

Technical Note

The Use of a Dorsal-Distal Portal in Trapeziometacarpal Arthroscopy

David J. Slutsky, M.D., F.R.C.S.C.

Abstract: An accessory dorsal-distal portal (D-2) was developed to improve the visualization of the medial aspect of the trapezium during an arthroscopic trapeziectomy. This portal is ulnar to the extensor pollicis longus tendon and 1 cm distal to the V-shaped cleft at the juncture of the index and thumb metacarpal bases. The entry site is marked before the tourniquet is elevated to allow palpation or Doppler ultrasound of the radial artery in the anatomic snuffbox. A 22-gauge needle is inserted with proximal, radial, and palmar angulation to penetrate the joint space, which is viewed from either the 1-R or 1-U portal. A small skin incision is made and is followed by the insertion of a blunt trocar and cannula. An anatomic dissection of 5 cadaveric hands revealed that branches of the superficial radial nerve passed within 3.2 mm, the radial artery was 3.8 mm away, the first dorsal metacarpal artery was within 2.8 mm of this portal, and the cephalic vein was within 2.8 mm of this portal. On average, the D-2 portal was 17.2 mm from the 1-U portal (range, 12 to 20 mm). This study provides a safe, standardized approach to the D-2 portal for trapeziometacarpal arthroscopy, which is useful for evaluation of the dorsal capsular ligaments, provides access to medial osteophytes during an arthroscopic partial trapeziectomy, aids in the reduction of intra-articular metacarpal base fractures, and facilitates triangulation of the instruments. **Key Words:** Arthroscopy—Thumb—Portal—

From Private Practice, South Bay Hand Surgery Center, Torrance, California, U.S.A.

The author reports no conflict of interest.

Address correspondence and reprint requests to David J. Slutsky, M.D., F.R.C.S.C., 3475 Torrance Blvd, Suite F, Torrance, CA 90503, U.S.A. E-mail: d-slutsky@msn.com

© 2007 by the Arthroscopy Association of North America

Cite this article as: Slutsky DJ. The use of a dorsal-distal portal in trapeziometacarpal arthroscopy. Arthroscopy 2007;XX:XXX-XXX [doi:10.1016/j.arthro.2006.12.020].

0749-8063/07/xx0x-6260\$32.00/0

doi:10.1016/j.arthro.2006.12.020

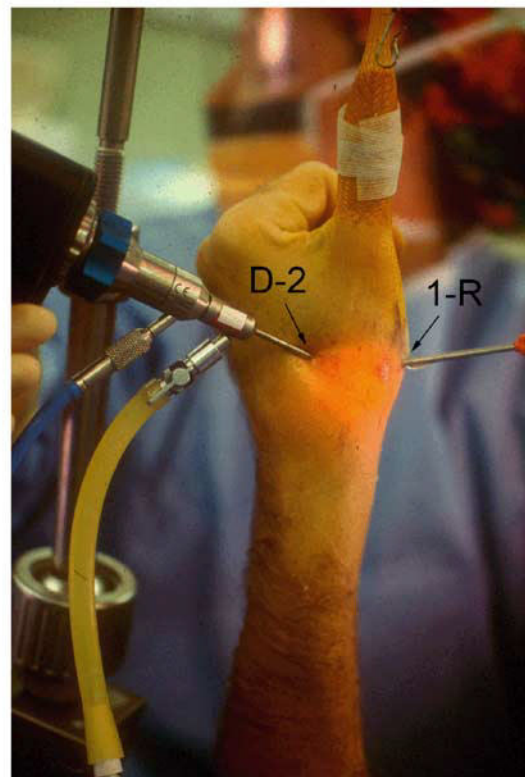
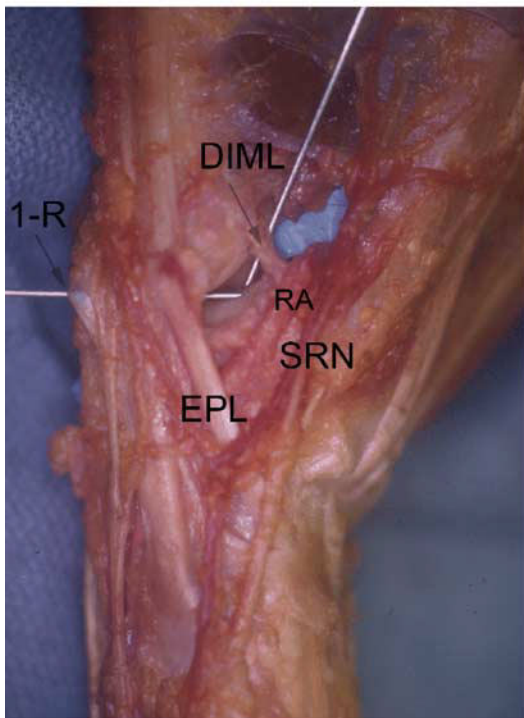
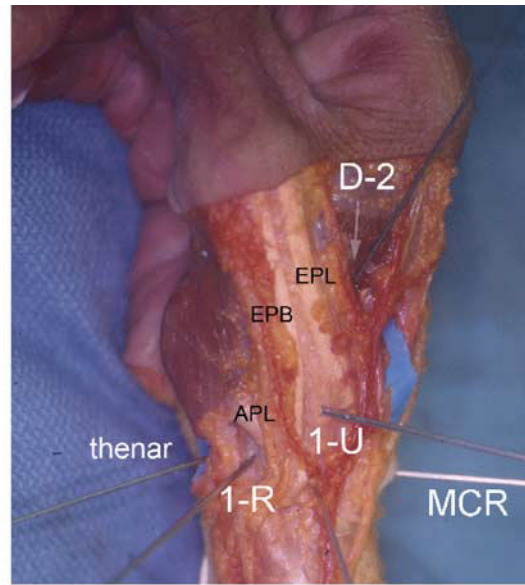
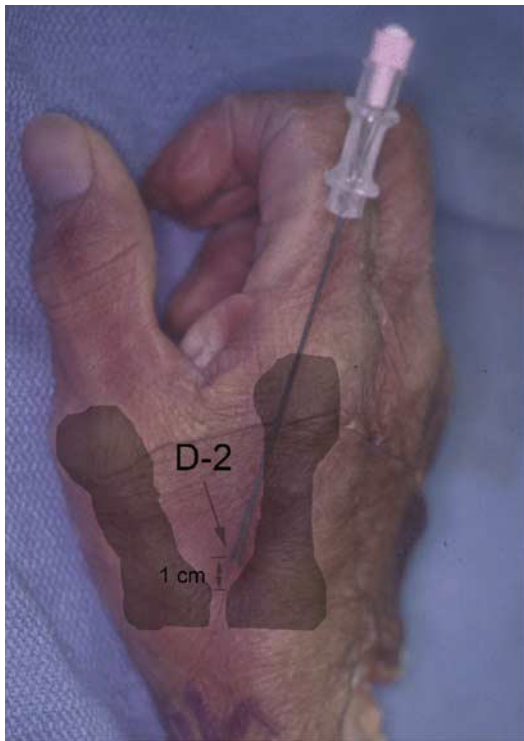


FIGURE. (Top Left) D-2 portal located 1 cm distal to juncture of thumb and index metacarpals. (Top Right) Relative positions of trapeziometacarpal portals. (EPL, extensor pollicis longus; EPB, extensor pollicis brevis; APL, abductor pollicis longus; MCR, midcarpal radial portal.) (Bottom Left) Deep dissection of D-2 portal. It should be noted how the needle in the D-2 portal points down toward the trapezium as compared with the needle in the 1-R portal, which crosses the trapezium horizontally. (DIML, deep intermetacarpal ligament; RA, radial artery; SRN, superficial radial nerve branches; EPL, extensor pollicis longus.) (Bottom Right) Right wrist with arthroscope inserted in D-2 portal and resector in 1-R portal.