

# Acceptability of Lycra Sleeve for the management of Glenohumeral Subluxation in People with Stroke: Nurses and Therapists' Perceptions

Rob Jones\*, Chris Easton\*, Rosemary Greenwood\*, Ailie Turton\*\*, Praveen Kumar\*\*

\*University Hospital Bristol NHS Foundation Trust

\*\*University of the West of England

## INTRODUCTION

- Glenohumeral subluxation (GHS) is reported in up to 81% of patients with stroke
- Previous studies have found that a Lycra sleeve can reduce subluxation gap in small samples of people with chronic stroke (n=5; n=6).
- Prior to testing its effectiveness, we need to understand if Lycra Sleeve is an acceptable form of treatment.

## AIM

The aim was to explore staff (Therapists and Nurses) perceptions regarding the use of the Lycra Sleeve whilst delivering care and rehabilitation to patients with stroke.

## METHODS

As part of a feasibility trial, questionnaires were used to explore staff's perceptions. Staff were provided training on the application of the Lycra sleeve. Two separate questionnaires were developed to tailor towards nurses and therapists. Patients wore the sleeve for 3 months (in hospital and following discharge). The questionnaire consisted of questions on a 7 point Likert Scale with 1- Entirely disagree to 7- Entirely agree categories. In addition, there were free-text boxes for additional comments. Data was analysed using descriptive statistics and thematic analysis.

## REFERENCE

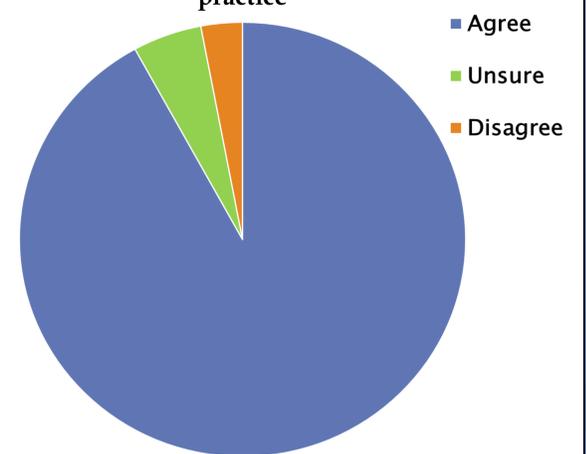
Kumar P (2019) The effects of Lycra arm sleeves on Glenohumeral Subluxation in Post-stroke Hemiplegia A Preliminary Study. Journal of Prosthetics and Orthotics.31(1):70-75

## RESULTS

- **31 stroke survivors** were included in the feasibility study. Nurses (n=10), Nursing assistants (n=5), Physiotherapists (n=10), Occupational therapists (n=8) and therapy technicians (n=3) provided feedback relating to **one or more of the patients** included.
- The **majority** of respondents (**>80%**) found that: training and information received was **appropriate**; the patient received the right sized sleeve; and that putting on and taking off the sleeve was easy.
- Some **staff from outside the hospital** setting requested **more training** and information.
- There was **uncertainty** about if the sleeve allowed **more engagement** in rehab or **altered resting alignment** of the limb.
- Nurses agreed (**76%**) that the sleeve allowed engagement in daily activities.
- On **average** it took a **minute and a half to put on (96 seconds)** to put the sleeve on.
- In **2 cases** the sleeve **did not fit the patient's arm well** and was therefore not tolerated.
- Only **few adverse effects** were reported: Minor **marking or redness** of the skin was most common (although for only 3 patients). There were isolated reports of excessive heat, sweating and itching, as well as mild swelling or pain related to the sleeve.
- Therapists were generally **unsure (50%)** about **recommending** the sleeve for longer term use – citing a need for more clarity of evidence or benefit before they could do this.



Acceptable in daily life and routine clinical practice



## CONCLUSIONS

The use of a Lycra sleeve, as an adjunct to therapy, is acceptable to nurses and therapists and is not a burden or hindrance to nursing care or therapy in either hospital, nursing home or home environments. Understanding the purpose of the sleeve, providing basic training and defining potential benefit would be necessary in the larger scale study.

Rob Jones (Principal Investigator)

Stroke Specialist Physiotherapist  
University Hospital Bristol NHS Trust  
[Robert.Jones@UHBristol.nhs.uk](mailto:Robert.Jones@UHBristol.nhs.uk)

Dr Praveen Kumar (Chief Investigator)

Senior Lecturer in Physiotherapy  
University of the West of England  
[Praveen.Kumar@uwe.ac.uk](mailto:Praveen.Kumar@uwe.ac.uk)

### Acknowledgements

1) Above and Beyond (charity) University Hospitals Bristol NHS Foundation Trust. 2) Jobskin Ltd UK, for supplying the Lycra Sleeve