

Dupuytren's Disease

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Dupuytren's Disease (DD) has surely plagued people for hundreds of years at least. Whilst the 20th century saw surgery for any condition – DD included – becoming safer, the ideal treatment was not established. For a disease with an inexorable tendency to progress until treatment was inevitable and to recur after treatment, opinions ranged from the most radical excision with grafting, to the most simple least invasive option of needle fasciotomy. The wound could be left open to heal by secondary intention, or closed with a variety of flaps. In the 21st century, treatment paradigms have been challenged with the option of collagenase which can dissolve a segment of disease – a “surgical drug”.

There is much we do not yet know and that we may never know. Whilst randomized studies of one intervention against another would be desirable there are many issues. Would patients really consent to surgery rather than to a needle? If they are to have a needle, would they really consent to the concept of scratching through a cord rather than to the concept of dissolving disease? Prior to randomization, simple discrete cords cannot be regarded as the same as diffuse disease – the treatment is likely to be different with the former tending to simpler techniques and the latter to more deletive techniques.

What is the best outcome measure? *Range of movement*, whilst objective, does not particularly correlate with function before or after treatment nor with patient satisfaction [1], [2], [3], [4]. Patient related outcome measures (PROMS) such as the Disability of the Arm Shoulder Hand (DASH) or Patient Evaluation Measure (PEM) are not specific enough for DD; more specific measures such as the SDSS [5] or URAM [6] are perhaps more suitable but need independent evaluation. *Recurrence* as an outcome needs a universally accepted definition, something which has eluded the literature so far.

The future treatment of DD will probably be undertaken, like many other diseases, at cellular and genetic level. Much is known about the altered cellular processes; when this knowledge is expanded and clarified, then manipulation of genes or the products of their expression might allow the disease to be halted at its earliest presentation.

In this chapter, the knowledge so far is presented by experts picked from around the world. The format of the Living Textbook of Hand Surgery will allow the individual section authors to update their contributions regularly so that as new concepts and treatments come, the reader of the Living Textbook will be kept up to date.



References

1. Degreef I, Vererfve PB, De Smet L. Effect of severity of Dupuytren contracture on disability. *Scand J Plast Reconstr Surg Hand Surg.* 2009;43(1):41-2. DOI: [10.1080/02844310802410125](https://doi.org/10.1080/02844310802410125)
2. Engstrand C, Borén L, Liedberg GM. Evaluation of activity limitation and digital extension in Dupuytren's contracture three months after fasciectomy and hand therapy interventions. *J Hand Ther.* 2009 Jan-Mar;22(1):21-6; quiz 27. DOI: [10.1016/j.jht.2008.08.003](https://doi.org/10.1016/j.jht.2008.08.003)
3. Zyluk A, Jagielski W. The effect of the severity of the Dupuytren's contracture on the function of the hand before and after surgery. *J Hand Surg Eur Vol.* 2007 Jun;32(3):326-9. DOI: [10.1016/J.JHSB.2006.10.007](https://doi.org/10.1016/J.JHSB.2006.10.007)
4. Draviaraj KP, Chakrabarti I. Functional outcome after surgery for Dupuytren's contracture: a prospective study. *J Hand Surg Am.* 2004 Sep;29(5):804-8. DOI: [10.1016/j.jhsa.2004.05.005](https://doi.org/10.1016/j.jhsa.2004.05.005)
5. Mohan A, Vadher J, Ismail H, Warwick D. The Southampton Dupuytren's Scoring Scheme. *J Plast Surg Hand Surg.* 2014 Feb;48(1):28-33. DOI: [10.3109/2000656X.2013.794349](https://doi.org/10.3109/2000656X.2013.794349)
6. Beaudreuil J, Allard A, Zerkak D, Gerber RA, Cappelleri JC, Quintero N, Lasbleiz S, Bernabé B, Orcel P, Bardin T; URAM Study Group. Unité Rhumatologique des Affections de la Main (URAM) scale: development and validation of a tool to assess Dupuytren's disease-specific disability. *Arthritis Care Res (Hoboken).* 2011 Oct;63(10):1448-55. DOI: [10.1002/acr.20564](https://doi.org/10.1002/acr.20564)

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