

Assessment Approaches for Hemiplegic Shoulder Pain – A Scoping Review



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INTRODUCTION

- Hemiplegic shoulder pain (HSP) is a common complication of stroke that can lead to functional dependency and reduced quality of life.
- HSP is reported between 16% and 84% in people with stroke.
- There is limited evidence to support what current assessments are being utilised in examining HSP
- A recent survey of therapists in the UK reported that clinicians are using a wide range of assessment approaches irrespective of the underlying pathology.

PURPOSE

- The primary purpose was to gather all potential assessment approaches available for HSP
- To identify how frequently each assessment approach occurred.

METHODS

- Five researchers were involved
- The following databases were searched systematically: Embase, CINAHL plus, Medline, Cochrane library and AMED
- Search Terms were:
 - 1) assess* OR examinat* OR measure* OR investigat*
 - 2) stroke OR cerebr* accident OR cerebr* event OR cerebr* hemorrhage OR ischemic attack
 - 3) Pain OR discomfort OR ache OR irritation
 - 4) Shoulder OR glenohumeral
- Inclusion Criteria: 1) HSP 2) English Language 3) Adult participants (>18 years old) 4) Outcome measure related to HSP
- Initially articles were reviewed by individual researchers. Then they were reviewed by a different researcher

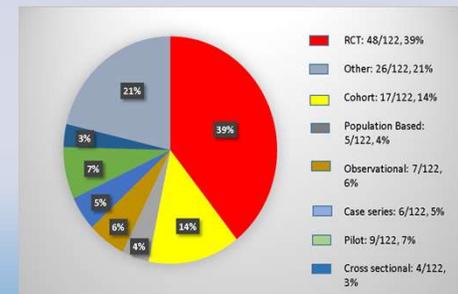
RESULTS

A total of 122 out of 585 studies were found.

43 assessment methods of HSP were identified (Table 1)

Outcome Measure	Abbreviation	Frequency
Visual Analogue Scale	VAS	66
Passive Range of Movement	PROM	51
Fugl-Meyer Assessment	FMA	29
Ashworth/Modified Ashworth Scale	MAS	26
Numerical Rating Scale	NRS	23
Active Range of Movement	AROM	14
Brief Pain Inventory	BPI	12
Neers Test		8
Hand Behind Neck Test	HBN	6
Independent Questionnaire		6
Ritchie Articular Index	RAI	6
ShoulderQ		4
Assessment of Subluxation		5
Pain History (location, duration, frequency)		5
Medical Outcomes Study Short Form 36	SF-36	5
Chedoke McMaster Stroke Assessment	CMSA	4
McGill Pain Questionnaire		4
Quantitative Sensory Testing	QST	4
Faces Pain Scale		3
Euroqol Questionnaire		3
Acromioclavicular Shear Test		3
Rowe test		3
Speeds test		3
Palpation		3
Motor Assessment Scale		3
Pain Present/Absent at Rest		2
DN4 Questionnaire		2
Shoulder Pain and Disability Index	SPADI	2
Pain Behavior Scale		2
Use of Analgesia		2
Hawkins-Kennedy Test		1
Croft Disability Questionnaire		1
Observation		1
Apprehension Test		1
Shoulder Disability Questionnaire		1
Independent Pain Scale		1
Stroke Impairment Assessment Set	SIAS	1
Altered Sensation		1
Likert Pain Scale		1
Upper arm girth		1
Reports/Documentation		1
Constant-Murley Shoulder Score		1
The Disabilities of the Arm, Shoulder and Hand	DASH	1
Total number of outcome measures = 43		

A pie chart to show the percentage of each study design



CONCLUSIONS

Both general and stroke specific assessment approaches were used to measure HSP.

Several measures lacked reliability/validity in stroke population.

KEY MESSAGE

A comprehensive assessment that considers subjective, objective and functional elements is needed in this area to inform appropriate treatment choices and to improve patients' outcome

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