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EFFECTIVENESS OF BOWEN TECHNIQUE COMBINED WITH CUPPING THERAPY VERSUS CUPPING THERAPY ALONE ON PAIN, CERVICAL RANGE OF MOTION, AND FUNCTION IN TRAPEZITIS: A COMPARATIVE STUDY

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ABSTRACT

Background: Trapezitis is a common musculoskeletal disorder characterised by inflammatory pain of the trapezius muscle, frequently associated with prolonged awkward neck postures, repetitive movements, and sedentary work habits, contributing to reduced cervical range of motion (ROM), functional disability, and diminished quality of life. Conservative physiotherapy management — including Bowen's technique and cupping therapy — is commonly used, but evidence comparing their combined effect against cupping therapy alone remains limited.

Objective: To compare the effectiveness of Bowen's technique combined with cupping therapy versus cupping therapy alone on pain, cervical range of motion, and functional ability in individuals with trapezitis.

Methods: A two-group, non-randomized comparative study was conducted on 30 participants with trapezitis, selected by convenience sampling and allocated equally (non-randomly) into

two groups of 15. Group A (Experimental) received Bowen's technique (15–20 minutes) followed by dry cupping therapy (10–15 minutes) over the upper trapezius region; Group B (Control) received dry cupping therapy alone (10–15 minutes). Both groups were treated three sessions/week for 4 weeks. Outcomes — pain intensity (Numeric Pain Rating Scale, NPRS), functional disability (Neck Disability Index, NDI), and cervical ROM (lateral flexion, flexion, extension; bubble goniometer) — were assessed at baseline and post-treatment.

Results: Both groups showed statistically significant within-group improvement in NPRS, NDI, and all planes of cervical ROM ($p < .001$). On between-group comparison, Group A showed significantly greater improvement than Group B in NDI, NPRS, lateral flexion (right and left), and cervical extension ($p < .05$). No significant between-group difference was found for cervical flexion ($p = .086$). Mean NDI improvement was 11.33 points in Group A and 7.47 points in Group B, both exceeding the minimal clinically important difference.

Conclusion: Bowen's technique combined with cupping therapy was more effective than cupping therapy alone in reducing pain and disability and improving cervical lateral flexion and extension in individuals with trapezitis. This non-invasive, low-cost combined approach may be a clinically useful conservative treatment option, although the non-randomized design warrants cautious interpretation.

Keywords: Trapezitis; Bowen's technique; Cupping therapy; Neck pain; Cervical range of motion; Neck Disability Index

1. INTRODUCTION

The trapezius is a large, flat, diamond-shaped superficial muscle extending from the occipital bone, ligamentum nuchae, and cervical–thoracic spinous processes (C7–T12) to the lateral clavicle, acromion, and scapular spine, divided into upper, middle, and lower fibres. The upper fibres elevate the scapula and assist cervical extension, lateral flexion, and contralateral rotation. Because of its constant postural activity, the upper trapezius is highly prone to fatigue, trigger-point formation, and inflammatory change — a condition termed trapezitis, defined per the revised International Association for the Study of Pain (IASP) criteria as an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage **[1-3]**.

Neck pain related to trapezitis is among the leading causes of years lived with disability worldwide, with an average point prevalence of 13% and lifetime prevalence of up to 50%; Indian epidemiological data report a prevalence of 42.5%, with a marked female predominance **[5, 7, 9, 10, 11]**. Chronic neck pain is associated with reduced physical activity, sleep disturbance,

psychological stress, and diminished quality of life, underscoring the value of timely, effective conservative management **[13]**.

Cupping therapy, one of the oldest complementary treatments, uses negative pressure to lift skin and superficial fascia, improving local circulation, reducing tissue congestion, and modulating pain via gate-control and endogenous opioid mechanisms **[3, 12, 18, 19]**. Bowen's technique, developed by Tom Bowen in the 1950s, uses gentle rolling moves over muscle and fascia to stimulate neuromuscular and autonomic self-regulatory mechanisms, and has shown benefit in whiplash, cervical and back pain, and related myofascial conditions **[11]**. Although both techniques show individual promise, evidence directly comparing their combined use against cupping therapy alone in trapezitis is limited, and few studies have simultaneously evaluated pain, disability, and cervical ROM using standardized outcome measures **[5, 8]**.

1.1 Rationale

Given the theoretical complementarity of a neuromuscular technique (Bowen) and a myofascial-decompression technique (cupping) — potentially addressing both the neurophysiological and circulatory/mechanical components of trapezitis — this study was designed to test whether their combination produces superior outcomes to cupping alone, using a pragmatic, clinic-based, non-randomized comparative design appropriate for an initial exploratory evaluation.

1.2 Aim and Objectives

The aim of this study was to compare the effectiveness of Bowen's technique combined with cupping therapy versus cupping therapy alone on pain, cervical range of motion, and functional ability in individuals with trapezitis. The specific objectives were to determine the effectiveness of Bowen's technique combined with cupping therapy on pain, cervical ROM, and functional ability in trapezitis; to assess the effectiveness of cupping therapy alone on these same outcomes; and to compare the difference in effectiveness between the two interventions.

1.3 Hypotheses

H01: There is no significant effect of Bowen's technique combined with cupping therapy on pain, cervical ROM, and functional ability. H02: There is no significant effect of cupping therapy alone on these outcomes. H03: There is no significant difference between the two interventions on these outcomes. Corresponding alternative hypotheses (H11–H13) proposed significant within- and between-group effects favouring the combined intervention.

2. MATERIALS AND METHOD

This report follows the TREND (Transparent Reporting of Evaluations with Nonrandomized Designs) Statement,

selected because group assignment in this study was by convenience sampling rather than randomization.

2.1 Study Design and Setting

A two-group, non-randomized, comparative interventional study was conducted in the Orthopedic OPD of Nootan College of Physiotherapy, Sankalchand Patel University, Visnagar, Gujarat, India, over a study period of April 2026 to July 2026 with a 4-week treatment duration per participant.

2.2 Participants

Thirty participants diagnosed with trapezitis were recruited from the Orthopedic physiotherapy outpatient department using convenience sampling and screened against the following criteria:

Inclusion criteria: Participants aged 20–40 years, of either gender, who were clinically diagnosed with trapezitis with a symptom duration of more than 3 months, presented with mild-to-moderate pain (NPRS < 6), and were willing to provide informed consent and participate in the study were included.

Exclusion criteria: Participants with cervical radiculopathy, recent cervical trauma or surgery, skin lesions at the cupping site, bleeding disorders, systemic inflammatory conditions, or who were currently receiving other physiotherapy treatment were excluded from the study.

Ethical approval was obtained from the Institutional Ethics Committee of Nootan College of Physiotherapy prior to recruitment. Written informed consent was obtained from all participants after explanation of the study purpose and procedures.

2.3 Assignment Method

Participants were allocated, non-randomly, into two equal groups of 15 using convenience sampling as they presented to the OPD and met eligibility criteria, with alternate (sequential) assignment to Group A and Group B in order of presentation. No formal randomization sequence or allocation concealment procedure was used.

2.4 Interventions

Group A — Bowen's Technique + Cupping Therapy (Experimental, n = 15)

- Bowen's technique: gentle rolling movements over upper trapezius and cervical paraspinal muscles, 15–20 minutes/session
- Followed immediately by dry cupping therapy over the upper trapezius region, 10–15 minutes/session, moderate suction as tolerated
- Frequency: 3 sessions/week for 4 weeks (12 sessions total)

Group B — Cupping Therapy Alone (Control, n = 15)

- Dry cupping therapy over the upper trapezius region, 10–15 minutes/session, identical protocol and suction level to Group A

- Frequency: 3 sessions/week for 4 weeks (12 sessions total)

All participants were assessed at the baseline before starting treatment and at completion (4 weeks) using identical assessment procedures.

2.5 Outcome Measures

- Numeric Pain Rating Scale (NPRS) — 11-point self-reported pain intensity scale (0–10), validated for musculoskeletal pain **[15]**.
- Neck Disability Index (NDI) — 10-item patient-reported measure of neck-related functional disability; the gold-standard tool for this population **[16]**.
- Cervical range of motion — lateral flexion (right/left), flexion, and extension, measured with a bubble goniometer, an instrument with established intra- and inter-rater reliability for the cervical spine **[17]**.

2.6 Sample Size

Sample size was estimated post hoc using G*Power software (v3.1.9.7), based on an independent-samples t-test for comparing two means. Assuming a large effect size (d = 0.8) — derived from comparable prior manual-therapy trials in trapezitis **[3, 5]** — $\alpha = 0.05$ (two-tailed), and 80% power, the minimum required sample size was calculated as 26 participants per group (52 total). Accounting for an anticipated 10% attrition, a target enrolment of 30 per group (60 total) would have been appropriate.

The present study enrolled 30 participants in total (15 per group), which is below this calculated target. This shortfall reflects the fixed recruitment window available for data collection and is acknowledged as a limitation of the study (Section 4.2).

A post-hoc achieved-power analysis using the observed between-group effect sizes indicated that the study was adequately powered (>90%) to detect the large differences observed for NDI, NPRS, lateral flexion (right and left), and extension. However, the study was likely underpowered (post-hoc power ≈ 45–55%) to detect the smaller effect observed for cervical flexion, consistent with the non-significant between-group finding for this outcome ($p = .086$; Section 3.6.2).

2.7 Blinding

Blinding of the outcome assessor and/or participants was not explicitly implemented. Given the nature of manual therapy interventions, participant blinding to treatment allocation was not feasible; assessor blinding was not reported. Notably, all outcome measurements (NPRS, NDI, and goniometric ROM) and both interventions were administered by a single investigator (JB), so the treating clinician and outcome assessor were the same individual — a further source of potential

assessment and expectation bias beyond the absence of formal blinding.

2.8 Statistical Methods

Data were analysed using the Shapiro–Wilk test to assess normality (appropriate for this sample size). NDI and all cervical ROM variables were normally distributed and analysed using paired t-tests (within-group) and independent-samples t-tests (between-group). NPRS data were not normally distributed and were analysed using the Wilcoxon signed-rank test (within-group) and Mann-Whitney U test (between-group); pre-treatment left lateral flexion in Group A also deviated from normality and was analysed between groups using the Mann-Whitney U test. Statistical significance was set at $p < .05$. The individual participant was the unit of analysis for all outcomes ($n = 15$ per group).

3. RESULTS

3.1 Participant Flow and Recruitment

A total of 39 individuals attending the outpatient department (OPD) were assessed for eligibility against the study's inclusion and exclusion criteria between 10 June 2026 and 20 June 2026. Of these, nine individuals were excluded prior to enrolment: two did not meet the inclusion criteria, three declined to provide informed consent, and four were unable to commit to the required intervention schedule of three sessions per week for four consecutive weeks. The remaining 30 participants *et al*, eligibility criteria, provided written informed consent, and were enrolled in the study.

Given the non-randomized, convenience-sampling design of this trial, enrolled participants were allocated to one of two intervention groups based on order of presentation to the OPD, with alternate (sequential) allocation to Group A and Group B as eligible participants presented for treatment. Fifteen participants were allocated to Group A, who received Bowen's technique combined with dry cupping therapy, and 15 participants were allocated to Group B, who received dry cupping therapy alone.

All 30 participants completed the full four-week intervention protocol (three sessions per week) with no losses to follow-up and no discontinuations in either group. Consequently, all 30 participants ($n = 15$ per group) were included in the final statistical analysis, with no exclusions at the analysis stage. The complete participant flow, including reasons for pre-enrolment exclusion, is presented in **Figure 1**.

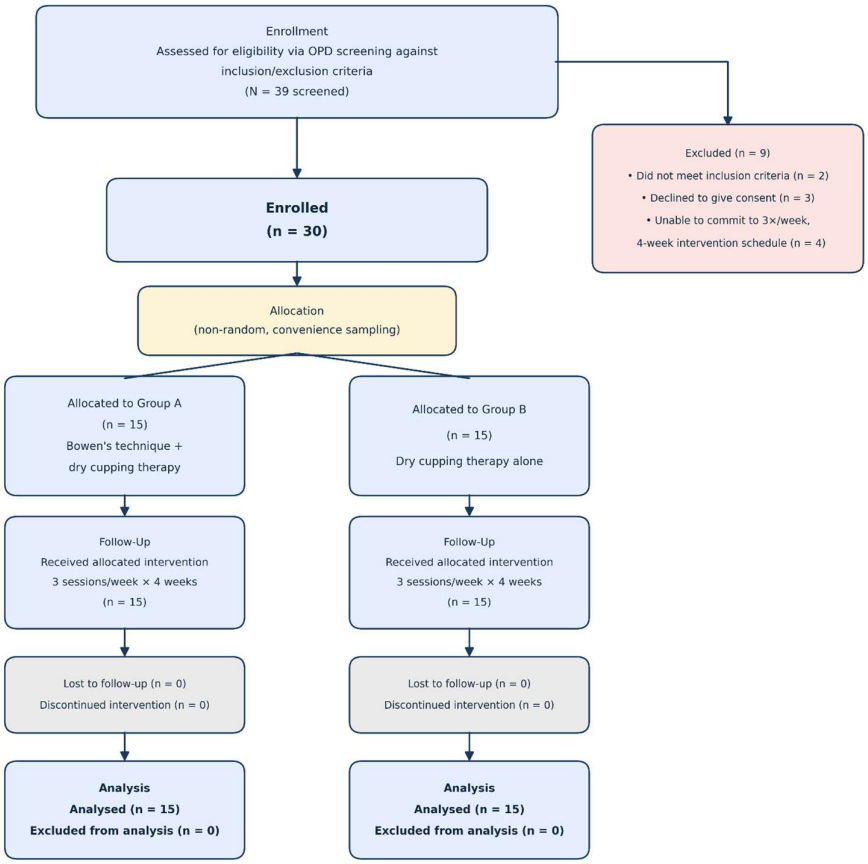


Figure 1: Participant flow diagram

3.2 Baseline Characteristics

The sample was predominantly female in both groups (93.3% in Group A, 86.7% in Group B).

Table 1: Gender Distribution by Group

Gender	Group A n (%)	Group B n (%)	Total n (%)
Male	1 (6.7%)	2 (13.3%)	3 (10.0%)
Female	14 (93.3%)	13 (86.7%)	27 (90.0%)
Total	15 (100%)	15 (100%)	30 (100%)

Table 2: Age Distribution by Group

Variable	Group A Mean ± SD	Group B Mean ± SD	t-value	df	p-value
Age (years)	29.93 ± 5.15	27.87 ± 5.60	1.052	28	.302

Age (independent t-test, t (28) = 1.052, p = .302) and gender distribution (Fisher's exact test, p = 1.000) were statistically comparable between groups at baseline

3.3 Descriptive Statistics of Outcome Measures

Table 3: Pre- and Post-Treatment Mean ± SD by Group

Outcome Measure	Group A Pre	Group A Post	Group B Pre	Group B Post
NPRS	4.27 ± 0.80	1.27 ± 0.70	4.27 ± 0.80	2.07 ± 0.88
NDI	17.67 ± 2.72	6.33 ± 1.88	17.87 ± 2.75	10.40 ± 2.69
Lat. Flexion – Right (°)	30.87 ± 4.47	39.47 ± 3.89	27.87 ± 2.95	33.07 ± 2.19
Lat. Flexion – Left (°)	33.47 ± 7.10	41.47 ± 2.75	31.73 ± 2.71	36.07 ± 2.19
Cervical Flexion (°)	37.00 ± 4.47	42.40 ± 2.23	37.67 ± 2.58	41.00 ± 2.07
Cervical Extension (°)	35.27 ± 4.43	42.07 ± 2.43	35.47 ± 2.50	39.67 ± 2.35

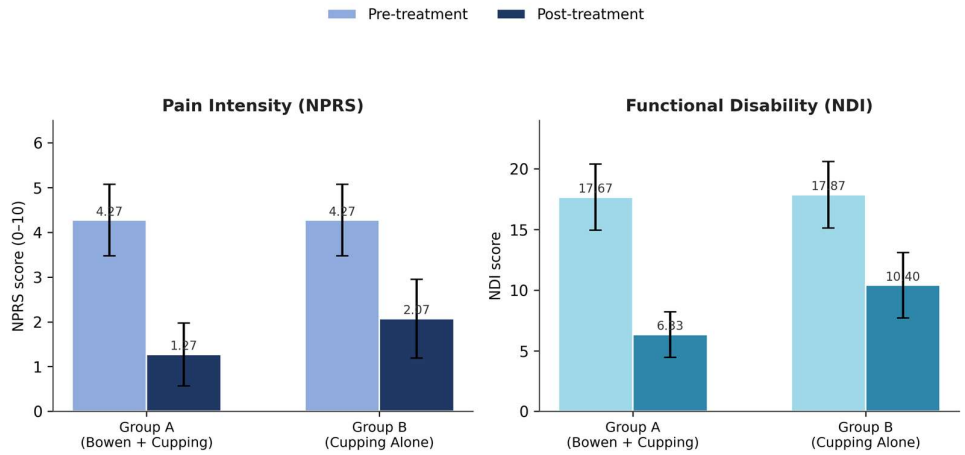


Figure 2: Pre- and post-treatment NPRS (pain) and NDI (disability) scores by group, Mean ± SD

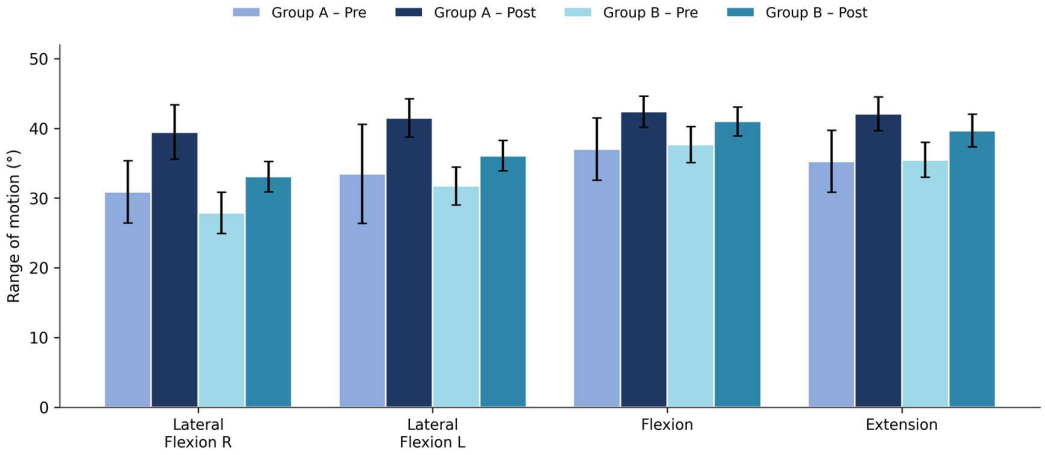


Figure 3: Pre- and post-treatment cervical range of motion (lateral flexion, flexion, extension) by group, Mean ± SD

3.4 Test of Normality (Shapiro–Wilk)

NDI and all cervical ROM variables were normally distributed in both groups ($p > .05$). NPRS pre- and post-treatment scores were not normally distributed in either group ($p < .05$), reflecting the discrete, narrow-range nature of the 0–10 ordinal scale; pre-treatment left lateral flexion in Group A also deviated from normality ($p < .001$). Non-parametric tests were applied accordingly.

3.5 Within-Group Analysis

Table 4: Within-Group Comparison — Group A (Bowen's Technique + Cupping)

Variable	Mean Difference ± SD	Test	t / Z	df	p-value
NDI (Pre–Post)	11.33 ± 1.05	Paired t-test	t = 41.94	14	<.001*
NPRS (Pre–Post)	3.00 ± 0.38	Wilcoxon	Z = 3.42	—	<.001*
Lat. Flexion Right	8.60 ± 2.10	Paired t-test	t = 15.88	14	<.001*
Lat. Flexion Left	8.00 ± 5.72	Paired t-test	t = 5.42	14	<.001*
Flexion	5.40 ± 2.82	Paired t-test	t = 7.41	14	<.001*
Extension	6.80 ± 2.65	Paired t-test	t = 9.93	14	<.001*

Table 5: Within-Group Comparison — Group B (Cupping Therapy Alone)

Variable	Mean Difference ± SD	Test	t / Z	df	p-value
NDI (Pre–Post)	7.47 ± 0.92	Paired t-test	t = 31.59	14	<.001*
NPRS (Pre–Post)	2.20 ± 0.41	Wilcoxon	Z = 3.41	—	<.001*
Lat. Flexion Right	5.20 ± 0.86	Paired t-test	t = 23.37	14	<.001*
Lat. Flexion Left	4.33 ± 0.62	Paired t-test	t = 27.19	14	<.001*
Flexion	3.33 ± 0.62	Paired t-test	t = 20.92	14	<.001*
Extension	4.20 ± 2.76	Paired t-test	t = 5.90	14	<.001*

Both groups demonstrated statistically significant within-group improvement across all outcome measures (p < .001), rejecting H01 and H02

3.6 Between-Group Analysis

3.6.1 Pre-Treatment (Baseline) Comparison

Table 6: Between-Group Comparison — Pre-Treatment

Variable	Group A Mean	Group B Mean	Test	t / U	p-value
NDI Pre	17.67	17.87	Independent t-test	t = −.20	.843
NPRS Pre	4.27	4.27	Mann-Whitney U	U = 112.5	1.000
Lat. Flexion Right Pre	30.87	27.87	Independent t-test	t = 2.17	.039*
Lat. Flexion Left Pre	33.47	31.73	Mann-Whitney U	U = 165.5	.029*
Flexion Pre	37.00	37.67	Independent t-test	t = −.50	.621
Extension Pre	35.27	35.47	Independent t-test	t = −.15	.880

Baseline NDI, NPRS, cervical flexion, and extension were statistically comparable between groups ($p > .05$). However, pre-treatment right ($p = .039$) and left ($p = .029$) lateral flexion were significantly different, with Group A starting with greater lateral flexion — a baseline imbalance that should be considered when interpreting post-treatment lateral flexion differences (ideally addressed via ANCOVA in future analyses).

3.6.2 Post-Treatment Comparison

Table 7: Between-Group Comparison — Post-Treatment

Variable	Group A Mean	Group B Mean	Test	t / U	p-value
NDI Post	6.33	10.40	Independent t-test	t = −4.80	<.001*
NPRS Post	1.27	2.07	Mann-Whitney U	U = 54.0	.011*
Lat. Flexion Right Post	39.47	33.07	Independent t-test	t = 5.56	<.001*
Lat. Flexion Left Post	41.47	36.07	Independent t-test	t = 5.96	<.001*
Flexion Post	42.40	41.00	Independent t-test	t = 1.78	.086
Extension Post	42.07	39.67	Independent t-test	t = 2.75	.010*

Group A showed significantly lower NDI and NPRS scores, and significantly greater lateral flexion (right/left) and extension, compared with Group B (all p < .05), rejecting H03 for these variables. Post-treatment cervical flexion was numerically higher in Group A but not statistically significant (p = .086), so H03 was not rejected for flexion.

3.6.3 Effect Sizes and Confidence Intervals

To complement the p-values reported in **Tables 4, 5, and 7, Table 8** presents standardized effect sizes (Cohen's d for parametric within- and between-group comparisons; r for the non-parametric Wilcoxon and Mann-Whitney U comparisons of NPRS) with 95% confidence intervals for the corresponding mean differences.

Table 8: Effect Sizes (Cohen's d / r) and 95% Confidence Intervals

Comparison	Outcome	Effect Size	95% CI (mean diff.)	Interpretation
Within-Group A	NDI (Pre–Post)	d = 10.79	[10.75, 11.91]	Very large
Within-Group A	NPRS (Pre–Post)	r = 0.88	—	Large (Wilcoxon)
Within-Group A	Lat. Flexion Right	d = 4.10	[7.44, 9.76]	Very large
Within-Group A	Lat. Flexion Left	d = 1.40	[4.83, 11.17]	Large
Within-Group A	Flexion	d = 1.91	[3.84, 6.96]	Large
Within-Group A	Extension	d = 2.57	[5.33, 8.27]	Very large
Within-Group B	NDI (Pre–Post)	d = 8.12	[6.96, 7.98]	Very large
Within-Group B	NPRS (Pre–Post)	r = 0.88	—	Large (Wilcoxon)
Within-Group B	Lat. Flexion Right	d = 6.05	[4.72, 5.68]	Very large
Within-Group B	Lat. Flexion Left	d = 6.98	[3.99, 4.67]	Very large
Within-Group B	Flexion	d = 5.37	[2.99, 3.67]	Very large
Within-Group B	Extension	d = 1.52	[2.67, 5.73]	Large
Between-Group (Post)	NDI	d = 1.75	[−5.81, −2.33]	Large, favours A
Between-Group (Post)	NPRS	r = 0.44	—	Moderate–large (MWU), favours A
Between-Group (Post)	Lat. Flexion Right	d = 2.03	[4.04, 8.76]	Very large, favours A
Between-Group (Post)	Lat. Flexion Left	d = 2.17	[3.54, 7.26]	Very large, favours A
Between-Group (Post)	Flexion	d = 0.65	[−0.21, 3.01]	Medium; CI crosses 0 (ns)
Between-Group (Post)	Extension	d = 1.00	[0.61, 4.19]	Large, favours A

Effect sizes for NDI, NPRS, lateral flexion, and extension were large to very large for both within-group changes and the between-group post-treatment comparison. The between-group flexion comparison showed only a medium effect (d = 0.65) whose 95% confidence interval crossed zero, consistent with the non-significant p-value (p = .086) and the limited statistical power identified for this outcome (Section 2.6).

3.7 Adverse Events

No adverse events were formally recorded in the original data collection instrument. Cupping-related bruising is a recognized, expected effect of the intervention and participants were counselled about this prior to treatment; systematic adverse-event reporting was not implemented as part of this protocol.

4. DISCUSSION

This comparative study evaluated whether combining Bowen's technique with cupping therapy produces superior outcomes to cupping therapy alone in 30 individuals with trapezitis. Both groups were statistically comparable at baseline for age and gender, and both interventions produced statistically and clinically significant within-group improvement in pain, disability, and cervical ROM after 4 weeks, confirming that each approach is independently effective and rejecting H01 and H02.

These findings align with prior literature: Murugan *et al*. (2024) **[3]** found Bowen's technique superior to Muscle Energy Technique in data entry operators with trapezitis; Zeb *et al*. (2026) **[4]** reported Bowen therapy outperforming foam rolling for pain, disability, and ROM in text neck syndrome; and Mehta *et al*. (2021) **[6]** found Bowen's technique comparably effective to Positional Release Technique in sub-acute trapezitis. The gentle rolling moves of Bowen's technique are thought to stimulate

fascial and muscular mechanoreceptors, triggering reflexive neuromuscular relaxation and autonomic regulation — a plausible mechanism for the pain and spasm reduction observed.

Group B's significant within-group improvement corroborates Sangpal *et al*. (2023) **[7]**, Shekh *et al*. (2024) **[8]**, Dhal (2024) **[10]**, and Sonkusare and Kulkarni (2020) **[14]**, who each demonstrated cupping therapy's standalone efficacy for trapezius-related pain via improved local circulation and interruption of the pain–spasm cycle.

When compared directly, Group A showed significantly greater improvement than Group B in NDI, NPRS, lateral flexion, and extension ($p < .05$), suggesting an additive or synergistic effect consistent with the study's theoretical rationale — that Bowen's technique addresses the neuromuscular component while cupping addresses the circulatory/myofascial component of trapezitis. This mirrors combination-versus-monotherapy patterns reported by Arya *et al*. (2022) **[9]**. The non-significant between-group difference in cervical flexion ($p = .086$) may reflect a ceiling effect, since flexion is less restricted by upper trapezius tightness than lateral flexion or extension, and/or inadequate statistical power at this sample size — consistent with mixed between-group findings reported by Nagulkar and Mehta (2025) **[11]** and Vispute and Kumar (2022) **[12]**.

Clinically, the NDI improvements in both groups (11.33 and 7.47 points respectively) exceeded the published minimal detectable change threshold (5–10 points), indicating that gains were not only statistically significant but clinically meaningful, with a larger clinically relevant gain in the combined-therapy group. As both techniques are non-invasive, low-cost, and require minimal equipment, the combined approach may represent a practical addition to conservative musculoskeletal management in outpatient physiotherapy settings.

4.1 Generalizability

Findings are drawn from a single-centre, convenience-sampled cohort of 30 predominantly female participants aged 20–40 years, which may limit generalisability to broader trapezitis populations, older age groups, or male-predominant cohorts. Multi-centric replication is needed before these findings can be generalised more widely.

4.2 Study Limitations

This study has several limitations. First, a non-randomized design was used, with group assignment based on convenience sampling rather than randomization or allocation concealment, introducing potential selection bias. Second, a baseline imbalance was observed, as pre-treatment

right and left lateral flexion differed significantly between groups (p = .039, p = .029); post-treatment lateral flexion differences should therefore be interpreted with caution, as they may partly reflect this baseline disparity. Third, cervical rotation, though intended as an outcome, was not recorded in the final dataset — confirmed against the raw data file, which contains only lateral flexion (right/left), flexion, and extension (pre- and post-treatment), with no rotation field present. Fourth, no follow-up was conducted beyond the 4-week treatment period, so the long-term durability of effects remains unknown. Finally, blinding of outcome assessors and/or participants was not implemented, which may have introduced potential assessment or expectation bias.

4.3 Recommendations for Future Research

Future research should employ larger, multi-centric samples with true randomisation and allocation concealment to eliminate baseline imbalances. A prospective a priori sample-size/power calculation should be performed at the design stage, rather than post hoc, with recruitment continuing to the full calculated target (≥26/group) before enrolment closes. Blinded outcome assessment should also be implemented, along with inclusion of cervical rotation as an outcome measure and long-term follow-up of 4–8 weeks post-intervention. Finally, future studies should compare the intervention against a true no-treatment or placebo control group.

5. CONCLUSION

Both Bowen's technique combined with cupping therapy and cupping therapy alone were effective in reducing pain and disability and improving cervical range of motion in individuals with trapezitis. The combination produced significantly greater improvements in pain, functional disability, lateral flexion, and extension than cupping therapy alone, suggesting this combined, non-invasive, low-cost approach may be a clinically useful conservative treatment option for trapezitis — pending confirmation in larger, randomized, multi-centric trials.

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Ethical Approval: Obtained from the Institutional Ethics Committee, Nootan College of Physiotherapy, Sankalchand Patel University, prior to participant recruitment (NCP/IEC/144.23/26).

Informed Consent: Written informed consent was obtained from all participants.

Conflict of Interest: None declared.

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