Editorial

Current Concept in the Treatment of Scaphoid Nonunion

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Since the historical paper by Linscheid et al in 1972,¹ behavior of the distal and proximal fragment of the scaphoid bone after its fracture or nonunion has been “the target” of biomechanics of the wrist. As the proximal carpal row is the “intercalated” bone, too many factors can affect the motion of the scaphoid fragment. Once the scaphoid is fractured, gradually the distal fragment flexes due to the force from the flexor carpi radialis, and the proximal fragment extends as the extension force passes through the scapholunate ligament from the triquetrum. The dorsal intercalated segment instability deformity after scaphoid fracture or nonunion has been explained in this issue. However, in daily clinical practice, we sometimes see normal alignment of the proximal carpal row after scaphoid fracture or nonunion.

This issue includes the “Special Review” article “Current Management of Scaphoid Nonunion Based on the Biomechanical Study” by Drs. Oka and Moritomo. They have studied kinematics of the scaphoid fracture or nonunion for the last

20 years and discuss behavior of the scaphoid fragments based upon the fracture site, proximal or distal to the scaphoid apex where the scapholunate and dorsal intercarpal ligaments attach. They clearly explain why there are several patterns of the behavior of the scaphoid fragment after fracture or nonunion from their biomechanical studies using computer simulation of the three-dimensional computed tomography data.

Interesting wrist-related scientific articles on scapholunate ligament, wrist clinical evaluation score, total arthroplasty of the wrist, triangular fibrocartilage complex lesion, and new technique for carpometacarpal arthroscopic arthroplasty are also included in this issue.

Don't miss it.

Reference

- 1 Linscheid RL, Dobyns JH, Beabout JW, Bryan RS. Traumatic instability of the wrist. Diagnosis, classification, and pathomechanics. *J Bone Joint Surg Am* 1972;54(08):1612–1632

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