Foreword

From Scapholunate Interosseus Ligament to Scapholunate Ligament Complex

Christophe L. Mathoulin, MD¹

¹ Clinique Jouvenet, Institut De La Main, Paris, France

J Wrist Surg 2013;2:98.

The understanding and treatment of lesions of the scapholunate ligament has markedly changed since the advent of wrist arthroscopy.

The intent behind this Special Focus Section on the scapholunate ligament is to chronicle the evolution of an isolated scapholunate interosseous ligament injury to the concept of a scapholunate ligament complex.

For many years the standard of care included a repair or reconstruction of the dorsal part of the scapholunate ligament, but the outcomes have often been unpredictable, and, based on kinematic and clinical studies, it now appears that scapholunate instability is more complex than we originally believed.

First, proprioception has an essential role in stabilizing the carpal bones. When an abnormal tension occurs on the ligamentous system, the nervous system leads to a muscular response that provides a dynamic protection to the scapholunate joint. This should make us rethink the routine resection of the distal termination of the posterior interosseous nerve, which provides important proprioception to the carpus!

Our understanding of the anatomy of the scapholunate complex has also evolved considerably.

Since the work of Viegas et al in 1999, who demonstrated the importance of the distal and dorsal part of the scapholunate ligament and its interactions with the dorsal intercarpal (DIC) and dorsal radiocarpal ligaments, our own

anatomical studies have shown a consistent connection between the DIC and the dorsal capsular reflection, which we have termed the dorsal capsuloscapholunate septum. Its exact role has yet to be determined, but our early clinical experience suggests that it interacts with the other extrinsic ligaments in acting as a secondary stabilizer of the scapholunate joint and that it is amenable to an arthroscopic repair. This repair technique has also been adapted for arthroscopic plication of palmar tears as well.

Advances in imaging through magnetic resonance (MR) technology combined with arthrography have provided images that are far superior to the results of earlier imaging techniques.

The arthroscopic classification of scapholunate ligament tears has also evolved and has led to a dynamic grading classification that is based on the abnormal joint kinematics rather than the size of the ligament tear per se, which in turn has led to more tissue-specific repair techniques.

However, in advanced cases when the ligament is no longer repairable using arthroscopic techniques, there is always a place for open repair.

We are no doubt at a crossroads for the understanding and treatment of scapholunate ligament injuries. The purpose of this review is to advance the understanding and treatment of lesions of the scapholunate ligament complex, while realizing that we are just at the beginnings of this journey.

Address for correspondence

Christophe Louis Mathoulin, MD,
Clinique Jouvenet, Institut De La Main,
6 Square Jouvenet, Paris, France (e-mail: cmathoulin@orange.fr).

Copyright © 2013 by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA.
Tel: +1(212) 584-4662.

DOI <http://dx.doi.org/10.1055/s-0033-1341961>.
ISSN 2163-3916.