



Rehabilitation of Stage One Scapholunate instability (ReSOS): An online survey of UK practice.

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Introduction and Aims

Scapholunate (SL) instability is one of the most frequent types of wrist instability, but its optimal management has not been established.

1. What are the current conservative management strategies of stage 1 SL instability in UK clinical practice?
2. How do clinicians measure effectiveness of current conservative management strategies of stage 1 SL instability in UK clinical practice?

Methods

- A cross-sectional online survey was developed using a CROSS¹ guideline with reference to a clinical vignette.
- Purposive sample of Physiotherapists (PTs) and Occupational Therapists (OTs) with experience in ReSOS within the UK.
- 2 stages of piloting completed.
- Frequency of treatment strategies were collated via a 5-point Likert-type scale. Evaluation strategies via fixed response answers.
- Data were analysed descriptively. Treatment responses were grouped into frequently reported (quite often or always) and infrequently reported (never & rather infrequently).



Fig 1. Frequently used treatments 3-6 weeks



Fig 2. Frequently used treatments after 7 weeks

Results

- 43 surveys were completed & analysed, including 30 PTs, & 13 OTs.
- 90% respondents worked in the NHS.
- 56% had treated wrist & hand pathology for over 10 years.
- Respondents used a wide range of treatment strategies across all time-points; however, many were infrequently used. Frequently used treatment strategies are shown in Fig. 1 & Fig. 2.
- Evaluation strategies included a range of physical testing, PROMs and PREMs (Fig. 3).



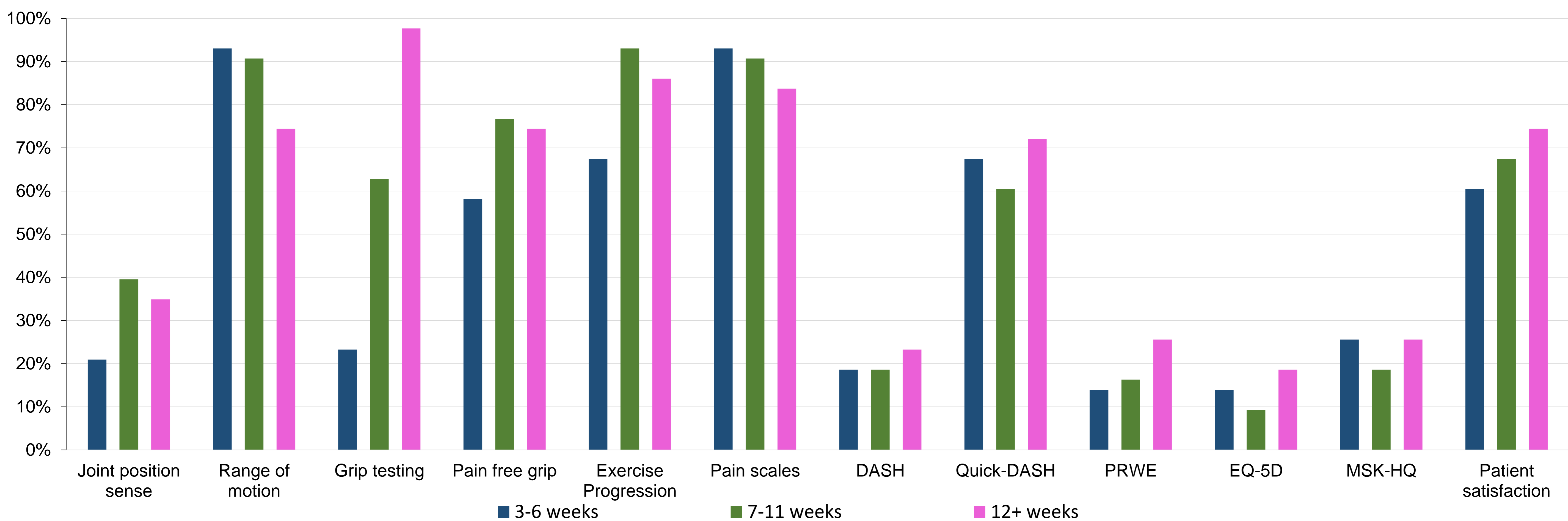
Discussion

- Activity advice & education was the most frequently used treatment.
- At 3-6 weeks “basic”² rehabilitation strategies were used most frequently. After 7 weeks more neuromuscular strategies were frequently used.
- Isometric training of APL, FCR, ECRL has been recommended in ReSOS to reduce the SL diastasis & was more frequently reported from 7 weeks.
- Physical evaluation measures were frequently used across all time-points.
- Quick-DASH was most frequently used PROM at all time-points. The content validity of Quick-DASH in this population is unknown and needs to be established.³

Conclusion

- First study to investigate the evaluation & ReSOS in the UK.
- Reported treatments replicate proposed rehabilitation stages from the literature.²
 - Progression neuromuscular rehabilitation strategies are frequently used.
- However, optimal rehabilitation and evaluation remains unknown & future research could consider development of a consensus of best practice.

Fig 3. Percentage frequencies of reported evaluation strategies



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1. Sharma A, Minh Duc NT, Luu Lam Thang T, et al. A consensus-based checklist for reporting of survey studies (CROSS). *Journal of general internal medicine* 2021; 36: 3179-3187.
 2. Hager E. Proprioception of the Wrist Joint: A Review of Current Concepts and Possible Implications on the Rehabilitation of the Wrist. *Journal of Hand Therapy* 2010; 23: 2-17. DOI: 10.1016/j.jht.2009.09.008.
 3. Ziebart C, Bobos P, Furtado R, et al. Patient-reported outcome measures used for hand and wrist disorders: An overview of systematic reviews. *Journal of Hand Therapy* 2023.