

Bringing It All Together

A Practical Approach to the Treatment of Dupuytren Disease



Steven C. Haase, MD*, Kevin C. Chung, MD, MS

KEYWORDS

- Dupuytren disease • Collagenase • Fasciectomy • Shared decision making
- Evidence-based medicine

KEY POINTS

- Interventions for Dupuytren disease range from minimally invasive options (needle aponeurotomy, collagenase injection) to extensive surgeries (fasciectomy, dermofasciectomy).
- Because no option is completely curative, and each has associated risks, decisions about treatment should be made using the best evidence available in a shared decision-making process between the patient and the clinician.
- Regardless of the treatment chosen, a detailed knowledge of anatomy, as well as precise, careful technique, is necessary for the safe, effective, efficient elimination of Dupuytren contractures.

Despite the passage of more than 200 years since Cline first proposed a treatment for Dupuytren disease, debate still continues regarding the optimal intervention for these patients. Even the definition of “optimal” is in flux as one tries to compare techniques based on complexity, effectiveness, cost, and other criteria. Given the worldwide prevalence of Dupuytren disease, one must also consider the implications of the interventions in different cultures, different economies, and different health care delivery systems. It would be quite shortsighted for any practitioner to claim they have developed the “best” algorithm of care, when it is unlikely any one approach will be generalizable to all of the world’s populations.

Nonetheless, within the context of a tertiary practice at a high-volume academic medical center, the authors have developed what they believe is a practical approach to the treatment of Dupuytren disease. At its core, it is a *patient-centered approach* heavily based on *shared decision making*: 2 characteristics that should make much of

this discussion applicable to a wide range of clinical practices. Their approach begins with a simple assignment of patients into one of 3 groups:

1. Observation (no intervention)
2. Intervention: minimal (clinic based)
3. Intervention: operative (operating room based)

OBSERVATION

Many patients present to the authors’ clinic with early Dupuytren disease and require no operative intervention. Some are self-referred, and others are sent by their primary care physician when a new nodule is discovered. A subset of these patients is quite worried about the presence of malignancy, and these patients may require reassurance to help their peace of mind. If patients are unwilling to accept the experienced surgeon’s diagnosis, based on history and physical examination, an objective evaluation with ultrasound imaging can confirm the diagnosis at relatively low cost.

Disclosure Statement: The authors have no conflict of interest.

Department of Surgery, Michigan Medicine, University of Michigan Medical School, 2130 Taubman Center, 1500 East Medical Center Drive, Ann Arbor, MI 48109, USA

* Corresponding author.

E-mail address: shaase@med.umich.edu

Hand Clin 34 (2018) 427–436

<https://doi.org/10.1016/j.hcl.2018.04.003>

0749-0712/18/© 2018 Elsevier Inc. All rights reserved.

In rare cases, nodules in atypical locations may not be immediately identified as Dupuytren disease by the surgeons, and there is certainly very little morbidity to perform excisional biopsy in these cases. In the authors' experience, postoperative "flares" or worsening of the disease is rare in these patients.

Observation may also be warranted for patients with mild contractures. Despite the appeal of the minimally invasive procedures for this disease, all interventions are accompanied by some risk. Patients with mild proximal interphalangeal (PIP) contractures (less than 30°) that do not interfere with daily function might be considered candidates for surgery in some textbooks. However, in the authors' approach, these patients are carefully evaluated and counseled about their options. A patient with a strong Dupuytren diathesis may recur quickly after operative PIP release, and this can be discouraging for surgeon and patient alike. Even after release of a mild PIP contracture, patients need to be committed to the postoperative therapy program, and they need to understand the chance of recurrence. Many times, after a frank discussion with these patients, the authors decide to take careful measurements of their contractures and reevaluate in 3 to 6 months. If there is demonstrable, objective worsening of the contracture during this period of observation, then both surgeon and patient may feel more comfortable proceeding with an intervention.

INTERVENTION: MINIMAL

In the authors' institution, the demand for collagenase treatment has increased steadily since its US Food and Drug Administration (FDA) approval in 2010. Many patients request this treatment, having been referred by a friend or by their physician specifically for this intervention. Despite the popularity

this treatment has achieved, the authors have a detailed discussion about all applicable interventions, ranging from needle aponeurotomy to dermofasciectomy, depending on the patient's needs and presentation.

Patients with distinct cords in the palm leading to metacarpophalangeal (MCP) contractures are excellent candidates for either needle aponeurotomy or collagenase treatment (Fig. 1). After educating patients about both treatment options, including the potential costs, risks, and estimated recurrence rates, the authors encourage patients to choose between these interventions freely. Despite telling patients that there is no clear long-term advantage of one over the other, most patients in the authors' institution choose collagenase treatment over needle aponeurotomy.

For palmar cords that extend into the finger, leading to PIP contractures via spiral cords and/or central cords, it is important to evaluate what effect the division/dissolution of the cord will have on the PIP joint. Many of these cords cross both the MCP and the PIP joints (Fig. 2). Mobility of the PIP joint is assessed with the MCP flexed, and vice versa, to determine how much of the PIP contracture is attributed to the cord, and how much is intrinsic joint contracture. Although minimally invasive techniques can be used on these distinct cords, one may not expect complete resolution of the PIP contracture if there is intrinsic joint stiffness present. Patients are counseled that they may still have some residual PIP contracture present, even if the palmar cord is completely disrupted by minimally invasive means.

Many patients seek out these minimally invasive treatment options after previously undergoing more invasive surgery. When patients have successfully recovered from fasciectomy, completed all the postoperative therapy, and then develop a recurrence, they are often quite interested in pursuing something less invasive if possible. If distinct



Fig. 1. (A) A 73-year-old patient with Dupuytren contracture limited to the MCP joint of the left small finger. (B) Failed "table-top test" before collagenase treatment. (C) Two months after collagenase treatment, with restoration of full extension.

Download English Version:

<https://daneshyari.com/en/article/8798764>

Download Persian Version:

<https://daneshyari.com/article/8798764>

[Daneshyari.com](https://daneshyari.com)