

Specific Question:

In adults with trigger thumb/finger does splinting improve outcomes for pain and function compared to usual care?

Clinical bottom line

Currently there is no evidence to answer this question. It would be reasonable to continue the use of splinting as a therapeutic treatment option for adults with trigger finger/thumb in the absence of evidence to the contrary. There is however a need for clinical audit and research in order to provide further evidence.

Why is this important?

Splintage for the management of trigger finger and thumb is a relatively new concept in hand therapy and from a clinicians' perspective it can be beneficial conservative treatment for the condition. There are however several types of splint available both custom made and fabricated. Selecting the most appropriate splint is important therefore in the treatment of this condition to try and relieve pain whilst maximising function.

Search timeframe (e.g. 2005-2016)

Inclusion Criteria

	Description	Search terms
Population and Setting	Male and female adults (age 18 years over) with trigger finger or thumb	Adults Primary or secondary care Trigger finger/thumb
Intervention or Exposure	Bespoke or fabricated finger & thumb splints	Bespoke splint Splints Splinting Outcomes Treatment outcomes Trigger finger Trigger thumb Metacarpalphalangeal joint Tenosynovitis Trigger finger/trigger finger disorder Stenosing tenosynovitis Orthoses/orthotic devices
Comparison, if any	Type of splint	

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Date: Sept 2016

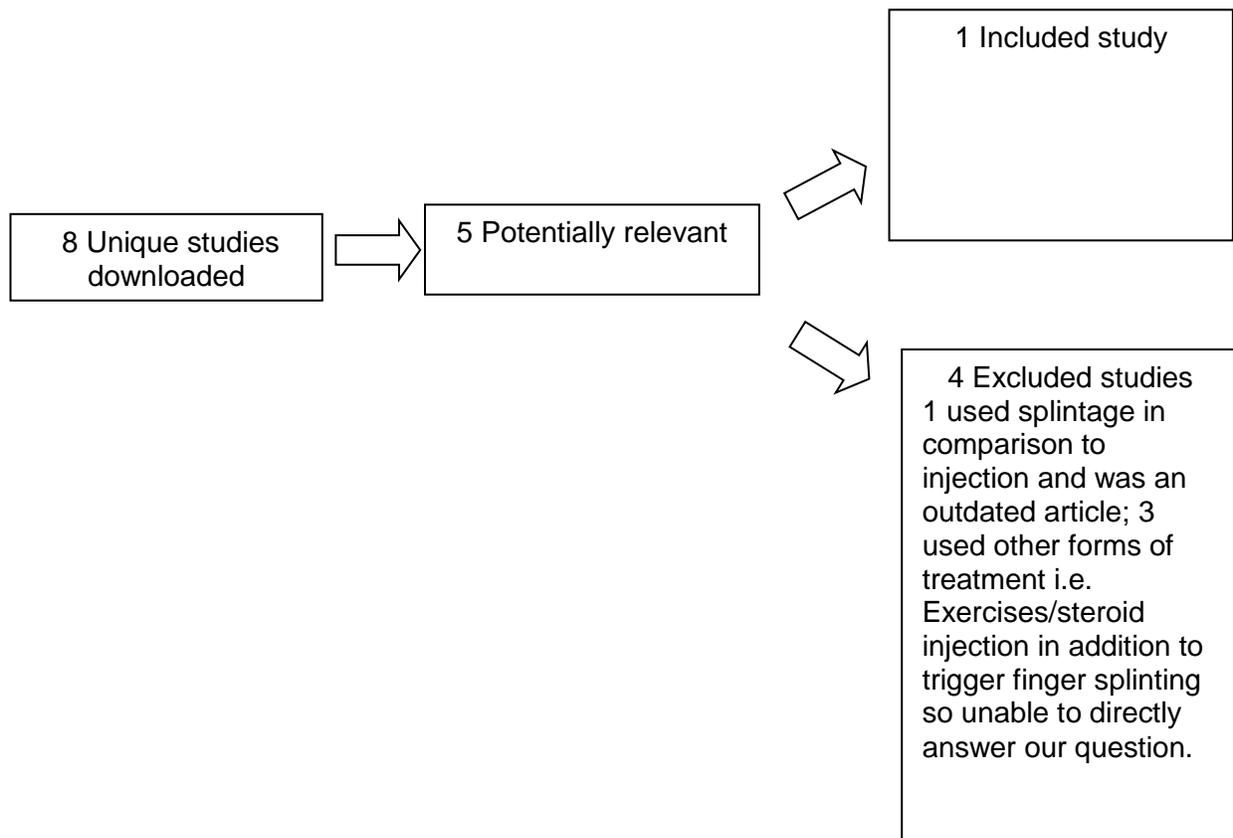
Outcomes of interest	Pain scale Function	Pain & functional scales
Types of studies		RCT's Systematic reviews

Routine Databases Searched

CINAHL, MEDLINE, EMBASE, AMED, BNI, Google Scholar

Date of search- 10th March 2015 & 4th January 2016 (Recurring search alert)

Results of the search



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Table 1- Detail of included studies

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Tarbhai. K et al (2012) Prospective randomised study	30 subjects with unilateral or bilateral trigger finger/thumb. Canada – Toronto Western Hospital (university-affiliated teaching hospital)	N=15 digits randomly to an MCP blocking splint and n=17 digits randomly allocated to a DIP blocking splint. Both groups instructed to wear the splint as much as possible over a 24hr period and to keep a diary. Assessment measures included pain (VAS), frequency of triggering, scale for severity of triggering and functional impact of triggering, ROM and grip strength. Parameters assessed at day 0, week 1,3,6,12 and 1 year	Both groups showed statistically significant improvement in triggering; however the MCP joint blocking splint was successful in providing at least partial relief of triggering and pain in 10 of 13 trigger finger subjects, whereas the DIP joint blocking splint provided at least partial relief of triggering and pain in 7 of 15 subjects after 6 weeks of treatment. The significant improvement was maintained in a minority of the cohort for 1 year. There was little difference between the two splint groups for impact on function. Subjects who wore the MCP joint blocking splint reported higher rates of comfort compared with those who wore the DIP joint blocking splint.	Did use a valid and reliable functional score. Sample size was small however they did undertake a power analysis but further subjects were discounted as they had opted for a steroid injection or surgery if no progress was made. 13 subjects remained in each splint group which was the minimum requirement to meet the power analysis. No control group. Didn't state whether the improvements were in those with more or less severe triggering.

Summary

CAT Lead: Suzanne Sharp Date CAT completed: September 2016
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There is a paucity of evidence to determine the efficacy of splintage in the treatment of trigger finger/thumb in adults. The best available evidence is that of Tarbhai et al (2012) as above but is of very limited value due to flaws in research methodology. Nevertheless it suggests that the use of splintage is warranted as a treatment option, with an MCP joint splint being the preferred option by patients for comfort.

Implications for Practice/research

There is a need for more evidence/research into this area. There is no evidence to say that the use of splints is detrimental to the patient so current practice can continue, however an audit of efficacy of current splints used would be a good starting point for future research.

What would you tweet? (140 characters)

There is no conclusive evidence for splintage in the treatment of adult trigger finger, however MCP joint splints may well be still considered worthwhile from a clinicians perspective in the absence of evidence to the contrary.

References

Tarbhai. K; Hannah. S; Von Schroeder. HP (2012) Trigger Finger Treatment: A Comparison of 2 Splint Designs Journal of Hand Surgery 37A: 243-249.