

#### Journal of Hand Surgery (European Volume) 2023, Vol. 48(6) 603–605 © The Author(s) 2023 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/17531934231169203 journals.sagepub.com/home/jhs



## Question 1 The capitate bone

A	Articulates with the radius	T/F
В	Articulates with the second metacarpal bone	T/F
С	Articulates with the fourth metacarpal bone	T/F
D	Articulates with the scaphoid	T/F
E	Articulates with the triquetrum	T/F

# **Question 2 Finger joint stiffness**

A	Immobilization of more than 3 weeks is a critical time frame for the development	T/F
В	PIP (proximal interphalangeal) joint release may be performed via a mid-lateral incision	T/F
С	In the release of a flexion contracture of the PIP joint the tight structures should be released in the order of accessory collateral ligament, collateral ligament and then checkrein ligament	T/F
D	The intraoperative improvement will reliably be maintained postoperative	T/F
E	The prognosis is better in younger patients	T/F

## Question 3 Hypothenar hammer syndrome

A	Is commoner in women than in men	T/F
В	ls idiopathic	T/F
С	Patients typically present with Raynaud's syndrome	T/F
D	Will often respond to conservative treatment	T/F
E	May present with an aneurysm of the ulnar artery	T/F

## **Clinical case**

This 45-year-old, left-handed man has fallen and presents with forearm pain. Here are representative radiographs.





What is the diagnosis? What level of radial fracture is more commonly associated with this injury? How will you manage this patient?

### **EBHS questions April 2023 Answers**

Question 1 The capitate bone

A	Articulates with the radius	F
В	Articulates with the second metacarpal bone	Т
С	Articulates with the fourth metacarpal bone	Т
D	Articulates with the scaphoid	Т
E	Articulates with the triquetrum	Т

The capitate has articular facets for the trapezoid, scaphoid, lunate and hamate and for the second, third and fourth metacarpals (Yu et al., 2004).

#### Question 2 Finger joint stiffness

A	Immobilization of more than 3 weeks is a critical time frame for the development	Т
В	PIP (proximal interphalangeal) joint release may be performed via a mid- lateral incicion	Т
С	In the release of a flexion contracture of the PIP joint the tight structures should be released in the order of accessory collateral ligament, collateral ligament and then checkrein linament	F
D	The intraoperative improvement will reli- ably be maintained postoperative	F
E	The prognosis is better in younger patients	Т

The problem of PIP joint stiffness is discussed by Richter (2023). Strickland is reported as having described that continued immobilization beyond 3 weeks led to stiffness. The joint may be released via a mid-lateral or a Bruner incision. The former has the advantage of possibly allowing earlier mobilization. Brüser et al. (1999) reported better outcome in a series of patients operated on via a mid-lateral incision compared with a palmar incision. The usual sequence of release is transverse retinacular ligament, flexor tendon sheath, checkrein ligaments, taking care to try to avoid the transverse digital artery, accessory collaterals, volar plate and finally collateral ligaments (Hammert, 2022). Ghidella et al. (2002) reported that the best surgical candidate is a patient younger than 28 years with a less severe diagnosis and who has preoperative maximum flexion measurement  $<43^{\circ}$ .

Question 3 Hypothenar hammer syndrome

A	Is commoner in women than in men	F
В	Is idiopathic	F
С	Patients typically present with Raynaud's syndrome	Т
D	Will often respond to conservative treatment	Т
Е	May present with an aneurysm of the ulnar artery	Т

Hypothenar hammer syndrome is thought to be caused by repetitive injury to the ulnar artery by repetitive direct trauma using the heel of the hand as a hammer. Although the disease was recognized as long ago as 1772, the first detailed report was by Conn (Eskandari and Kumar, 2014). Swanson et al. (2012) has a good review of the literature for those interested. Eskandari and Kumar (2014) reported that many cases will settle with conservative measures, but in recalcitrant cases or in case of critical ischaemia, surgery is indicated (Yang and Chung, 2018).

#### **Clinical case**

#### What is the diagnosis?

Galeazzi fracture dislocation. First described by Sir Astley Cooper but bearing the name of Dr Galeazzi (Sebastin and Chung, 2010). This is a fracture of the radius with an associated distal radioulnar joint (DRUJ) dislocation.

How will you manage this patient? Internal fixation of the radius is imperative. The DRUJ should then be assessed for stability in supination. Operative strategies for the management of persistent DRUJ instability include pinning with Kirschner wires. If the joint is irreducible the ECU (extensor carpi ulnaris) may be found to be interposed. Some authorities advocate repair of the TFCC (triangular fibro cartilage complex) (Sebastin and Chung, 2010) although the value of this is debated (Baratz, 2022).

You may be asked to describe your surgical approach and your postoperative regime.

#### References

- Baratz M. Disorders of the forearm. In Wolfe S, Pederson W, Kozin S et al. (Eds.) Green's operative hand surgery. Philadelphia, Elsevier, 8th Edn. 2022: 955–6.
- Brüser P, Poss T, Larkin G. Results of proximal interphalangeal joint release for flexion contractures: mid lateral versus palmar incision J Hand Surg Am. 1999, 24: 288–94.
- Eskandari MK, Kumar HR. Occupation vascular problems. In Cronenwett JL, Johnston KW (Eds.) *Rutherford's vascular surgery*. Philadelphia, Elsevier, 8th Edn. 2014: 1917.
- Ghidella SD, Segalman KA, Murphey MS. Long term results of surgical management of proximal interphalangeal joint contracture. J Hand Surg Am. 2002, 27: 799–805.
- Hammert WC. The stiff finger. In Wolfe S, Pederson W, Kozin S et al. (Eds.) *Green's operative hand surgery*. Philadelphia, Elsevier, 8th Edn. 2022: 399–403.
- Richter M. The stiff proximal interphalangeal joint an unsolved problem? J Hand Surg Eur. 2023, 48: 214–21.
- Sebastin SJ, Chung KC. A historical report on Riccardo Galeazzi and the management of Galeazzi fractures. J Hand Surg Am. 2010, 35: 1870–7.
- Swanson KE, Bartholomew JR, Paulson R. Hypothenar hammer syndrome: a case and brief review. Vascular Medicine. 2012, 17: 108–15.
- Yang G, Chung KC. Ulnar artery to superficial arch bypass with a vein graft. In Chung KC (Ed.) *Hand and wrist surgery*. Philadelphia, Elsevier, 3rd Edn. 2018: 732–7.
- Yu H-L, Chase RA, Strauch B. Atlas of hand anatomy and clinical implications. St Louis, Mosby, 2004: 204–5.