Re: Akhavani MA, McMurtrie A, Webb M, Muir L. A review of the classification of Dupuytren's Disease. J Hand Surg Eur. 2015, 40: 155–65 and Rodrigues JN, Zhang W, Scammell BE, Davis TRC. What patients want from the treatment of Dupuytren's Disease – is the Unité Rhumatologique des Affections de la Main (URAM) scale relevant? J Hand Surg Eur. 2015, 40: 150–4

Dear Sir,

We read with interest the above two articles that point out the limitations of using an objective measurement (range of movement) when assessing Dupuytrens' Disease (DD), yet the potential drawbacks of a subjective measurement such as URAMS may not capture all relevant functional problems. Patient-related outcome measures should now be an integral part of hand surgery practice, but they must accurately reflect the underlying condition. The QuickDASH score (QD) is widely used across hand surgery, but many of the domains (e.g. tingling, pain, sleep) are not affected in DD, which will dilute its validity; it does not correlate well with deformity (Budd et al., 2011).

Might we draw to the attention of the readership to the Southampton Dupuytren's Scoring Scheme (SDSS) which has just five domains, each relevant to DD (Mohan et al., 2014). We found that the SDSS had good internal consistency (Cronbach's alpha 0.87), and high test–retest reliability ($r = 0.79$). In comparison with the QD it had favourable field characteristics and greater sensitivity to change (Standardized Response Mean SDSS –1.8; QD –1.2).

We have since used the scheme on 297 patients with DD prior to injection of Clostridial Collagenase Histiolyticum, correlating the pre-injection goniometric flexion deformity with both SDSS and QD. We found that whereas SDSS correlated moderately

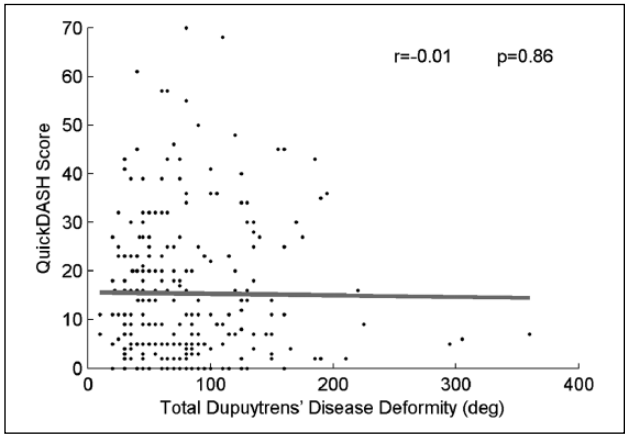

Figure 1. Correlation of QuickDASH with Dupuytren's deformity.

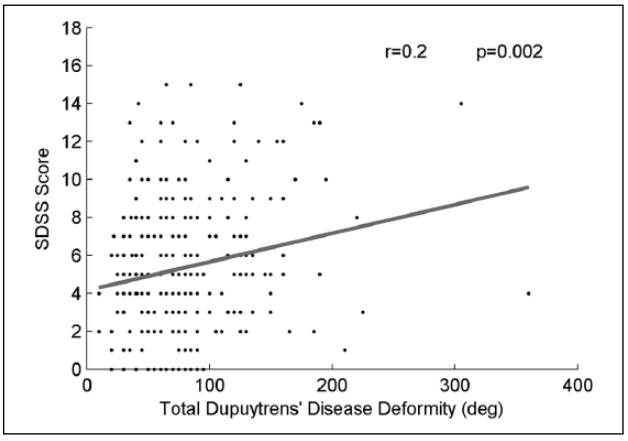

Figure 2. Correlation of SDSS with Dupuytren's deformity.

with deformity (Figure 1, $r = 0.2$, $p \geqslant 0.002$) QD did not (Figure 2, $r = -0.01$, $p = 0.86$).

We would welcome independent validation of the SDSS, which we believe may have a useful role in assessing the functional problems associated with DD.

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Reply

Dear Sir,

Rodrigues JN, Zhang W, Scammell BE, Davis TRC. What patients want from the treatment of Dupuytren's Disease – is the Unité Rhumatologique des Affections de la Main (URAM) scale relevant? J Hand Surg Eur. 2015, 40: 150–4

We thank Professor Warwick and colleagues for their interest in our article. We agree that further work is required to establish the optimal outcome measurements for clinical practice and research in Dupuytren's disease, and commend them on the development of Southampton Dupuytren's Scoring System (SDSS) (Mohan et al., 2014). We also agree that further independent validation of candidate measures is required.

The described correlation between the SDSS and deformity was statistically significant, and was greater

than the correlation between the QuickDASH and deformity. However, patients were only assessed before treatment, such that the authors' conclusions may not apply after treatment. In spite of statistical significance, an *r* of 0.2 still represents relatively weak correlation between the SDSS and angular deformity. On the other hand, angular loss of extension should not be used as a 'gold standard', and certainly not as a surrogate for hand function (Mokkink et al., 2010). The range of goals identified in our study suggests that patients' experience of functional limitation in preoperative Dupuytren's disease is more complex than can be explained by loss of extension alone (Rodrigues et al., 2015). Additionally, functional impairment in the early post-treatment phase may result from complications, such as pain and limited finger flexion. These complications may result in worse disability than the pre-operative state, yet their impact may be missed if the outcome measure used mainly assesses loss of extension, or when calculating the responsiveness of the outcome measure using the standardized response mean or effect size. In contrast, studying interpretability of tools such as the SDSS, where the ability to respond to 'clinically meaningful' change is considered, may prove more informative.

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Mokkink LB, Terwee CB, Knol DL et al. The COSMIN checklist for evaluating the methodological quality of studies on measurement properties: a clarification of its content. BMC Med Res Methodol. 2010, 10: 22.

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Reply

Dear Sir,

Re: Akhavani MA, McMurtrie A, Webb M, Muir L. A review of the classification of Dupuytren's Disease. J Hand Surg Eur. 2015, 40: 155–65

We are grateful to Professor Warwick and his colleagues for their interest in our article.

We were conscious when writing that there was a risk that we would miss a worthwhile assessment scheme, especially if it was recently published.

We agree that there is a need for consensus on a single scoring system, even if we fear that there might be a cure for Dupuytren's disease before this is agreed upon. Our one concern is that once a scheme has been adopted, there is a risk that it stifles innovation and that new schemes struggle to make an impact.

Professor Warwick's scheme appears to have the beauty of being quick, easy and manageable in a busy clinic. The authors do however draw attention to the fact that some of their patients continued to have disability, despite full correction of their flexion contracture. The scheme is thus useful for patient outcome measurement, but we suggest that a more comprehensive assessment may be useful in the longer term, if only to understand how degrees of contracture (the aspect that we try to correct in our treatment) and patient satisfaction are linked.

We are happy to coordinate responses and thoughts on this.

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