

Index

A

- A2 pulley rupture, *see* Climber's pulley injuries
- Abductor pollicis longus (APB/APL), 204, 228
- Acute compartment syndrome (ACS), 277
- Avulsions, 135

B

- Bennett's fracture, 126, 129, 131
- Boutonniere deformity, 40
- Bow-stringing phenomenon, 90
- Boxer's fractures, 108
- Boxer's knuckle
 - anatomy, 152, 153
 - clinical features, 153
 - investigations, 153
 - operative management, 153, 154
 - outcomes, 154
 - pathology, 152, 153
- Buddy strapping, 65
- Buddy taping, 47
- Button-anchor techniques, 24

C

- Carpal fractures
 - capitate fractures, 190, 191, 193
 - hamate fractures, 190, 192, 195–197, 200
 - incidence, 185, 186
 - lunate fractures, 197, 198
 - pisiform, 188, 190
 - trapezium, 188, 189
 - trapezoid, 198, 199
 - triquetrum, 187, 188, 200
- Carpal instability complex (CIC), 213, 215
- Carpal instability dissociative (CID), 213, 215
- Carpal instability non-dissociative (CIND), 213, 215
- Carpometacarpal (CMC) joint, 197
 - anatomy, 154, 155
 - clinical features, 156
 - operative management, 156, 157
 - outcome, 157
 - pathology, 154, 155

- Chronic exertional compartment syndrome (CECS)
 aetiology, 278, 279
 clinical diagnosis, 280–282
 pathophysiology, 279, 280
 treatment, 282–285
- Climber's pulley injuries
 biomechanics, 89
 crimp grip, 82, 85, 98
 DIPJ, 87
 flexor tendon sheath anatomy, 83, 88
 French Classification, 82, 86–87
 hook grip, 82, 85, 98
 International Climbing and Mountaineering Federation, 83, 86–87
 IPJ, 87
 MCPJ, 83
 palmar aponeurosis, 87
 PIPJ, 83
 pulley ruptures
 body movements, 91
 clinical assessment and classic bowstringing, 92, 93
 clinical examination, 89, 90
 first-aid measures, 92
 imaging examination, 90, 91
 pathology, 89
 repeated manoeuvre, 91
 results, 97
 surgical technique, 94–97
 training sessions, 91
 treatment, 93, 94
 short climbing lexicon, 82
 slope grip, 82, 85, 98
- Comminuted fractures, 74
 Conventional therapy, 77
- D**
 Distal interphalangeal joint (DIPJ), 2, 16, 87
 Distal phalanx fractures, 71, 72
- Distal radio-ulnar joint (DRUJ), 262
 Dorsal blocking splint, 65
 Dorsal splint, 65
 Doyle's classification, 3, 4
 Dynamic compartment pressure monitoring, 281
- E**
 Eaton-Belsky technique, 66, 68
 Edinburgh position splint, 65
 Epibasal fractures, 133
 Extensor carpi radialis longus (ECRL), 228
 Extensor carpi ulnaris (ECU) tendon, 204, 245
 anatomy and biomechanics, 256–259
 classification, 265
 clinical presentation, 260
 diagnosis, 263
 imaging, 263
 inflammatory tendinopathy, 263, 264
 mechanism, 259–261
 physical examination, 260, 262
 RTP, 273–275
 tendon protocol, 267–270, 273
 tendon rupture, 263–265
 traumatic instability, 263, 264
 treatment decisions, 265–267
 wrist taping, 268, 269
- Extra-articular fractures, 133
 Extra-articular metacarpal shaft fractures, 129
- F**
 Flexor carpi radialis (FCR) muscles, 228
 Flexor carpi ulnaris (FCU), 203, 247
 Flexor digitorum profundus (FDP) avulsion injuries
 anatomy, 16, 18
 classification, 18, 19

- diagnosis
 magnetic resonance imaging, 20
 physical examination, 19
 soft tissue imaging, 20
 ultrasound, 20
 rehabilitation programmes, 30
 treatment, 20
 acute principles, 23
 Leddy-Packer classification, 20
 management, 20, 21
 mini fragment plate fixation, 24
 outcomes, 31
 reconstruction, 30
 subacute timeframe, 24
 type I and II injuries, 23
 type III–V injuries, 24
- G**
 Gamekeeper's thumb, 138
- H**
 Hebert classification system, 167
 Hypertrophic scarring, 172
- I**
 Interphalangeal joint level (IPJ), 87
 Intra-articular fractures, 135
 Intra-compartmental pressure monitoring, 280, 281
 Intrinsic plus (IPP), 65
- J**
 Jersey finger, 16
- K**
 Keith needle, 24
 Kienböck's disease, 197
 K-wire, 24, 45
- L**
 Leddy-Packer classification, 20
 Lister's tubercle, 174
 Lunocapitate (LC) joints, 203
 Lunotriquetral (LTq) instability, 205, 206, 248
- M**
 Magnetic resonance imaging (MRI), 20, 240
 Mallet injury
 classification, 3
 clinical setting, 2
 diagnosis, 3
 distal phalanx, 6
 treatment, 3
 acute, 5
 chronic lesions, 6
 conservative, 4, 5, 10
 mallet fracture, 7, 9
 post-operative treatment, 9
 pure tendinous lesion, 5
 surgical treatment, 10
 Mallet thumb, 135, 146
 Malunion, 121
 Manipulation under anaesthesia (MUA), 116
 Mayo classification system, 167
 Metacarpal fractures, 129
 anatomy, 102–104
 cascade sign, 109–111
 clinical assessment, 104
 immobilisation techniques, 106
 metacarpal base extra-articular fractures, 118
 investigation, 120
 management, 120
 metacarpal head investigation, 107
 management, 107
 referral, 107
 metacarpal neck fingernail rotation, 110

- Metacarpal fractures (*Cont.*)
 investigation, 112
 management, 112, 113
 overlapping, 109
 referral, 114
 metacarpal shaft
 investigation, 117
 management, 117
 manipulation under
 anaesthesia, 116
 non-operative, 115
 referral, 117
 radiographs, 105
 stability, 105
 treatment
 malunion, 121
 metalwork, 121
 non-union, 121
 pressure effects, 121
 rotational
 mal-alignment, 121
 stiffness, 122
- Metacarpophalangeal joint
 (MCPJ), 19, 35, 83
- Metalwork, 121
- Mini fragment plate fixation, 24
- Minimally invasive
 techniques, 283
- N**
- Non-displaced distal pole
 fractures, 168
- Non-steroidal anti-inflammatory
 drugs (NSAIDs), 241
- O**
- Oblique fractures, 74
- P**
- Palmar "V" Sign, 223
- Phalangeal fractures, 75
 assessing stability, 64, 65
 clinical assessment, 62–64
 middle phalanx, 72, 73
 open fractures, 64
 PIPJ and DIPJ, 77
 proximal phalanx, 72, 73
 rehabilitation, 76
 return-to-play, 77
 splinting
 buddy strapping, 65
 dorsal blocking splint, 65
 edinburgh position
 splint, 65
 thimble splint, 65
 volar splint, 65
 surgical intervention
 closed reduction, 66, 69
 Eaton-Belsky technique,
 66–68
 internal fixation, 69, 71
 intramedullary wires,
 67, 69
 open reduction, 69, 71
 percutaneous screw
 fixation, 69
 percutaneous wiring, 66
 treatment, 77
 in young athletes
 phalangeal base
 fractures, 76
 phalangeal neck
 fractures, 75
 seymour fracture, 74
- Phalangeal neck fractures, 75
- Polydioxanone suture (PDS), 244
- Posterior-anterior (PA)
 radiograph, 188
- Pre-dynamic instabilities, 217
- Proximal interphalangeal joint
 (PIPJ), 19, 83
 anatomy, 37, 38
 central slip extensor tendon
 injuries, 41
 collateral ligament injuries,
 38, 39
 condylar fractures
 return to sport, 54
 timing of surgery, 53

treatment, 50, 52, 53
 dislocations, 38
 complex dislocations, 39
 dorsal fracture, 43–45
 recurrent dislocations, 40
 return to sport, 39
 treatment, 38, 39
 dorsal lip fractures, 47
 palmar lip fractures, 43
 phalangeal neck fractures,
 55, 56
 pilon fractures
 remodelling, 47
 return to sport, 50
 treatment, 49, 50
 sub-condylar fractures, 55

R

Return to play (RTP), 273–275
 Ring' sign, 224
 Robert's view, 131
 Rolando's fractures, 129, 132
 Russe classification, 167

S

Scaphocapitate (SC) joint, 203
 Scaphoid fractures
 computed tomography, 164
 diagnosis, 163, 164
 Hebert classification
 system, 167
 magnetic resonance
 imaging, 164
 Mayo classification
 system, 167
 proximal pole, 166
 radiographs, 166
 return to play, 178, 180
 Russe classification, 167
 snuffbox, 163
 treatment
 arthroscopic-assisted
 fixation, 173
 dorsal approach, 172

immobilisation, 169
 internal fixation, 171
 long-arm vs. short-arm
 casts, 169
 mini-open dorsal
 approach, 174, 175
 non-operative
 treatment, 168
 open reduction, 171
 percutaneous screw
 fixation, 171
 socioeconomic and
 psychiatric factors, 168
 straight dorsal incision, 174
 volar approach, 171
 Scaphoid lunate advanced
 collapse (SLAC), 213
 Scapholunate (SL) ligament
 injury
 axial rotation, 208, 209
 carpal stabilisation, 209, 210
 dart-throwing motion, 206,
 207, 230
 distal row, 202, 203, 206
 dorsal ligament, 205, 206, 230
 extracapsular ligaments,
 203, 204
 FCU, 203
 flexion-extension, 207
 frontal plane of motion/
 radial-ulnar
 inclination, 208
 intracapsular ligaments,
 203, 204
 intrinsic ligaments, 204
 kinetics, 209
 midcarpal joint, 203, 206
 palmar ligament, 205, 206
 proprioceptive feedback,
 203, 230
 proximal ligament, 230
 radiocarpal joint, 203
 radius row, 202, 203
 sagittal plane of motion, 207
 SLD (*see* Scapholunate
 dissociation)

- Scapholunate dissociation (SLD), 230
 arthrography, 225
 arthro-MRI, 224
 arthroscopy, 225
 cadaveric division, 212
 classification, 216, 217
 degenerative changes, 213
 diagnosis, 217
 dynamic cineradiography, 223, 224
 examination, 218–220
 history, 217
 loaded lunate, 212
 perilunar dislocations, 210
 permanent misalignment, 212
 plain radiograph, 220–224
 positive scaphoid shift test, 230, 231
 progressive perilunar destabilisation, 211
 radioscapoid fossa, 213
 stages, 213
 treatment
 general factors, 226
 local factors, 226, 227
 patient selection, 226
 staging, 227–229
 triquetrum, 212
 ultrasound, 225
 wrist instability, 213, 215
- Scaphotrapezotrapezoidal (STT) joint, 172, 203
- Seymour fracture, 74
- Skier's thumb, 138
- SL interosseous ligament (SLIL) injury, 226–229
- Spiral fractures, 74
- Sports injury, *see* Extensor carpi ulnaris (ECU) tendon
- Stener's lesion, 143, 144, 146
- T**
- Terry Thomas' sign, 222
- Thimble splint, 65
- Three-ligament tenodesis technique, 228, 229
- Thumb metacarpal fractures
 Bennett's fracture, 126, 129
 extra-articular metacarpal shaft fractures, 129
 head fracture, 129
 imaging, 131
 medical history, 129, 131
 physical exam, 129, 131
 Rolando fracture, 129
 treatment, 131–133
- Thumb phalangeal fractures
 avulsions, 135
 extra-articular fractures, 133, 135
 intra-articular fractures, 135
 medical history, 143, 145
 physical exam, 143, 145
 radiographic evaluation, 145
 treatment, 145–147
- Triangular fibrocartilage complex (TFCC)
 acute/chronic wrist pain, 240
 arthroscopic techniques, 242
 biomechanical tests, 237
 central articular disc, 237
 cortisone injection, 241
 degenerative
 classification, 237
 degenerative tears, 241
 diagnosis, 240
 distal radioulnar joint, 238
 distal radius, 237, 238
 gripping pronation maneuver/
 ulnar positive variance, 240
 MRI, 240
 vs. open repair, 246–250
 operative intervention, 241, 242
 operative setup and
 diagnostic arthroscopy, 242–244
 repair process, 244, 245

resistance rotational
movements, 240
specificity and sensitivity, 240
symptomatic tears, 241
traumatic classification,
236, 237
ulnar-side wrist pain, 240
vascularity, 238, 239
Triquetrocapitate (TqC)
ligament, 206
Triquetrohamate (TqH) joint,
203, 206
T-shaped fracture, 47
Tuft fractures, 145

U

Ulnar collateral ligament (UCL)
injuries, 126–129
Ulnolunate (UL) ligament, 237
Ulnotriquetral (UT)
ligament, 237

V

Volar splint, 65

Z

Zone I flexor tendon injuries, 15