


A Comparison of Patient-Reported Outcome Measures for Dupuytren Disease: A Prospective View

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Dupuytren's disease



Abnormal thickening of the skin in the palm of your hand at the base of your fingers

Progressive flexion of the fingers
NO availability of extension

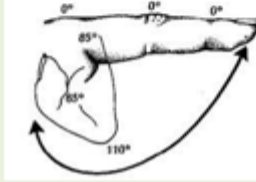
Treatments

- Fasciectomy - Resection of the abnormal tissue
- Fasciotomy - Cut the abnormal tissue
- Enzymatic fasciotomy - Collagenase that "dilutes" the cord and break it
- Other treatments - Radiotherapy, splinting...

VALUATION OF RESULTS IN DUPUYTREN'S TREATMENT

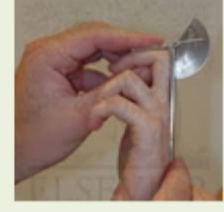
RANGE OF MOTION:

- Objective
- Reproducible




BUT → What the patient think about the result of the treatment?


- Is he/she satisfied?
- Responds to their needs and requirements?



THE NEED OF EACH PATIENT IS DIFERENT



BLUE-COLLAR WORKER
GARDENER
BRICKLAYER



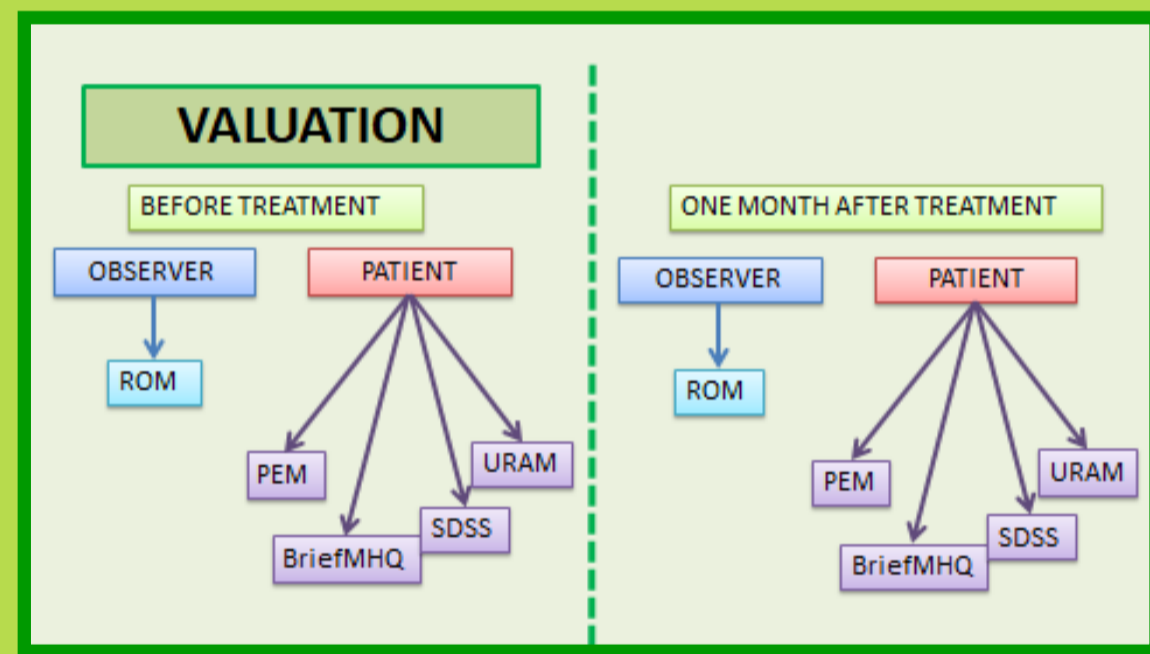
WHITE-COLLAR WORKER
MUSICIAN
SECRETARY

OBJECTIVES

Most widely used questionnaires for Dupuytren's
Their psychometric properties
Their association with an objective measurement of treatment improvement → ROM

METHODS

Prospective study.
QUESTIONNAIRE COMPARISON
REGION SPECIFIC
PEM → Patient Evaluation Measure
BriefMHQ → Brief Michigan Hand Outcome Questionnaire
DISEASE SPECIFIC
SDSS → Southampton Dupuytren Scoring Scheme
URAM → Unite Rhumatologique des Affections de la Main
Comparison with an objective measurement → ROM



RESULTS

- ✓ 92 Treatments
- ✓ Completed questionnaires → 100%
- ✓ **Before and after treatment scores**
 - ✓ Strong correlation between all questionnaires
 - ✓ (Spearman rho >0.6).
- ✓ **Minimal Clinically Important Change Score**
 - ✓ Similar between tres of the questionnaires(URAM, 11.528/45=0.256; SDSS, 5.079/20=0.254; and PEM, 21.542/77=0.215)
 - ✓ Slightly lower for the briefMHQ (10.617/60=0.177).
- ✓ There were **NO correlations** between treatment results and...
 - ✓ Hand Treated (r = 0.107; p = 0.31)
 - ✓ Joint treated (r = 0.163; p = 0.12)
 - ✓ Finger treated (r = -0.151; p = 0.15)

○ Internal responsiveness
○ Effect size
○ Standardized Response Mean

Questio	Change after treatment			Paired t test	P Value (t test)	ES	SRM	Pearso n's r	RCI*
	Mean	95% CI (lower bound)	95% CI (upper bound)						
URAM	-11.717	-13.808	-9.627	-11.135	<0.01	-1.136	-1.161	0.375	11.528
SDSS	-5.087	-5.988	-4.186	-11.212	<0.01	-1.116	-1.169	0.377	5.079
briefMHQ	-12.185	-14.127	-10.242	-12.459	<0.01	-1.197	-1.299	0.450	10.617
PEM	-19.609	-23.476	-15.742	-10.073	<0.01	-0.910	-0.895	0.500	21.542

Responsiveness is perhaps the most interesting parameter, as it reflects the ability of a questionnaire to detect change in a group of patients known to have changed. In our series, the ES and SRM values were higher than 0.8 in all cases, indicating that all four questionnaires were sensitive to the effects of treatment.

CONCLUSIONS

We did not find that any one questionnaire performed better than the others in detecting perceived changes in health status among patients with Dupuytren's disease treated with collagenase.