
Collagenase for Recurrent Dupuytren Contracture With Skin Grafts

To the Editor:

Drs. Swanson, Watt, and Vedder1 reported a collagenase clostridium histolyticum (CCH) injection with diffuse skin graft dehiscence on manipulation at day 7, followed by an infection and graft loss 4 days after manipulation. The clinical photo shows a skin tear with infection. Skin tears occurred 9% of the time in clinical trials and are more common in clinical practice as a result of the routine use of local anesthetic for manipulation, which can now be more forceful, yet painless. A diabetic with severe postsurgical Dupuytren contracture is fraught with potential complications with any treatment. With experience in over 400 enzyme injections, I find the following case illustrative.

A 62-year-old, non-diabetic man had 2 previous fasciectomies, including a skin graft, and a needle aponeurotomy. The patient had thick recurrent contracture with flexion contractures of 90° at the proximal interphalangeal joint and 30° at the distal interphalangeal joint. Full vials (0.9 mg) of CCH were injected on 2 occasions using a dilution of 0.45 mL/vial between the metacarpophalangeal and distal interphalangeal joints, including the area near the graft (Fig. 1) under bupivacaine block. To help prevent skin tears, I manipulated the finger under lidocaine block at 2 weeks. The X’s indicate an injected volume of 0.1 mg, and the circles 0.2 mg of CCH injection. Follow-up at 3 months (Fig. 1B) showed reduction of the proximal interphalangeal joint contracture to 40° and the distal interphalangeal joint contracture to 0°. No graft loss occurred.

With recurrent disease, CCH is an excellent choice because it is nerve and vessel sparing, while dissolving both contracture and scar. Surgery for recurrent Dupuytren contracture carries a high risk of nerve complications, infection, and stiffness, and the risk of circulatory compromise and amputation.2 Collagenase clostridium histolyticum carries the risk of tendon rupture, but injections can be carefully placed to help prevent this. This patient failed needle aponeurotomy, which is less effective for proximal interphalangeal contractures.3

Grafts should possibly not be a contraindication for enzyme treatments for recurrent Dupuytren contracture.

Keith Denkler, MD
Division of Plastic Surgery
University of California–San Francisco
Larkspur, CA

http://dx.doi.org/10.1016/j.jhsa.2013.03.063

K.D. has served on advisory boards and as a speaker for Auxilium Pharmaceuticals.

REFERENCES


In Reply:

We appreciate the insight Dr. Denkler shares1 in response to our recently reported case of diffuse skin
graft dehiscence after clostridial collagenase injection, particularly given his considerable experience with non-operative treatment of Dupuytren contracture. The case he shares involves a smaller skin graft and a pathologic cord well ulnar to the graft, compared with the case we report, in which the central cords ran directly under a larger graft. That collateral damage by collagenase to an incorporated skin graft may be proportional to certain factors, such as graft proximity, size of graft, and severity of disease, seems plausible. We again suggest that surgeons proceed cautiously when considering collagenase injection in the presence of a skin graft and consider the possibility of graft loss. We agree that collagenase may be particularly suitable for recurrent disease, because these patients have few good alternatives and a healed skin graft may periodically be present. We hope that with time and experience, and with more cases, indications and contraindications for collagenase will be further refined.

Jordan W. Swanson, MD, MSc  
Andrew J. Watt, MD  
Nicholas B. Vedder, MD  
Division of Plastic Surgery  
University of Washington School of Medicine  
Seattle, WA

http://dx.doi.org/10.1016/j.jhsa.2013.04.014

REFERENCES

Letter Regarding “Magnetic Resonance Imaging After Endoscopic Carpal Tunnel Release”

To the Editor:
We read with interest the study by Beck et al,1 published in the February 2013 issue of the Journal of Hand Surgery. The stated purpose of this small study was to determine whether magnetic resonance imaging would reveal morphological changes in the carpal tunnel and median nerve 3 months after endoscopic carpal tunnel release. The authors concluded that the study failed to show changes in the transverse carpal ligament. They suggested that it may have some value in evaluating median nerve morphology.

Using magnetic resonance imaging to study the morphology of the median nerve seems to be an expensive stretch for that technology. The videos of the Micro-Aire uniportal endoscopic carpal tunnel release2 clearly show the separation of the transverse carpal ligament (not flexor retinaculum). Furthermore, the studies of Richman et al3,4 show a reproducible volumetric change in the carpal canal volume.

We would like to point out that images given to the reader were not useful for comparison because they were taken at different levels of the wrist.

We do not understand how the information presented in this article helps clinicians, and we ask the authors to clarify their study’s clinical relevance.

Virginia R. Bush, BFA  
University of Louisville School of Medicine  
Louisville, KY

Dean S. Louis, MD  
University of Michigan Medical School  
Ann Arbor, MI

Morton L. Kasdan, MD  
University of Louisville School of Medicine  
Louisville, KY

http://dx.doi.org/10.1016/j.jhsa.2013.03.059

REFERENCES

In Reply:
We appreciate the authors’ comments for bringing attention to additional studies and allowing us the