

CONGENITAL HAND DEFORMITIES

Swanson's Classification

1 Failure of formation

Proximal forearm

Boyer & Kling

Transverse arrest

Longitudinal arrest

Radial club hand

1 Hypoplasia scaphoid

Lengthen with frame 1 DR physio dysplasia

Distraction lengthening 2 Radius in miniature

Centralisation

3 Distal radius & physio absent

4 Absent radius

5 Abnormal glenoid, absent prox hum

~~ulnar club hand~~ A/w Fanconi anaemia

TAR thrombocytopenia & absent radius

V vertebral (synostosis)

A not (atresia) FBO

C cardiac (valve defect) USS renal

T tracheal

E esophageal (stibula)

R renal (horseshoe kidney)

L w/b abnormalities

hypoplastic ulna

Absent ulna

Humero radial synostosis

Deficient ulna & absent wrist

Ulnar club hand

Cleft hand

2 Failure of Differentiation

Syndactyly

Camptodactyly

Clinodactyly

simple = soft tissue complex = bone

T1 Infantile

T2 Adolescent

Lateral plane dysmaturity

3 Duplication

Preaxial polydactyly (thumb duplication)

	Wassel	Byfid	Duplicate
Retain ulnar thumb (integrity) of UCL	Distal phalanx	1	2
	Proximal phalanx	3	4 (most com)
	Metacarpal	5	6
	Triphalangium	7	
	Postaxial polydactyly (small finger duplication)		
	Central polydactyly		

4. Overgrowth (Macrodactyly) ^{NF} Maffucci, Ollier's

5. Undergrowth Thumb hypoplasia Tx
 Blauth I Short thumb, hypoplastic thenar muscles M.I
 II Adduction contracture UCL instability
 III Intrinsic & extrinsic muscle/tendons dysgenesis } Reconstruct
 A CMC jt intact
 B Abnormal CMC jt
 IV Floppy thumb } Pollicisation
 V Absence of thumb

6. Congenital constriction band - Streeter's dysplasia

7. Generalised skeletal abnormalities

Madelung's

Arthrogriposis

Congenital trigger thumb

Congenital dislocation of the radial head