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HAND THERAPY NEW ZEALAND
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Table of Contents

Contents

Editors' Note

Kia ora Colleagues,

This is the second edition for 2026. Thanks to Georgia Keech for kindly sharing their Hand and Upper Limb Treatment (HAULT) assignment with us. We really appreciate your contributions and dedication to the profession!

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Does night-only splinting improve pain and function in adults with mild to moderate carpal tunnel syndrome?

By Georgia Keech

Introduction

Carpal tunnel syndrome (CTS) is a highly prevalent neuropathy caused by entrapment and compression of the median nerve at the wrist (Burton et al. 2022). In mild to moderate CTS, clinical symptoms can include numbness, paresthesia, pain, discomfort, and impaired function typically of the first three digits and medial palm because of median nerve entrapment (Gatheridge et al., 2020). CTS is the highest occurring peripheral neuropathy worldwide, affecting approximately one in 10 people (Bühler et al., 2024). Subsequently, five percent of adult women and two percent of adult men in the general population are affected (Atroshi et al., 2019). In New Zealand (NZ) specifically, Māori and Pasifika people are at increased risk of developing CTS largely due to higher rates of manual labour occupations and a greater prevalence of diabetes, which is associated with a fivefold increase in CTS risk (Bühler et al., 2024). This heightened risk contributes to the broader impact of CTS on the NZ healthcare system, where it remains a significant concern due to a growing backlog of patients awaiting publicly funded treatment. Bühler et al. (2024) reports that access to treatment for CTS in NZ specifically can be difficult due to lack of resources, time constraints, cost, and complex public-private interfaces.

The primary goals of CTS treatment are to relieve symptoms and improve hand function (Atroshi et al., 2019). Nighttime wrist splinting is a recommended first line non-surgical intervention however, there is ongoing debate regarding the optimal duration of use, and whether splints should be worn both day and night. CTS symptoms often worsen during sleep due to sustained wrist flexion, which can increase nighttime discomfort. As such, using a splint to maintain a neutral wrist position during sleep may help alleviate nocturnal symptoms, improve sleep quality, enhance daytime function, and overall improve quality of life (Unal et al., 2023). This review aims to assess whether night-only splinting is effective in reducing pain and improving function in adults with mild to moderate CTS.

Methods

This review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021).

Search strategy

A literature search of the following databases was conducted between 2 June 2025 and 16 July 2025: MEDLINE, SPORTDiscus, CINAHL Complete via EBSCOHost (01/01/1980 – 16/07/2025); clinical trials via Cochrane Library (January 1980 – 16 July 2025); Google Scholar (1980 – 16 July 2025) first five pages only to identify any articles missed in the search. The Boolean phrase search included the following combination of terms: ("(carpal tunnel syndrome)" OR "(CTS)" OR "(median nerve entrapment)" OR "(carpal tunnel)") AND ("(splint*)" OR "(brac*)" OR “(night splint*)” OR “(orthotic)”) AND (“(function)” OR “(pain)” OR “(functional outcomes)”). To capture all the potentially applicable literature, no other filters were utilised during the search except articles from year 1980 onwards, and the Cochrane Library Clinical Trials filter.

Selection criteria

Individuals over 18 years old diagnosed with CTS were eligible for inclusion. The review included the following study types: randomised controlled trials (RCTs), quasi-randomised controlled trials (QRTs), or prospective controlled trials (PCTs).

Articles that were not in English or not available in full text were excluded. Participants with a diagnosis of severe CTS, pregnant women, had undergone CTS surgery or corticosteroid injection (CSI) were also excluded. Studies that compared night splinting to CSI or surgery were also excluded. Studies where bracing timeframes were not clearly specified (e.g., day, night, full-time) were excluded. Studies that involved both day and night splinting were only included if data specific to night-only splinting could be extracted and separately interpreted.

Selection method

Once the potential articles had been extracted from the databases, all duplicates were removed. The author then manually screened titles and abstracts to assess suitability and eligibility based on the previously stated inclusion and exclusion criteria. A review of the reference lists of included articles identified one further article that met criteria for inclusion. Where it was uncertain of the suitability of an article from the title and abstract, full texts were assessed. Full texts of all the selected articles were retrieved, reviewed and quality assessed. These articles were subsequently included in the review.

Quality assessment

The quality of the RCTs included was assessed via the Physiotherapy Evidence Database (PEDro) scale. This critiquing tool was specifically selected for quality assessment as it was exclusively developed for the appraisal of RCTs (Cashin & McAuley, 2020). The PEDro checklist includes 11 yes/no measures, with the highest possible score of 10 points. The PEDro scale is considered a validated tool for the assessment of statistical, external and internal validity of an RCT, that demonstrates strong inter-rater and intra-rated reliability (Cashin & McAuley, 2020). No exclusions were made due to study quality.

Qualitative analysis

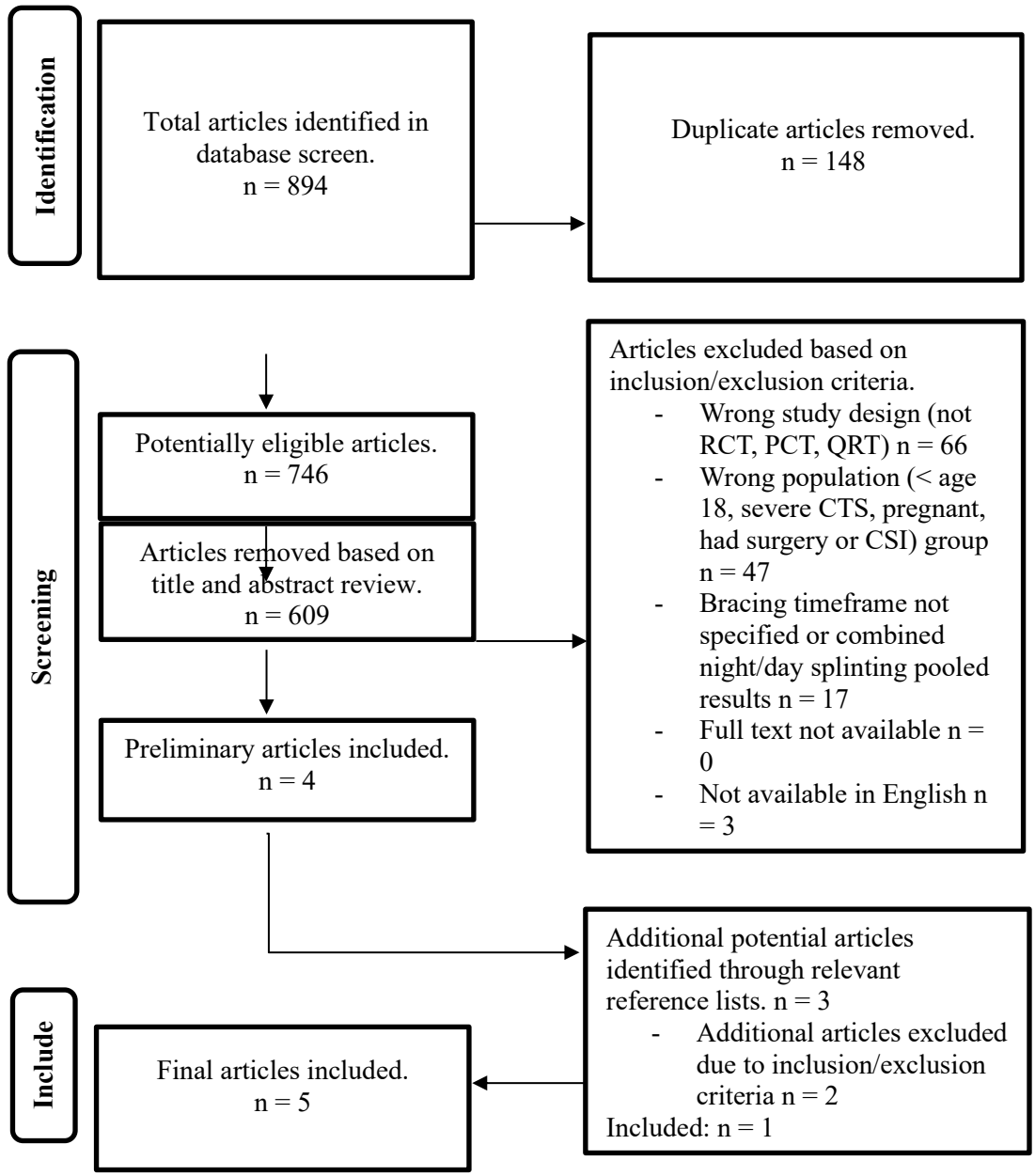
Pooling of the five studies was not feasible due to the variation in control treatments, treatment duration timeframes, outcome measures, and follow-up timeframes. Alternatively, a synthesis of the best-evidence was undertaken. Methodological quality of the five included studies was assessed via the PEDro scale. Studies were then categorised using the hierarchy levels of evidence as described in Burns et al. (2011).

Results

The primary search of the databases identified 894 articles. Duplicate articles were subsequently removed resulting in 746 articles continuing to the screening process. The screening process was then conducted and five RCTs were included in the analysis (see Figure 1). The primary characteristics of these studies including design, level of evidence, population, group descriptors, and interventions/treatment are summarised in Figure 2.

Figure 1

PRISMA diagram of article selection



Methodological quality

All five of the included studies were RCTs and hence the PEDro scale was used for the assessment of quality. All included studies reported on similarity of groups at baseline, follow-up results reporting, intention-to-treat analysis, analysis between groupings, and point measures and variability. The studies also all had similar population groups at baseline in terms of symptom severity, age ranges, both male and female. Blinding of subjects was unachievable in these studies as patients were prescribed splints to wear, making blinding of participants unattainable. Halac et al. (2015) was the only study that did not randomly allocate their treatment groups, and instead allocation was based on when the participant experienced their symptoms (e.g., day vs. night). Premoselli et al. (2006), Unal et al. (2023), and Werner et al. (2005) achieved blinding of clinicians and assessors. Table 1 below outlines the quality analysis of the included studies.

Table 1

Study quality appraisal assessed by the PEDro scale checklist

	Halac et al. (2015)	***Premoselli et al. (2006)***	***Unal et al. (2023)***	***Walker et al. (2000)***	***Werner et al. (2005)***
Eligibility criteria	1	1	1	0	1
Random allocation	0	1	1	1	1
Concealed allocation	0	0	0	0	1
Baseline comparability	1	1	1	1	1
Participant blinding	0	0	0	0	0
Clinician blinding	0	1	1	0	1
Assessor blinding	0	1	1	0	1
Adequate follow-up (>85%)	1	0	0	0	0
Intention-to-treat analysis	1	1	1	1	1
Between group analysis	1	1	1	1	1
Point measures and variability	1	1	1	1	1
Total score (quality description)	5/10 (fair)	7/10 (good)	7/10 (good)	5/10 (fair)	8/10 (good)

Note: eligibility criteria is not included in scoring due to correlating to external validity (Cashin & McAuley, 2020).

Study populations

Across the five studies, a total of 362 participants were included, with 97 individuals lost to follow-up or withdrawn. The average age of participants was 50.5 years, comprising of 177 females and 88 males. Recruitment methods and eligibility criteria varied among the studies. Halac et al. (2015) included adults (>18 years old) with mild to moderate CTS, diagnosed through subjective assessment and electrophysiological testing at a neurology clinic. Premoselli et al. (2006) recruited patients referred for electrodiagnostic testing, selecting those whose neurophysiological results fell within defined ranges. Unal et al. (2023) included participants over 18 with electrophysiologically confirmed mild to moderate CTS and symptoms lasting more than one month. Walker et al. (2000) recruited predominantly untreated male patients from an electrodiagnostic lab but did not clearly define their inclusion criteria. Werner et al. (2005) recruited workers from an auto assembly plant who reported symptoms suggestive of CTS using a hand symptom diagram.

Two studies did not discuss power analysis (Halac et al., 2015; Premoselli et al., 2006). Unal et al. (2023) did not achieve power due to 22.2% of participants lost to follow-up. Walker et al. (2000) and Werner et al. (2005) did not achieve power due to small sample size.

Table 2

Study characteristics

Article	Type	Evidence levels	Populations & number	Group descriptors			Treatment
				Experimental	Control		
Halac et al. (2015)	RCT	Therapy level 1B	Mean age: 50.7 years M/F: 6/34 Number of participants: 40 LTFU: 10 (25%)	Allocated by timing of symptoms. Night-only symptoms: 20 (M/F: 4/16)	Allocated by timing of symptoms. Night and day symptoms: 20 (M/F: 2/18)		Both groups: neutral static wrist splint made from cotton-polyester material (0-5 degrees of wrist extension) allowing free movement of MCPJ and elbow. Worn for 90 nights only on the affected side. Treatment duration: 3 months
Premoselli et al. (2006)	RCT	Therapy level 1B	Mean age: 49.8 years M/F: 5/45 Number of participants: 50 LTFU: 14 (28%)	Thermoplastic neutral wrist splint, worn at night-only, for a minimum of 6 hours per night: 25 (M/F: 2/23)	No treatment received: 25 (M/F: 3/22)		Thermoplastic neutral wrist splint, worn at night-only, for a minimum of 6 hours per night vs. no treatment. Treatment duration: 6 months.
Unal et al. (2023)	RCT	Therapy level 1B	Mean age: 47.6 years M/F: 6/40 Number of participants: 90 LTFU: 20 (22.2%)	No splint: 30	Day-night splint: 30	Night-only splint: 30	All groups encouraged to modify ADLs and prescribed 3 x 10 nerve gliding exercises. Groups 2 and 3: neutral soft wrist splint for night use and group 3 advised to continue daytime splinting. Treatment duration: 12 weeks.
Walker et al. (2000)	RCT	Therapy level 1B	Mean age: 60 years M/F: 16/1	Night-only group: 13	Full-time group: 11		Neutral position custom made wrist splint fabricated out of thermoplastic.

			Number of participants: 21 LTFU: 4 (19.1%)			Treatment duration: 6 weeks.
Werner et al. (2005)	RCT	Therapy level 1B	Mean age: 44.2 years M/F: 55/57 Number of participants: 161 LTFU: 49 (30.4%)	Customised wrist splint for night wear group: 86	Ergonomic education alone group: 75	Customised wrist splint, worn at night for 6 weeks vs ergonomic education. Treatment duration: 6 weeks.

Abbreviations: ADLs, activities of daily living; BCTQ, Boston Carpal Tunnel Questionnaire; CSI, corticosteroid injection; CTS, carpal tunnel syndrome; FSS, functional status score; IQR, interquartile range; LTFU, lost to follow-up; M/F, male/female; NHP, Nottingham Health Profile; NZ, New Zealand; RCT, randomised control trial; SD, standard deviation; SSS, symptoms severity score; VAS, visual analogue scale.
Note: Levels of evidence as per Burns et al., (2011).

Study interventions and treatment

Type of splinting

All included studies involved some variation of splinting as part of the intervention for the experimental or control groups. Halac et al. (2015) prescribed a neutral static wrist splint made from cotton-polyester material (0-5 degrees of wrist extension) allowing free movement of the metacarpophalangeal and elbow joints. The two treatment groups in the study by Unal et al. (2023) were also prescribed a neutral soft wrist splint, while the control group did not receive a splint. A customised, thermoplastic, neutral position wrist splint was prescribed in two of the studies (Premoselli et al., 2006; Walker et al., 2000), and Werner et al. (2005) also prescribed a customised wrist splint however the splint material was not specified.

Duration of splinting

The instructions of splint duration differed between studies. Premoselli et al. (2006) was the only study to clearly document the instructions on the duration of nighttime splint use, specifying that it should be worn for a minimum of six hours per night. “Nighttime splinting”, “night splinting” or “while sleeping” were the instructions given in other studies (Halac et al., 2015; Unal et al., 2023; Walker et al., 2000; Werner et al., 2005) however, no other timeframes were specified. In Unal et al. (2023), patient reported splint duration was recorded with an average duration of seven hours, however no clear timeframe instructions were given.

Two studies had an overall treatment duration of six weeks (Walker et al., 2000; Werner et al., 2005), two studies of 12-weeks (Halac et al., 2015; Unal et al., 2023), and one study six months (Premoselli et al., 2006).

Patient adherence

Each of the five studies described varying levels and methods of patient adherence to splint use. Self-reporting of adherence was reported in three studies; Halac et al. (2015) via calendar tracking with 90% adherence, Walker et al. (2000) via a self-administered questionnaire (85% and 100% adherence in the night-only and full-time groups, respectively), and Werner et al. (2005) also via a self-administered questionnaire however results were not reported on in the study. Werner et al. (2005) had a subset (n=13) of their intervention group with a monitoring device installed into the splint to determine actual splint wear based off temperature and movement. This subset of data revealed that self-reported splint wear was consistently overestimated compared to the actual time the splint was worn. This indicates that self-reported usage may not accurately reflect real usage, calling into question the reliability of the self-reported data. Two studies did not comment on patient adherence to splint wear (Premoselli et al., 2006; Unal et al., 2023)

Control groups

Two studies included ergonomic or activity modification advice for their control groups (Unal et al., 2023; Werner et al., 2005). Unal et al. (2023) was the sole study to prescribe exercises, specifically three sets of ten repetitions of nerve gliding exercises. In contrast, Premoselli et al. (2006) was the only study in which the control group received no form of treatment or intervention.

Outcomes

The primary relevant outcome measures used within the studies included the Boston Carpal Tunnel Questionnaire (BCTQ), also known as Levine's Self-Administered Questionnaire, and the Visual Analogue Scale (VAS). The BCTQ was employed to evaluate functional status, while the VAS was used to assess pain levels. Table 3 highlights the means, standard deviations, and statistical significance of the study results.

Function

All five studies assessed symptom severity and functional status via the BCTQ (or Levine's questionnaire). The BCTQ is a validated tool for assessing severity and functional limitations for CTS (Leite et al., 2006). The questionnaire has 11 questions relating to symptoms (symptom severity scale (SSS)), and a further eight questions relating to function (functional status score (FSS)). Halac et al. (2015) had significant improvements in SSS scores (25.4±7.5) following splinting in the night-only group ($p = 0.008$), while the sustained symptomatic group (27.4±9.2) showed no significant change ($p = 0.677$). Between the two groups (sustained symptomatic group 16.8±4.9, night-only group 16.0±6.9), there was no significant change in FSS (sustained symptomatic group $p = 0.701$, night-only group $p = 0.958$). The intervention group within Premoselli et al. (2006) had significantly reduced SSS (1.22±0.39) and FSS (0.75±0.28) following splint use (change from recruitment to final follow-up), $p = 0.001$ and $p = 0.0004$. Unal et al. (2023) and Walker et al. (2000) also supported the use of night splinting for improvements on the BCTQ that were statistically significant however, combined night and daytime splinting improvements were superior to night-only splinting groups. The splinted group in Werner et al. (2005) had a significant reduction in BCTQ scores for symptom severity (2.19±1.06) which was maintained at 12 months ($p = 0.02$), despite the treatment period ending after 6 weeks.

Pain

Three studies (Halac et al., 2015; Unal et al., 2023; Werner et al., 2005) utilised the VAS as an outcome measure. VAS scores improved in both groups following splinting however, led to significant improvements in pain levels for night-only symptomatic patients (2.10±2.67 and $p = 0.016$) (Halac et al., 2015). Unal et al. (2023) also showed significant VAS improvements for pain in

both the day-night and night-only splint groups ($p = 0.001$ and $p = 0.015$). Finally, participants in the nocturnal splinting group in the study by Werner et al. (2005) experienced significant pain reductions compared to the control group (4.43 ± 3.71 and $p < 0.05$).

Table 3
Study results

Article	Primary outcomes	Follow-up	Baseline mean ± SD	Final follow-up mean ± SD	p-value	p-value of comparison of change between groups
Halac et al. (2015)	BCTQ (SSS & FSS), VAS	Baseline, 3 months	**BCTQ** SSS Experimental: 29.3 ± 7.1 Control: 28.1 ± 9.9 FSS Experimental: 15.9 ± 5.9 Control: 17.5 ± 6.1	**BCTQ** SSS Experimental: 25.4 ± 7.5 Control: 27.4 ± 9.2 FSS Experimental: 16.0 ± 6.9 Control: 16.8 ± 4.9	**BCTQ** SSS Experimental: p = 0.008 Control: p = 0.677 FSS Experimental: p = 0.958 Control: p = 0.701	**BCTQ** SSS p = > 0.05 FSS p = > 0.05
			VAS Experimental: 4.80 ± 2.52 Control: 5.15 ± 1.98	**VAS** Experimental: 2.10 ± 2.67 Control: 3.75 ± 2.07	**VAS** Experimental: p = > 0.05 Control: p = < 0.05	**VAS** Experimental: p = 0.016 Control: p = not reported
Premoselli et al. (2006)	Levine's self-administered questionnaire (BCTQ)	Baseline, 3 and 6 months	**BCTQ** SSS Experimental: 2.70 ± 0.41 Control: 2.55 ± 0.50 FSS Experimental: 2.27 ± 0.47 Control: 1.81 ± 0.29	**BCTQ** SSS Experimental: 1.48 ± 0.19 Control: 2.38 ± 0.40 FSS Experimental: 1.52 ± 0.39 Control: 1.77 ± 0.79	**BCTQ** SSS Baseline: p = 0.43 Final follow-up: p = 0.001 FSS Baseline: p = 0.04 Final follow-up: p = 0.13	**BCTQ** SSS p = 0.0010 FSS p = 0.0004
Unal et al. (2023)	BCTQ, VAS	Baseline, 12 weeks	**BCTQ** SSS Experimental: 2.72 (IQR: 2.45-3.15) Control: 2.72 (IQR: 2.18-3.63) FSS	**BCTQ** SSS Experimental: 2.54 (IQR: 2.09-3.24) Control: 2.72 (IQR: 2.04-3.18) FSS	**BCTQ** SSS Baseline: p = 0.920 Final follow-up: p = 0.706 FSS Baseline: p = 0.058	**BCTQ** SSS p = 0.920 FSS p = not reported

			Experimental: 2.43 (IQR: 1.5-3.18) Control: 2.37 (IQR: 1.0-3.63)	Experimental: 1.87 (IQR: 1.10-3.0) Control: 2.56 (IQR: 1.03-3.75)	Final follow-up: p = 0.208	
			VAS Experimental: 70.0 (IQR: 50.0-80.0) Control: 70.0 (IQR: 70.0-80.0)	**VAS** Experimental: 55.0 (IQR: 32.50-70.0) Control: 70.0 (IQR: 45.0-80.0)	**VAS** Baseline: p = 0.353 Final follow-up: p = 0.269	**VAS** p = not reported
Walker et al. (2000)	Levine's self-administered questionnaire (BCTQ)	Baseline, 6 weeks	**BCTQ** SSS Experimental: 2.89 (SD: 0.96) Control: 2.79 (SD: 0.69) FSS Experimental: 2.75 (SD: 1.01) Control: 2.27 (SD: 1.03)	**BCTQ** SSS Experimental: 2.30 (SD: 0.93) Control: 2.09 (SD: 0.62) FSS Experimental: 2.14 (SD: 0.87) Control: 1.93 (SD: 0.77)	**BCTQ** SSS Baseline: p = 0.77 Final follow-up: p = 0.53 FSS Baseline: p = 0.26 Final follow-up: p = 0.53	**BCTQ** SSS p = 0.58 FSS p = 0.22
Werner et al. (2005)	Levine's self-administered questionnaire-SSS aspect only (BCTQ), VAS	Baseline, 3, 6, 12 months	**BCTQ** SSS Experimental: 2.86 ± 0.88 Control: 2.9 ± 0.73	**BCTQ** SSS Experimental: 2.19 ± 1.06 Control: 2.52 ± 1.06	**SSS** p = 0.02	**SSS** p = 0.15
			VAS Experimental: 7.24 ± 2.08 Control: 6.60 ± 2.51	**VAS** Experimental: 4.43 ± 3.71 Control: 5.58 ± 3.30	**VAS** p = 0.05	**VAS** p = 0.03

Abbreviations: ADLs, activities of daily living; BCTQ, Boston Carpal Tunnel Questionnaire; CSI, corticosteroid injection; CTS, carpal tunnel syndrome; FSS, functional status score; IQR, interquartile range; LTFU, lost to follow-up; M/F, male/female; NHP, Nottingham Health Profile; NZ, New Zealand; RCT, randomised control trial; SD, standard deviation; SSS, symptoms severity score; VAS, visual analogue scale.
Note: BCTQ has been separated into the two components of the questionnaire, FSS and SSS.

Discussion

This review investigates existing and developing evidence regarding the use of night-time splinting for mild to moderate CTS. Findings from the best-evidence synthesis identified that night splinting alone is sufficient at reducing pain, and improving symptoms and function with changes sustained up to three, six, and 12 months. Although the findings of this review were limited, several important conclusions can be drawn from the collective study results. Consistent with existing literature, our study found that night-time splint use had significantly positive impacts on pain as measured by the VAS, and improvements in symptom severity and functional outcomes as measured by the BCTQ. In two studies (Unal et al., 2023; Walker et al., 2000), day and night splinting also indicated positive changes in pain, symptoms and function however the research was strong enough to support the use of the benefits for night-only splinting.

Splint type and duration

Despite variations in specific splint types, all studies consistently prescribed a neutral-position wrist splint that limited wrist flexion. The splints were fabricated from either thermoplastic or soft material, and the material type did not appear to influence the therapeutic benefits of splint use. Splint wear varied between six weeks and six months with no clear consensus on optimal hours per night that the splint was required to be worn for effectiveness. The literature supports the current clinical approach of using neutral wrist splints at night for treating CTS, with some clinicians recommending additional daytime use depending on symptom presentation and practicality of splint application in relation to occupational and family roles.

Quality of evidence

The scores of the articles varied between 5/10 and 8/10 on the PEDro scale. This indicates methodological quality that is considered moderate to good. Werner et al. (2005) had the highest level of study quality as assessed by the PEDro (see Table 1). The implementation of random and concealed allocation, blinding of clinicians and assessors, and group similarity at baseline all reduced the risk of bias. Premoselli et al. (2006) and Unal et al. (2023) also scored within the “good” range on the PEDro scale however lacked concealed allocation. While none of the studies achieved the highest possible score, studies scoring six or above are generally considered to have acceptable internal validity (Cashin & McAuley, 2020). The variation in scores reflects differences in aspects such as allocation concealment, blinding, and follow-up completeness. Overall, the body of evidence can be regarded as moderately robust, with findings reasonably reliable but requiring cautious interpretation due to some risk of bias across studies.

Strengths and limitations

One limitation of all the studies was the lack of participant blinding which was unachievable due to the treatment intervention being a wearable splint. As participants could not be blinded, the outcome assessments may have involved some subjective reporting, increasing the risk of performance and detection bias.

Aside from Werner et al. (2005), the other studies had limited sample size (see Table 2). All studies had participants lost to follow-up; Premoselli et al. (2006) had 28% lost to follow-up, Unal et al. (2023) 22.2%, Walker et al. (2000) 19.1%, and Werner et al. (2005) 30.4%. Halac et al. (2015) did not specify, nor was it able to be calculated, if any participants were lost to follow-up. High dropout rates may restrict statistical power and raise concerns about broader applicability of the findings.

Three of the five studies had short follow-up periods of three months or less (Halac et al., 2015; Unal et al., 2023; Walker et al., 2000), limiting their application of treatment effect to the short-term. Although Werner et al. (2005) included the longest follow-up period of 12 months, data collection was not completed by many participants at the three- and six-month follow-up periods. The 12-month follow-up did represent a more complete data set however a significant dropout rate may skew results and limit the ability of transferable results to evaluate long-term outcomes.

Clinical context

These review findings are relevant to clinical practice for the conservative management of CTS in NZ. Although none of the studies included were undertaken in NZ, Buhler et al. (2024) notes that the use of neutral wrist splints for CTS management is common practice in NZ and similarly, all the international studies included in this review used comparable splint types.

The age and sex demographics of participants in the reviewed studies also reflect the CTS population in NZ. According to the Accident Compensation Corporation (ACC) guidelines, individuals with CTS in NZ are three times more likely to be female than male, with the highest prevalence occurring between the ages of 40 and 55 (Accident Compensation Corporation, 2014), demographics that align with those of the study participants.

One study (Werner et al., 2005) had an exclusive focus on an occupational population; a key contextual factor given CTS is frequently associated with repetitive, physically demanding work. This is particularly relevant to the NZ context, as many individuals with CTS in NZ are employed in service industries or manual labour roles that involve repetitive physical tasks (Accident Compensation Corporation, 2014). Therefore, the findings and population characteristics in this particular study have strong relevance to the NZ workforce.

Conclusion

Splint-use for the treatment of CTS is an area of debate and ambiguity in the literature. In clinical practice, conservative management of CTS has traditionally included the use of a neutral wrist splint worn at night, with daytime splinting also considered when appropriate. The addition of daytime splinting is variable due to the lack of functionality that most neutral wrist splints offer. When selecting appropriate splint type, duration, and time of day for splint application in a clinical setting, principles of client-centered care and evidence-based practice need to be prioritised. This review demonstrates that night splinting alone is supported for improving pain and functional outcomes at three, six, and 12-months for adults with mild to moderate CTS; with notable implications for delaying or possibly avoiding more invasive and costly future interventions. Night splinting is a practical and cost-effective intervention for managing mild to moderate CTS, particularly within the NZ context where public health resources are constrained.

Further high-quality research is required to determine optimal splinting timeframes for long lasting sustained improvements in those with CTS. Future research of the clinical application of splinting could include a questionnaire targeting NZ hand therapists evaluating current trends, and preferences of splinting choices for CTS, including type of splint, duration of wear, and patient education strategies. This would provide an in-depth overview of what is currently being implemented in clinical practice and subsequently help to identify how closely current splinting practices align with the latest evidence.

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Educational opportunities

Below are a series of resources for educational purposes that the HTNZ Education committee and us have identified in the last period. You can also keep an eye out for updates on the HTNZ blog page.

Supervision Course 2026

There are still spaces available!

AHTA Conference 2026

Conference in Perth 28-30 August 2026. Should be good weather with blue skies!

HTNZ & NZ Society for Surgery of the Hand Annual Meeting

A Hand Therapist–only day will be held on Friday 16 October, featuring Alison Taylor, in the Rangimarie Room at Te Papa . The timetable is currently being finalised. Have a look at the website for registration.

Online Journals

Hand Therapy New Zealand offers access to several fantastic journals. If you haven't already done so, head over the Journal page and try accessing any of the resources available (e.g. Journal of Hand Therapy). If you do not have a log in, contact admin@handtherapy.org.nz to receive a unique login code. The benefit of having access to these journals is that if you find an article on HandyEvidence that you like or you just want to search for information in the journals, you can often access the full text.

Hand Coach

This series of courses are run by Alison Coyle. They are great to expand your skills or meet the HTNZ registration requirements if you are an associate. Head over to their website to see what they offer - https://handcoach.co.nz

HandyEvidence

Nico's website reviews and assesses three clinically relevant scientific articles on Hand Therapy every week. In addition, it contains a database of over 900 previous synopses searchable by topic and level of evidence. It has been sponsored by HTNZ for 2026 for all New Zealand Hand Therapists.

Consent for clients' information and images

HAND THERAPY NEW ZEALAND
Ringaromi Aotearoa

Consent form – use of clinical case information and images

I, (*patient's name:* _____) consent to the use of information and images including photographs or videos from my hand therapy assessment and treatment to be used for (*mark agreement by clicking on box or print and tick*)

- ☐ Educating clinicians relevant to hand therapy
- ☐ Educating clinical students
- ☐ Service audit
- ☐ Publication in professional or scientific journal

I understand that the information and images will not have my name attached to them and will not obviously identify me in any way.

Patient Details:

Name: _____ Tel: _____

Email: _____

Signed: _____ Date: Click or tap to enter a date.

Clinician Details:

Name: _____ Tel: _____

Email: _____

Organisation: _____

Hand Therapy New Zealand membership ☐Full ☐Associate Membership No. _____

Signed: _____ Date: Click or tap to enter a date.

Consent form case study final 15/02/2021

You can download the original document on HTNZ webpage.