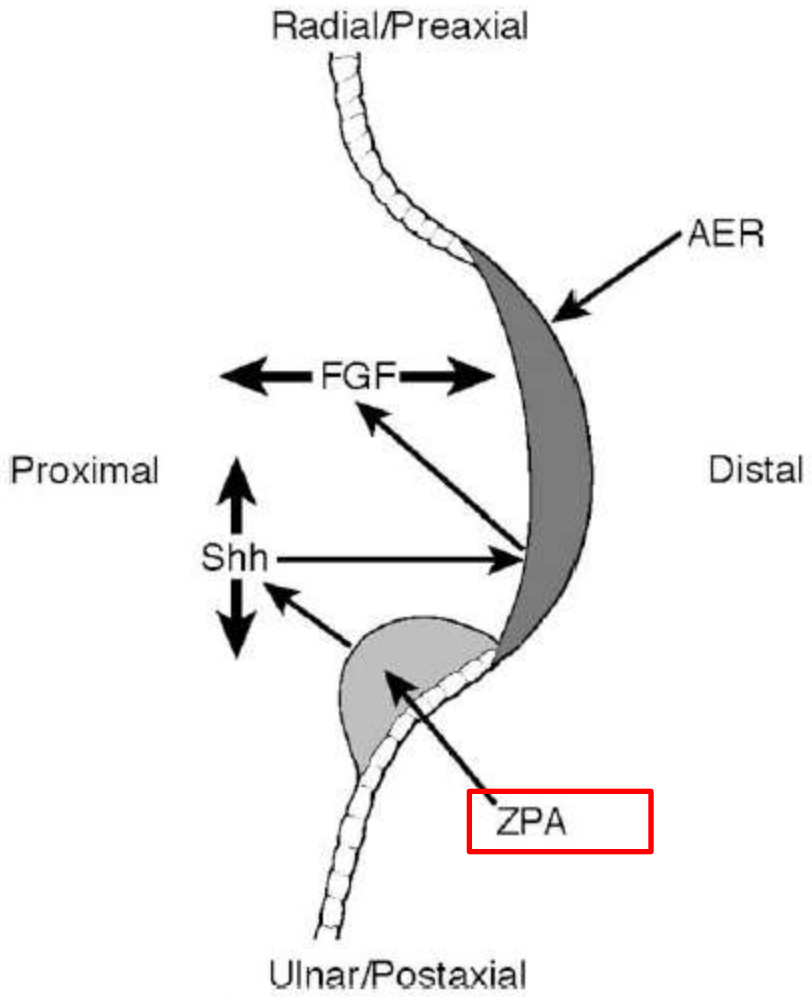
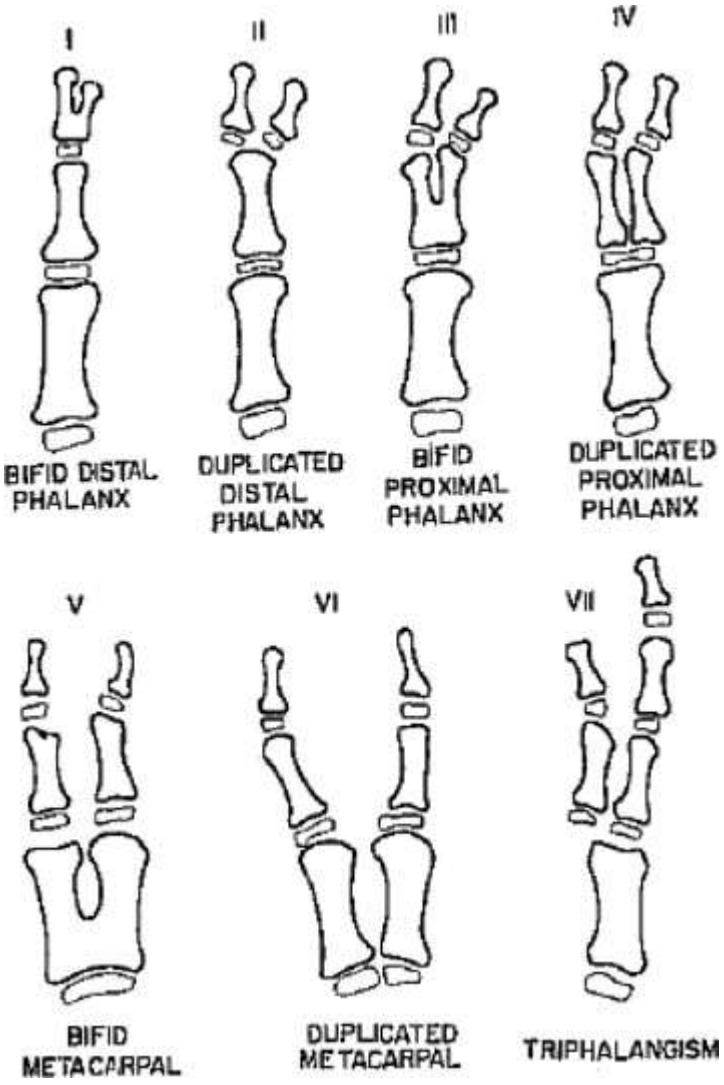


Fig. 2. AER and the zone of polarizing activity (ZPA) control the proximal-distal and radial-ulnar axes respectively. Proximal-distal growth is controlled by FGF, and radio-ulnar differentiation is controlled by Sonic hedgehog (Shh). Shh also stimulates FGF production by the AER.

The most common type of Thumb duplication is

a. Wassell type I
b. Wassell type II
c. Wassell type III
d. Wassell type IV
e. Wassell type V


I
II
III
IV
BIFID DISTAL PHALANX
DUPLICATED DISTAL PHALANX
BIFID PROXIMAL PHALANX
DUPLICATED PROXIMAL PHALANX
V
VI
VII
BIFID METACARPAL
DUPLICATED METACARPAL
TRIPHALANGISM

Concerning Finger flexion deformity in CP patients. If finger extension is not possible with maximum wrist flexion then treatment includes the following EXCEPT:

a. FDP to FDS Transfer
b. FDS to FDP Transfer
c. Flexor Aponeurosis release
d. Flexor Pronator Slide
e. FCU to ECRB transfer

Table 1—Classification of flexion deformities of wrist and fingers

Group 1	Finger extension with wrist in neutral or less than 20° of flexion
Group 2A	Active wrist extensors present Finger extension only with wrist in more than 20° of flexion
Group 2B	No active wrist extensors present Finger extension only with wrist in more than 20° of flexion
Group 3	Finger extension not possible even with maximal flexion of wrist

Table 2—Recommended procedures for flexion deformity of wrist and fingers

Group 1	FAR ± FCUT
Group 2A	FAR + FCUT
Group 2B	FAR + FCU–ECRB
Group 3	1. Flexor pronator slide 2. PRC + extensor transfer + FAR or wrist fusion + FAR 3. FDS–FDP

FAR = Flexor aponeurotic release
FCUT = Flexor carpi ulnaris tenotomy
FCU–ERCB = Flexor carpi ulnaris to extensor carpi radialis transfer
PRC = Proximal row carpectomy
FDS–FDP = Flexor digitorum superficialis to flexor digitorum profundus transfer

Surgery for Cerebral Palsy: Part 2. Flexion Deformity of the Wrist and Fingers

M. TONKIN and C. GSCHWIND

J Hand Surg [Br] 1992 17: 396