Recently Reviewed and Updated CAT: March 2018

Short Question:

Specific Question: In patients with Benign Joint Hypermobility Syndrome (BJHS) is targeted physiotherapy more effective than generalised Physiotherapy?

Clinical bottom line

This update CAT still highlights there is insufficient evidence to answer whether targeted physiotherapy is more effective than generalised physiotherapy in treating patients with BJHS.

Although the current evidence base for the clinical and cost effectiveness of exercise is limited in size and quality, it provides some suggestion that exercise may have therapeutic value for people with Benign Joint Hypermobility Syndrome. However there is insufficient evidence to determine the type, frequency, dosage or means of delivery. There is insufficient evidence to inform any change in current practise.

Why is this important?

Although exercise is widely regarded as a core component of the management of joint hypermobility syndrome, there appears to be no clear consensus about the best type of exercise or dosage required.

Identification of clinical and cost effective treatments is essential for evidence based quality care. This enables patients to make informed decisions about their care and ensures appropriate use of valuable NHS resources

Inclusion Criteria
Adults
Search 2005-2015
Updated search 2015-2017

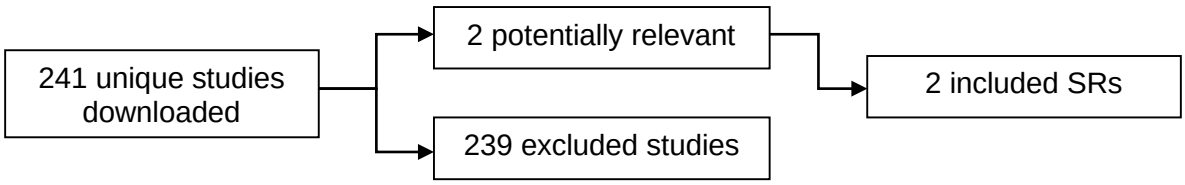
	Description	Search terms
Population and Setting	Patients with joint hypermobility syndrome	Patients Hypermobility Joint laxity Benign Joint Hypermobility

CAT Lead: Tina Hadley-Barrows Date CAT completed: March 2018
Date CAT to be reviewed: upon request

archived

		Excessive joint mobility Generalised laxity
Intervention or Exposure (ie what is being tested)	Physiotherapy	Physiotherapy Physical therapy Exercise Targeted exercise therapy, proprioception, strengthening, stability, taping, strapping, correcting motion control, range of motion, individualised, tailored, individualised, progressed, personalised
Comparison, if any	Generalised exercise advice	General exercise advice
Outcomes of interest	Pain, joint stability, function, cost effectiveness, short/long term, quality of life, patient satisfaction	
Types of studies	Systematic Reviews & RCTs	

Results 2015



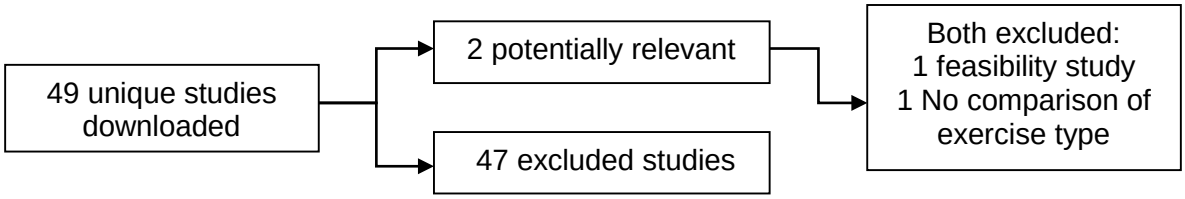
CAT Lead: Tina Hadley-Barrows

Date CAT completed: March 2018
Date CAT to be reviewed: upon request

archived

Recently Reviewed and Updated CAT: March 2018

Results of updated search 25/10/2017



First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Palmer et al 2013, Systematic review which included 1 RCT, 1 Randomised comparative trial and 2 cohort studies	Adults and children. Convenient sampling from single rheumatology and specialist centres. Three UK sites one in Turkey	General exercise, v targeted functional stability, joint specific Proprioceptive exercises v no intervention Proprioceptive, balance and strengthening	Overall patients who received an exercise intervention improved over time with no adverse events No convincing evidence for type of exercise	Databases searched along with hand searching and snowballing. Limited to English language, published research. Appraised individually and collectively; disagreements resolved by debate. Synthesis of results not possible due to heterogeneity of study designs and outcome measures. Methodological quality of included studies generally lacking, particularly statistical power

CAT Lead: Tina Hadley-Barrows

Date CAT completed: March 2018
Date CAT to be reviewed: upon request

archived

				and adequate control conditions. Some issues with sampling, diagnostic criteria and sample sizes, thereby reducing external validity. **Further robust studies are required to determine the effectiveness of therapeutic exercise**
Smith et al 2014, Systematic review 3 studies 2RCTs and 1Crossover trial	Adults and children. Convenient sampling from single rheumatology and specialist centres. Two UK sites and one in Turkey	General exercises v targeted functional stability, joint specific exercise Knee proprioception exercises v no intervention Use of custom made wrist splints	Current evidence base for physiotherapy and occupational therapy management of BJHS is limited in size and quality Some support for exercise based interventions but insufficient evidence to determine the type, frequency, dosage or means of delivery	Published, unpublished and trial databases searched. CASP critical appraisal for risk of bias. Synthesis of results not possible due to heterogeneity of study designs and outcome measures. Current evidence base for PT & OT interventions is severely limited in size and quality. **Further study is essential to**

				improve the current evidence base.

Summary

Methodological quality of the included studies is generally lacking, particularly statistical power and adequate control conditions. There were some issues with sampling, diagnostic criteria and sample sizes, reducing external validity. Synthesis of results is not possible due to heterogeneity of study designs and outcome measures.

Overall patients who received an exercise intervention improved over time with no adverse events, however the current evidence base for PT & OT interventions is severely limited in size and quality. Further study is essential to improve the current evidence base and determine the effectiveness of therapeutic exercise

Conclusions

It has been suggested that patients with BJHS have proprioceptive deficits and significantly decreased maximal exercise capacity compared to age and gender matched control subjects. Therefore clinical indication for exercise for this population seems appropriate. Although the current evidence base for the clinical and cost effectiveness of exercise is limited in size and quality, it provides some suggestion that exercise may have therapeutic value for people with BJHS. However there is insufficient evidence to determine the type, frequency, dosage or means of delivery. Further longer term rigorous multicentre trials are essential, confirming diagnostic criteria and specific detail regarding exercises in order to assess the clinical and cost-effectiveness of clearly defined interventions for this group of patients.

Of Interest

A recent National Institute for Health Research (NIHR) Health Technology Assessment funded programme of research aimed to determine the feasibility of conducting a randomised controlled trial to understand patient and health professional perspectives on the physiotherapy management of JHS and use this information to develop, and then evaluate, a comprehensive physiotherapy intervention package. Preliminary findings suggested patients preferred physiotherapy when their therapist understood JHS and treated their whole body, rather than concentrating on just one painful joint. Specialist health professionals with a special interest in JHS reported the need for patients to be better supported to be able to self-manage their condition. It was concluded that a future much larger study is worth doing to establish whether or not physiotherapy really provides worthwhile benefits.

CAT Lead: Tina Hadley-Barrows

Date CAT completed: March 2018
Date CAT to be reviewed: upon request

archived

What would you tweet?

Is targetted exercise better than generalised exercise for BJHS. No good quality evidence found and more research is needed

References for included studies

Palmer S, Bailey S, Barker L, Barney L, Elliott A (2013). The effectiveness of therapeutic exercise for joint hypermobility syndrome: a systematic review. Physiotherapy 2013 http://dx.doi.org/10.1016/j.physio.2013.09.002

Smith T, Bacon H, Jerman E, Easton V, Armon K, Poland F, Macgregor A. (2014) Physiotherapy and occupational therapy interventions for people with benign joint hypermobility syndrome: a systematic review of clinical trials. Disability and Rehabilitation. An International multidisciplinary journal 36(10): 797-803

2017 references in blue italics
Celenay ST, Kaya DO (2017) Effects of spinal stabilization exercises in women with benign joint hypermobility syndrome: a randomized controlled trial Rheumatol Int (2017) 37:1461–1468 DOI 10.1007/s00296-017-3713-6

Palmer S, Cramp F, Clark E, et al. (2016) The feasibility of a randomised controlled trial of physiotherapy for adults with joint hypermobility syndrome. Health Technology Assessment, No. 20.47 Southampton (UK): NIHR Journals Library; 2016 Jun