Role of homoeopathy in the management of adhesive capsulitis: A pretest-posttest study

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Abstract

Background: Adhesive capsulitis (AC) is an insidious and painful stiffening of the glenohumeral (shoulder) joint, resulting in compromised functional ability and quality of life (QoL). **Objectives:** Primary objective was to evaluate change in shoulder pain after individualised homoeopathy treatment for over 2 months. Secondary objective was to assess the change in the QoL and outcome related to impact on daily living (ORIDL). **Methods:** A single-arm, pretest-posttest, clinical study on AC was conducted on 40 participants recruited from the outpatient clinic of rheumatological disorders at Clinical Research Unit (Homoeopathy), Siliguri, West Bengal, India. Medicines were prescribed on the basis of the totality of symptoms. Changes in shoulder pain over 2 months were evaluated using the shoulder pain and disability index (SPADI). QoL was evaluated using SF-12v2 and ORIDL (participants and physician assessed), respectively. **Results:** Thirty-six participants completed the study and four participants dropped out. A protocol compliant sample of $n = 36$ was analysed. There was a statistically significant reduction of SPADI score (91.92 ± 10.22 vs. 34.14 ± 24.43; mean reduction 57.78, 95% CI 49.41–66.14, $P < 0.001$) and statistically significant increase in SF-12 v2 score (44.39 ± 9.70 vs. 72.27 ± 10.97; mean increase 27.87, 95% CI 23.89–31.85, $P < 0.001$). The Spearman's correlation between the changes in physician assessment ORIDL scores and participants assessment ORIDL scores over 2 months suggested a statistically significant correlation ($r_s = 0.998$, $P < 0.01$). **Conclusion:** The findings showed symptom alleviation, and improvement in the QoL after homoeopathic treatment. Randomised controlled trials are further warranted.

Keywords: Adhesive capsulitis, Frozen shoulder, Homoeopathy, India, Inflammation, ORIDL, SF-12v2, SPADI

INTRODUCTION

Adhesive capsulitis (AC) (frozen shoulder) is a clinical condition characterised by spontaneous onset of shoulder pain and gradual loss of active and passive shoulder movements.[1] The prevalence is more in women aged 40–60 years, diabetic population with the occurrence rate of approximately 2–5% of the general population,[2] and up to 20% in diabetics,[3] 13.4% of participants with AC have thyroid dysfunction.[4] The incident of AC in one shoulder increases the risk of contralateral shoulder involvement by 5%–34%, and simultaneous bilateral shoulder involvement develops in approximately 14% of cases.[5]

Zuckerman classified AC into primary and secondary and subdivided the latter into intrinsic, extrinsic and systemic ones.[6,7]

Participants presenting with AC often report an insidious onset with a progressive increase in pain and a gradual

decrease in active and passive range of motion (ROM).[5] The subjects frequently have difficulty with dressing, grooming, performing overhead reaching activities and particularly fastening items behind the back for a period of several months to several years.[7]

The literature reports that AC progresses through three overlapping clinical phases that is, acute/freezing/painful phase, adhesive/frozen/stiffening phase and resolution/thawing phase.[8,9] The diagnosis of AC is usually based on clinical findings, medical history and physical examination.[7] The orthopaedic clinical examination for AC shows high sensitivity

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and specificity for the confident diagnosis of AC and is the reference standard for diagnosis[10] Despite the value of imaging techniques in recent advances, these are not initially indicated to diagnose AC but can be used to rule out other intra-articular pathology[11] There is currently no gold standard for diagnosis nor have validated diagnostic criteria been published in the literature.[12]

Systemic reviews of the current therapies for AC such as physiotherapy, both oral and intra-articular steroid, and operative interventions do not provide significant long-term benefits.[11] The Cochrane review also reports very inconclusive results or add little evidence in interventions such as manual therapy and acupuncture. Even though AC is a self -limiting condition, lasting on an average for 2-3 years; few studies have shown that 20-50 % of affected individuals do continue to have pain and restricted movement beyond 3 years.[7] In spite of this, recent clinical evidence of persistent functional limitation, lasting for years, has challenged this theory.[13] A 2017 systematic review of seven studies found low-quality evidence that no treatment yielded some, but not complete improvement in ROM after 1–4 years of follow-up. Moderate-quality evidence from three randomised controlled trials with longitudinal data demonstrated that most improvement in pain and ROM occurs early, not late.[14] Homoeopathic medicines have been shown to provide relief and improve quality of life (QoL) in rheumatic disorders such as fibromyalgia and rheumatoid arthritis,[15-17] and could be a valid alternative treatment for AC.[18] Unfortunately, there is inadequate evidence to conclude the utility of individualised homoeopathic medicine (IHM) in the management of AC. An observational study of homoeopathy in AC by Magotra *et al.*[18] illustrates an encouraging role with IHM having a positive treatment option for AC. To further extrapolate the role of IHM in managing AC, a study design incorporating an added outcome measurement of QoL(SF-12) along with different study setting was devised. Therefore, there was a need to explore the possible role of IHM in relieving pain and stiffness, reduction in limitation and disability in activities of daily life in the participants suffering from AC. To generate such evidence, a preliminary single-group, pre-test, a post-test clinical study has been undertaken by the investigators. The research question for this study was the generated clinical hypothesis that whether 2 months of (IHM) can significantly reduce pain, stiffness, limitation of movements and improve QoL when measured on standardised scales. The generated null hypothesis is that there is no statistical significant difference of the shoulder pain and disability index (SPADI) scores, SF-12v2 and outcome related to impact on daily living (ORIDL) score of the patients between baseline and after 2 months of homoeopathic treatment.

Methods

Setting and design
This was a prospective, single-group, pretest-posttest clinical study conducted in the out patient department of rheumatological disorders at Clinical Research Unit (Homoeopathy), Siliguri, West Bengal, India from July 2019 to March 2020. The study protocol was approved by the Institutional Ethics Committee, of Clinical Research Unit (Homoeopathy), Siliguri, and was registered with the Clinical Trials Registry – India (CTRI/2019/05/019121) before the enrolment of the first participant. The proposed plan of work adhered to the Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects adopted by the 18th WMA general assembly, Helsinki, Finland, June 1964.[19] Each participant was provided with a participant information sheet written in local vernacular Bengali language detailing the objectives, methods, risks and benefits of participating and confidentiality issues. Written informed consent was obtained from each participant before the study participation.

Eligibility
Participants suffering from AC (ICD10-75.02) of painful and stiffening phase of one or both shoulders were only included. AC was clinically diagnosed, by assessing the shoulder pain followed by gradual loss of both active and passive ROM of the shoulders. Participants accompanying pain at the extreme of motion observed mainly in the stiffness phase were also included. Impaired ROM with forward flexion, abduction and external and internal rotation was the prime clinical finding in diagnosing AC.

Participants aged between 30 and 70 years old and who had provided written informed consent were included in the study. Excluded participants were those with severe degeneration of the shoulder joint with marked joint narrowing with recent shoulder surgery within the past 6 months, deformity of the shoulder (>12°); evidenced by imaging or other evidence and requiring surgical intervention, self-reported joint disorders (e.g., inflammatory joint diseases, specific arthropathy, severe axis deviations or instabilities, joint or skin infections and the joint prosthesis of the upper limbs) other than AC. Exclusion criteria also included those cases suffering from uncontrolled systemic illness or life-threatening infections, those already undergoing homeopathic treatment for any chronic disease within past 3 months , who were compromised by substance abuse and/or dependence, were pregnant or puerperal or lactating women, patients with psychiatric diseases, and self-reported immune-compromised states.

Study procedures
As per the specified eligibility criteria, participants underwent preliminary screening. Following this, a thorough case taking was undertaken on a pre-designed case recording form. The overall process of the selection of individualised medicine was based on the presenting symptoms' totality, repertorisation and consultation with homoeopathic Materia Medica[20-24] when required. On the whole, the decision-making was influenced by two experienced practitioners after mutual consensus. Successive prescriptions were generated following the homoeopathic principles.[25] Symptoms considered for the homoeopathic prescription and, in the subsequent visits, the changes in these symptoms were mentioned clearly.

Homoeopathic medicines, dilution methods, potency, pharmaceutical form and dose were also recorded. All medicines were procured from a GMP-certified firm: SBL Pvt. Ltd. Each dose was directed to be taken orally on a clean tongue. It consisted of four medicated sugar globules of size 30. Each participant enrolled was treated for 2 months, and follow-up was done at every 2 weeks interval or earlier, as and when required by the participants. Repetition was done depending on the intensity of the complaints. The participants were free to report on follow-up days, as mentioned above, in person or by telephone as per convenience.

General management

All the participants were advised to maintain an ambulatory state, avoid actions that can aggravate the pain and perform joint mobility exercises.

Outcome assessment

Primary outcome

SPADI, a commonly used shoulder-specific health status questionnaire[26,27] and described as the most responsive shoulder pain and disability tool for shoulder conditions,[28] was used in this study. It is ranked as one of the most relevant questionnaires for shoulder pain for being easy to complete in the least time that is, 2–5 min.[27,29] It consists of 13 items and is divided into two constructs: Pain (5 items) and functional disability (8 items). It is scored on an ordinal scale from 0 (no pain/no difficulty) to 10 (worst pain imaginable) with higher scores indicating greater pain and/or disability.[27] SPADI was assessed at baseline and after 2 months of intervention.

Secondary outcomes

The Short Form12 version 2 health survey (SF-12v2) estimates eight domains of functioning and well-being of respondents by considering their health status over the past 4 weeks.[30] The SF-12 consists of 12 items and eight subdomains: Physical functioning (PF), role physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role emotional (RE) and mental health (MH). The subscales PF, RP, BP and GH form the physical component summary (PCS-12) scores, whereas the subscales VT, SF, RE and MH form the mental component summary (MCS-12) scores.[31] Each item of the questionnaire has response categories which vary from 2- to 6-point scales and raw scores for items ranging from 1 to 6.[31] The raw scores are summated and linearly transformed into 0–100 scale[31,32] with a higher score indicating better health status.[31,32]

The clinical improvement and outcome of signs and symptoms were assessed by ORIDL score[33] at every follow-up visit. The ORIDL instrument records the assessment of response to the previous prescription on the main complaint as well as on general well-being on a numerical scale of –4 to +4.

Sample size

The sample size was calculated using the software G*Power software (latest ver. 3.1.9.7; Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany; http://www.gpower.hhu.de/)[34] Considering a chance to drop out of 20%, the sample size was taken as 40. Therefore, we planned a sample size of 40 participants to be recruited for this clinical study. (The statistical analysis was performed by 't-test' and 'Difference between two dependent means (matched pairs)' with 'two tails test.' The effect size was fixed at 0.5, alfa=0.05, power [1-beta] = 0.8, degree of freedom was 1).

Statistical analysis

All statistical analyses were performed using Statistical Package for the Social Sciences (SPSS), version 20.0 (IBM Corp., IBM SPSS Statistics for Windows, Armonk, New York: USA). Per protocol (PP) analysis was performed meaning only the protocol-compliant sample was used in the final analysis. Data distribution for its normality was examined by histograms, Q-Q plots and the Shapiro–Wilk test. Descriptive data (categorical and continuous) were presented in terms of absolute values, percentages, means and standard deviations. Student's t-test (parametric test) was used as inferential statistics as per normality of data distribution comparing dependent observation of continuous outcomes at baseline and after 2 months. Pearson correlation coefficient was measured to detect a correlation between physician assessment score and participants' assessment score for ORIDL. $P < 0.01$ two tailed was considered as statistically significant.

RESULTS

A total of 70 participants reporting for pain in the shoulder were preliminarily screened of which 30 (42.8%) were excluded; 40 met the eligibility criteria and were enrolled in the study. Among those four participants dropped out and 36 completed the study. The demographic details [Table 1] and the flow diagram of participants [Figure 1] are given in the table and figure, respectively.

Baseline features

The baseline sociodemographic features – age, gender, residence, duration of illness, treatment history comorbidities, marital status and educational status are shown in Table 1.

Test of normality of the data distribution

When histogram, Q-Q plot and Shapiro–Wilk test were carried out, there was no significant departure from normality both in terms of age and baseline data of SPADI and SF-12v2 data.

Pre-post comparison of outcome measures

The objective was to compare the mean scores of SPADI (pain, disability and total) and of SF-12v2 (PCS, MCS and total) at baseline and after 2 months of participants receiving IHT. The data were analysed with the help of a correlated t-test and the results are given in Table 2.

From Table 3, it can be seen that the t values of the primary outcome measure of SPADI (pain, disability and total) and SF-12v2 (PCS, MCS and total) are significant at 0.01 level with df = 35. It indicates that mean scores of SPADI and SF-12v2 at pre-

Table 1: Sociodemographic information at baseline (*n*=40)

Variable	Value n (%)
Age (in years)	*50.43 ± 12.10
Age group (in years)	
30–40	10 (25.00)
41–50	13 (32.50)
Above 50	17 (42.50)
Duration of illness in months	3 (1–6)***
Duration of illness categorised	
Up to 6 months	31 (77.50)
More than 6 months–1 year	6 (15.00)
More than 1 year–2 years	1 (2.50)
More than 2 years	2 (5.00)
Gender	
Male	7 (17.50)
Female	33 (82.50)
Residence	
Rural	30 (75.00)
Urban	10 (25.00)
Marital status	
Married	30 (75.00)
Unmarried	1 (2.50)
Divorcee/widower	9 (22.50)
Comorbidity	
Hypertension	12 (30.00)
Diabetes mellitus	4 (10.00)
Hypothyroidism	2 (5.00)
Tuberculosis	1 (2.50)
Others.	4 (10.00)
Education	
Up to class 10	20 (50.00)
Up to class 12	8 (20.00)
Graduation and above	12 (30.00)

Data are presented as *mean±standard deviation, ***median (IQR)

Table 2: Correlations between the changes in SPADI total score and SF-12 v2 overall score after 2 months of treatment

Correlations	Changes in SPADI total score after 2 months of treatment	Changes in SF-12 v2 overall score after 2 months of treatment
Changes in SPADI total score after 2 months of treatment		
Pearson correlation	1	0.802**
Sig. (two tailed)		<0.001
n	36	36
Changes in SF-12 v2 overall score after 2 months of treatment		
Pearson correlation	0.802**	1
Sig. (two tailed)	<0.001	
n	36	36

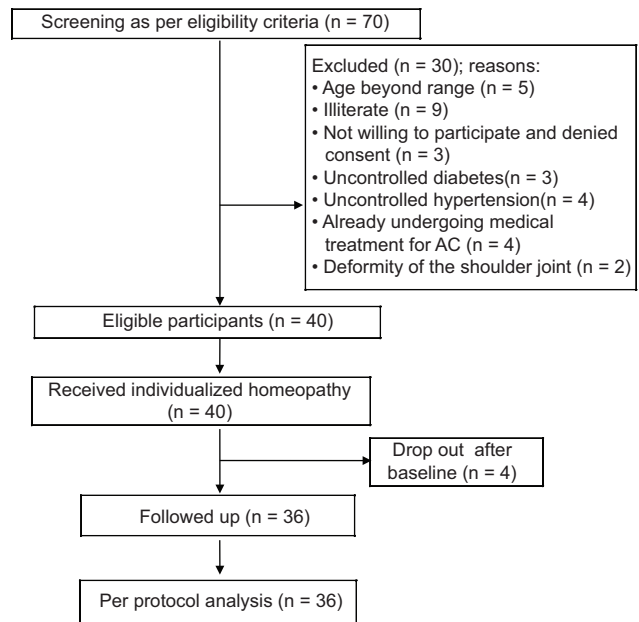**Correlation is significant at the 0.01 level (two tailed)

Figure 1: The participant flow diagram

test and post-test stages after IHT differ significantly. Therefore, the null hypothesis that there is no significant difference in mean scores of pain, limitation of movement and QoL at pre-test and post-test stages after IHT is rejected. Further, the primary outcome measure reductions in SPADI pain score (38.31 ± 4.11 vs. 15.61 ± 10.75; mean reduction 22.7, 95% CI 19.10–26.29, $P < 0.001$), SPADI disability score (53.61 ± 7.25 vs. 18.53 ± 13.88; mean reduction 35.08, 95% CI 30.19–39.98, $P < 0.001$) and SPADI total score (91.92 ± 10.22 vs. 34.14 ± 24.43; mean reduction 57.78, 95% CI 49.41–66.14, $P < 0.001$) were statistically significant by parametric paired t-test [Table 3].

Secondary outcome measures – in SF-12 v2 health survey increased in PCS score (41.43 ± 9.53 vs. 70.52 ± 12.58; mean value increased 29.08, 95% CI 25.12–33.05, $P < 0.001$), MCS score (49.72 ± 12.76 vs. 75.42 ± 8.89; mean value increased 25.69, 95% CI 21.13–30.25, $P < 0.001$) and overall score (44.39 ± 9.70 vs. 72.27 ± 10.97; mean value increased 27.87, 95% CI 23.89–31.85, $P < 0.001$) were statistically significant by parametric paired *t*-test [Table 3].

Table 2 shows that Pearson's correlation coefficient is 0.802 which is positive and nearer to 1 and significant at the 0.01 level. It reflects that the changes in SPADI scores and SF-12v2 overall scores over 2 months of IHT were positively and significantly correlated [Figure 2].

Further, Table 4 reflects that there is a significant positive correlation between ORIDL scores of the participants assessment and the physician assessment with a correlation coefficient of 0.998 significant at 0.01 level and df = 142. To see the clinical significance between the baseline and after 2 months of treatment, the effect size (Cohen's-d) was calculated from this primary outcome (SPADI score). The obtained Cohen's-d score (score '5.65') [Table 3] indicates

Table 3: Paired sample statistics

Variable	Mean±SD	Paired differences (baseline and 2 months)			
		Mean±SD	95% confidence interval of the difference	t	*P*-value (two tailed)
SPADI pain					
Baseline	38.31±4.11	22.69±10.63	19.10–26.29	12.805	0.000*
After 2 months	15.61±10.71				
SPADI disability index					
Baseline	53.61±7.25	35.08±14.48	30.19–39.98	14.541	0.000*
After 2 months	18.53±13.88				
SPADI total score					
Baseline	91.92±10.22	57.78±24.72	49.41–66.14	14.026	0.000*
After 2 months	34.14±24.43				
SF-12 v2, PCS-12					
Baseline	41.44±9.54	−29.09±11.72	−33.05—25.12	−14.893	0.000*
After 2 months	70.52±12.59				
SF-12 v2, MCS-12					
Baseline	49.72±12.76	−25.69±13.48	−30.25—21.13	−11.439	0.000*
After 2 months	75.42±8.89				
SF-12 v2, overall score					
Baseline	44.39±9.71	−27.88±11.77	−31.86—23.89	−14.211	0.000*
After 2 months	72.27±10.98				

Effect size (Cohen's-d)=Mean difference/SD=57.78/10.22=5.65. *P<0.05, significant at the 0.05 level (two tailed)
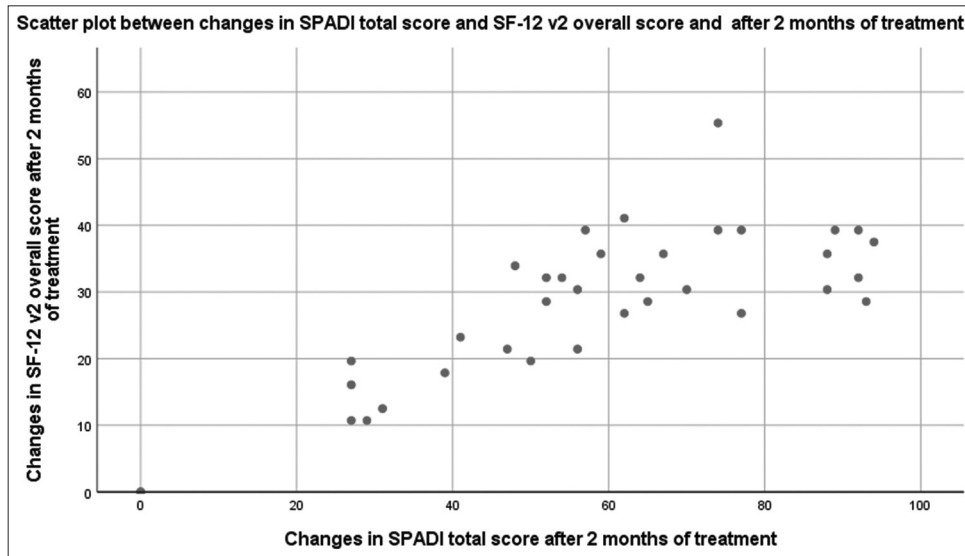

Figure 2: Scatter plot showing linear correlation between change in total SPADI score and SF-12 v2 overall score over 2 months of treatment

the large effect size (above 0.8) and ascertains the clinically significant reduction of the SPADI score.

Medicines used

Overall in this study, 16 different medicines were prescribed in 30cH,200cH and 1000cH potencies. The most frequently indicated medicines were *Rhus toxicodendron* (n=7;17.5%), *Ferrum Metallicum* (n=5;12.5%) and *Syphilinum* (n=5;12.5%) [Figure 3].

Adverse or unanticipated events

Throughout the course of treatment, no unanticipated event in the form of aggravation or worsening of symptoms, that is,

`adverse event',[34,35] was reported by the participants either directly in the OPD or over the phone.

Discussion

This study intended to explore the possible effects of IHM in relieving pain, stiffness, reduction in limitation of movement and disability in activities of daily life in the participants suffering from AC. Upon throrough search, we realised there is severe paucity of conclusive evidence-based homeopathy study in the mainstream database for AC. We, therefore, devised a study to come up with a single-arm clinical study to find some effects of IHM on AC. AC, though a self-limiting condition, its

Homoeopathic medicines prescribed

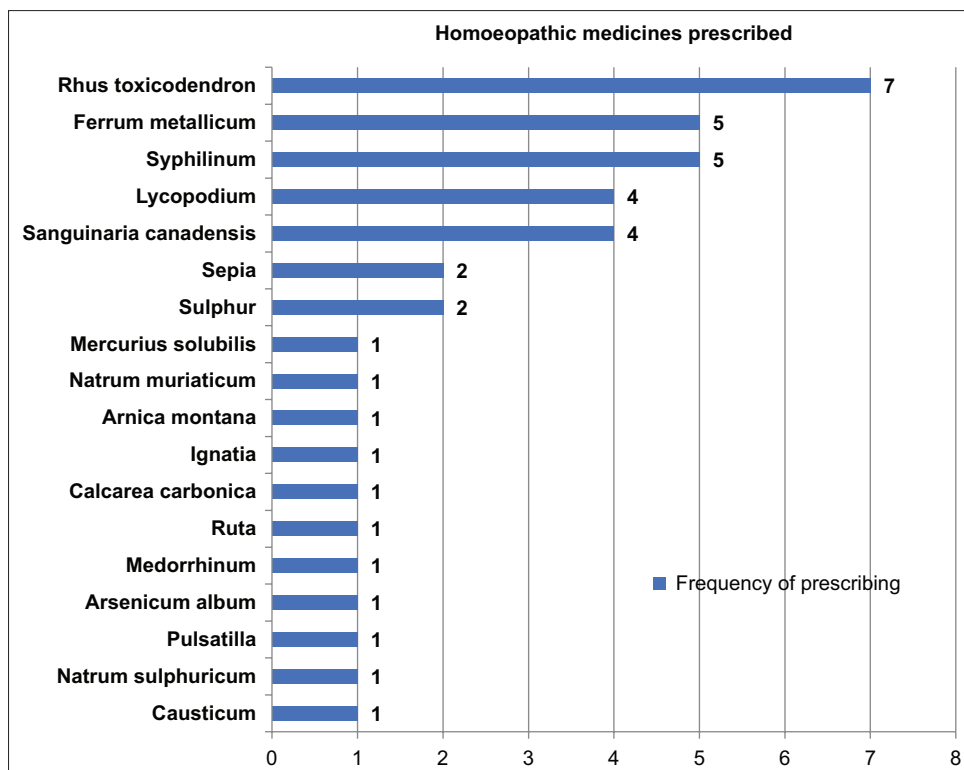| Medicine	Frequency of prescribing
Rhus toxicodendron	7
Ferrum metallicum	5
Syphilinum	5
Lycopodium	4
Sanguinaria canadensis	4
Sepia	2
Sulphur	2
Mercurius solubilis	1
Natrum muriaticum	1
Arnica montana	1
Ignatia	1
Calcarea carbonica	1
Ruta	1
Medorrhinum	1
Arsenicum album	1
Pulsatilla	1
Natrum sulphuricum	1
Causticum	1

Figure 3: Homoeopathic medicines used: Sixteen different individualised medicines were prescribed in the clinical study

suffering may stretch for more than 3 years, leading to a serious compromise along with the impaired psychosocial status among the working section of the society.[8,37,38] This study reflected a statistically significant result in the reduction of pain, stiffness and improvement in limitation of the movement of affected shoulder joints along with favourable improvement in the QoL of the individuals suffering from AC. IHM was able to reduce the pain, stiffness and limitation of movement within a plausible time frame of 2 months which was the objective of this study. The study also assessed the difference in response before and after the administration of IHM in a single arm of 36 participants suffering from AC. The validated outcome such as SPADI and SF-12 v2 was taken as the primary and ORIDL scores as secondary outcome measures, calculated, respectively, at baseline and after 2 months of treatment. To see the clinical significance between the baseline and after 2 months of treatment, the effect size (Cohen's-d) was calculated from this primary outcome (SPADI score). The obtained Cohen's-d score (score '5.65') [Table 3] indicates the large effect size (above 0.8) and ascertains the clinically significant reduction of the SPADI score.

A study of Magotra *et al.*[18] on AC used the SPADI and Oxford Shoulder Score outcome measure to show the positive effect of homoeopathy in AC. This study utilised the QoL assessment scale measure like SF-12v2 along with the AC-specific rating scale to evaluate the effects of IHM. The pre-post comparison study of SF-12v2 a well-validated Bengali questionnaire showed changes in the outcomes over time significantly. The significant correlation between SPADI a

Table 4: Non-parametric correlation between patient assessment and physician assessment of ORIDL score

Correlations	ORIDL score physician assessment	ORIDL score patient assessment
Spearman's rho		
ORIDL score physician assessment		
Correlation coefficient	1.000	0.998**
Sig. (two tailed)		<0.001
n	144	144
ORIDL score patient assessment		
Correlation coefficient	0.998**	1.000
Sig. (two tailed)	<0.001	
n	144	144

**Correlation is significant at the 0.01 level (two tailed)

disease-specific rating scale and SF12 v2 also showed that IHM when used in pursuance with homoeopathic principles gives an overall improvement. We used the ORIDL scale to detect the overall improvement of the participants in the realm of participants and physician observation both. The correlation between the changes in physician assessment ORIDL scores and participants' assessment ORIDL scores over 2 months of treatment reflects that there is a significant correlation that supports the overall timely improvement of the pain, stiffness and QoL of the individual. However, AC participants suffering from comorbidities [Table 1] were reported to be low in terms of improvement in pain and stiffness. Altogether authors were able to find only one such study Magotra *et al.*[18]

where IHM had a possible effect on the systematic estimation of results. Moreover, this study with a multidimensional approach to measure perceived pain, stiffness, discomfort and QoL along with the subjective measure of ORIDL has been well-documented for the readers. AC responding with IHM significantly within a reasonable time edge supported by Magotra *et al.*[18] along with this study demands more robust randomised controlled trials with a multicentre design in near future. The strength of the study was following the approach of model validity of homoeopathic treatment accompanying all the six domains such as the rationale of the intervention, principles of homoeopathy, practitioners experience, outcome measures and outcome sensitivity along with the follow-up of the condition treated.[39] The Bengali-translated version of the SPADI questionnaires was able to elicit the minute significant changes in the pain which was the primary outcome measure in the study. The follow-up to evaluate the effects of IHM which was for 2 months in this study was done to bring in comparison with the conventional system of medicines which can bring down the pain of AC within 3–4 weeks of administration. The AC participants have to continue long treatment along with supplements as in the conventional system, which automatically brings in a disinterest and accrues economic burden along with the chance of side effects during the discourse.[7] In this study, the results were not only statistically significant within the 2 months of follow-up but also clinically with a large effect size. However, the study missed the opportunity to find the role of IHT in radiological changes in the affected joint and its assessment. The study if conducted with control group and considering a large sample size along with longer follow-up could further explore the efficacy or effectiveness of the intervention which is warranted in the future. This exploratory approach of the study without incurring any major budgetary expenditure was a potential explanation and its worthiness for further controlled trials.

The limitation of the study is that it is of one-group pretest-posttest design, where measures such as blinding, randomisation or control are missing, offers disadvantages of ruling out any possible alternative explanations and poses a threat to their validity.

Conclusion

This open-label, prospective one group of pretest-posttest comparison design conducted on 40 subjects suffering from AC showed statistically significant improvement in the SPADI scale, SF-12 v2 health survey and ORIDL scores after 2 months of individualised homoeopathic treatment. Further experimentations by adequately powered randomised trials and independent replications with longer follow-ups are merited.

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Conflicts of interest

None declared.

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Rôle de l'homéopathie dans la prise en charge de la capsulite adhésive: Une étude basée sur un modèle pré-test-post-test

RÉSUMÉ Contexte: La capsulite adhésive (CA) est un raidissement insidieux et douloureux de l'articulation gléno-humérale (épaule), entraînant une diminution de la capacité fonctionnelle et de la qualité de vie (QOV). Objectifs: L'objectif principal était d'évaluer l'évolution de la douleur à l'épaule après un traitement homéopathique individualisé sur 2 mois. L'objectif secondaire était d'évaluer l'évolution de la qualité de vie et des résultats liés à l'impact sur la vie quotidienne (ORIDL). **Méthodes:** Une étude clinique à un seul bras, de type pré-test-post-test, a été menée sur 40 participants souffrant de CA et fréquentant la clinique externe des troubles rhumatologiques de l'unité de recherche clinique (homéopathie), à Siliguri, au Bengale occidental, en Inde. Les médicaments ont été prescrits sur la base de l'ensemble des symptômes. L'évolution de la douleur à l'épaule sur 2 mois a été évaluée à l'aide de l'indice de douleur et d'incapacité à l'épaule (SPADI). La qualité de vie a été évaluée à l'aide du SF-12v2 et de l'ORIDL (évalués par les participants et les médecins), respectivement. **Résultats:** 36 participants ont terminé l'étude et quatre participants ont abandonné. Un échantillon conforme au protocole de (n = 36) a été analysé. On a constaté une réduction statistiquement significative du score SPADI (91,92 ± 10,22 contre 34,14 ± 24,43 ; réduction moyenne de 57,78, IC 95 % 49,41-66,14, P < 0,001) et une augmentation statistiquement significative du score SF-12 v2 (44,39 ± 9,70 contre 72,27 ± 10,97 ; augmentation moyenne de 27,87, IC 95 % 23,89-31,85, P < 0,001). La corrélation de Spearman entre les changements dans les scores ORIDL évalués par les médecins et les scores ORIDL évalués par les participants sur une période de 2 mois a suggéré une corrélation statistiquement significative (rs = 0,998, P < 0,01). **Conclusion:** Les résultats ont montré une atténuation des symptômes et une amélioration de la qualité de vie après le traitement homéopathique. Des essais contrôlés randomisés sont encore nécessaires.

Die Rolle der Homöopathie bei der Behandlung der adhäsiven Kapsulitis: Eine Studie mit Prä-Test-Post-Test-Design

Abstrakt Hintergrund: Die adhäsive Kapsulitis (AC) ist eine schleichende und schmerzhafte Versteifung des Schultergelenks, die zu einer Beeinträchtigung der Funktionsfähigkeit und der Lebensqualität führt. **Zielsetzungen:** Primäres Ziel war die Bewertung der Veränderung der Schulterschmerzen nach einer individualisierten homöopathischen Behandlung über 2 Monate. Sekundäres Ziel war die Bewertung der Veränderung der Lebensqualität und des Ergebnisses in Bezug auf die Auswirkungen auf das tägliche Leben (ORIDL). **Methoden:** Eine einarmige klinische Prä-Test-Post-Test-Studie wurde mit 40 Teilnehmern durchgeführt, die an AC litten und die Ambulanz für rheumatologische Erkrankungen in der Clinical Research Unit (Homöopathie), Siliguri, Westbengalen, Indien, aufsuchten. Die Medikamente wurden auf der Grundlage der Gesamtheit der Symptome verschrieben. Die Veränderungen der Schulterschmerzen über 2 Monate wurden anhand des Schulterschmerz- und Behinderungsindex (SPADI) bewertet. Die Lebensqualität wurde anhand des SF-12v2 und des ORIDL (nach Einschätzung der Teilnehmer und des Arztes) bewertet. Ergebnisse: 36 Teilnehmer schlossen die Studie ab, vier Teilnehmer brachen sie ab. Es wurde eine protokollkonforme Stichprobe von (n = 36) analysiert. Es gab eine statistisch signifikante Verringerung des SPADI-Scores (91,92 ± 10,22 vs. 34,14 ± 24,43; mittlere Verringerung 57,78, 95% CI 49,41-66,14, P < 0,001) und eine statistisch signifikante Erhöhung des SF-12 v2-Scores (44,39 ± 9,70 vs. 72,27 ± 10,97; mittlere Erhöhung 27,87, 95% CI 23,89-31,85, P < 0,001). Die Spearman-Korrelation zwischen den Veränderungen der ORIDL-Scores nach ärztlicher Beurteilung und den ORIDL-Scores nach Einschätzung der Teilnehmer über einen Zeitraum von 2 Monaten deutete auf eine statistisch signifikante Korrelation hin (rs = 0,998, P < 0,01). Schlussfolgerung: Die Ergebnisse zeigen eine Linderung der Symptome und eine Verbesserung der Lebensqualität nach homöopathischer Behandlung. Randomisierte kontrollierte Studien sind weiterhin gerechtfertigt.

आसंजी सम्पुटशोध के प्रबंधन में होम्योपैथी की भूमिका: एक परीक्षण-पूर्व परीक्षण-पश्चात डिजाइन-आधारित अध्ययन

पृष्ठभूमि: आसंजी सम्पुटशोध (एसी) ग्लेनोहुमरल (कंधे) के जोड़े का एक विकट और दर्दनाक कड़ापन है, जिसके परिणामस्वरूप समझौता कार्यात्मक क्षमता और जीवन की गुणवत्ता (क्यूओएल) जोखिमपूर्ण होती है। **उद्देश्य:** प्राथमिक उद्देश्य 2 महीने में व्यक्तिगत होम्योपैथी उपचार के बाद कंधे के दर्द में परिवर्तन का मूल्यांकन करना था। द्वितीयक उद्देश्य क्यूओएल में परिवर्तन और दैनिक जीवन पर प्रभाव (ओआरआईडीएल) से संबंधित परिणाम का आकलन करना था। **विधियां:** नैदानिक अनुसंधान इकाई (होम्योपैथी), सिलीगुड़ी, पश्चिम बंगाल, भारत में रुमेटोलॉजिकल विकारों के आउट पेशेंट क्लिनिक में भाग लेने वाले एसी से पीड़ित 40 प्रतिभागियों पर एक एकल-शाखा पूर्व-परीक्षण-परीक्षण-पश्चात-जांच नैदानिक अध्ययन आयोजित किया गया था। लक्षणों की समग्रता के आधार पर दवाएं निर्धारित की गई थीं। 2 महीने से अधिक समय तक कंधे के दर्द में परिवर्तन का मूल्यांकन कंधे के दर्द और विकलांगता सूचकांक (एसपीएडीआई) का उपयोग करके किया गया था। क्यूओएल का मूल्यांकन क्रमशः एसएएफ-12वी2 और ओआरआईडीएल (प्रतिभागियों और चिकित्सक का मूल्यांकन) का उपयोग करके किया गया था। **परिणाम:** 36 प्रतिभागियों ने अध्ययन पूरा किया और चार प्रतिभागियों ने छोड़ दिया। (एन = 36) के एक प्रोटोकॉल अनुरूप नमूने का विश्लेषण किया गया था। एसपीएडीएल स्कोर (91.92 ± 10.22 बनाम 34.14 ± 24.43; औसत कमी 57.78, 95% सीआई 49.41-66.14, पी <0.001) और एसएफ -12 वी 2 स्कोर मे में सांख्यिकीय रूप से महत्वपूर्ण वृद्धि हुई थी (44.39 ± 9.70 बनाम 72.27 ± 10.97) औसत वृद्धि 27.87, 95% सीआई 23.89-31.85, पी<0.001। चिकित्सक मूल्यांकन ओआरआईडीएल स्कोर में परिवर्तन और प्रतिभागियों के मूल्यांकन ओआरआईडीएल स्कोर में परिवर्तन के बीच एसपियर के सहसंबंध ने 2 महीने में एक सांख्यिकीय रूप से महत्वपूर्ण सहसंबंध का सुझाव दिया (आरएस = 0.998, पी <0.01)। **निष्कर्ष:** निष्कर्षों ने होम्योपैथिक उपचार के बाद क्यूओएल में लक्षण उन्मूलन और सुधार दिखाया। यादृच्छिक नियंत्रित परीक्षणों को आगे वारंट किया जाता है।

Papel de la homeopatía en el tratamiento de la capsulitis adhesiva: un estudio basado en el diseño pre - prueba - post – prueba

Abstracto El antecedente: La capsulitis adhesiva (CA)es un endurecimiento insidioso y doloroso de la articulación glenohumeral (hombro), lo que resulta en una capacidad funcional comprometida y en la calidad de vida (CdV). **Objetivos:** El objetivo principal fue evaluar el cambio en el dolor de hombro después del tratamiento individualizado de la homeopatía durante 2 meses. El objetivo secundario fue evaluar el cambio en la CdV y el resultado relacionado con el impacto en la vida diaria (ORIDL). **Métodos:** Se realizó un estudio clínico de un solo brazo pre - prueba - post – pruebaen 40 participantes con AC que acudieron a la clínica ambulatoria de trastornos reumatológicos de la Unidad de Investigación Clínica (Homeopatía), Siliguri, Bengala Occidental, India.Los medicamentos se recetaron sobre la base de la totalidad de los síntomas. Los cambios en el dolor de hombro durante 2 meses se evaluaron mediante el índice de dolor de hombro y discapacidad (SPADI).La QOL se evaluó utilizando SF-12v2 y ORIDL (participantes y médico evaluados), respectivamente. **Resultados:** 36 participantes completaron el estudio y cuatro abandonaron el estudioSe analizó una muestra conforme al protocolo de (n = 36). Hubo una reducción estadísticamente significativa de la puntuación de SPADI (91,92 ± 10,22 vs. 34,14 ± 24,43; reducción media 57,78, IC 95% 49,41–66,14, P < 0,001) y un aumento estadísticamente significativo de la puntuación de SF-12 v2 (44,39 ± 9,70 vs. 72,27 ± 10,97; aumento medio 27,87, IC 95% 23,89–31,85, P < 0,001).La correlación de Spearman entre los cambios en las puntuaciones ORIDL de la evaluación médica y las puntuaciones ORIDL de la evaluación de los participantes durante 2 meses sugirió una correlación estadísticamente significativa (rs = 0,998, P < 0,01). **Conclusión:** Los hallazgos mostraron alivio y mejoría de los síntomas en el QoLdespués del tratamiento homeopático.Los ensayos controlados aleatorios están además justificados.

顺势疗法在治疗粘连性关节炎中的作用: 一个基于前测后测设计的研究

摘要

背景介绍: 粘连性关节囊炎（AC）是一种隐性的、痛苦的盂肱关节（肩）僵化，导致功能能力和生活质量（QoL）受到影响。).

目标:主要目标是评估个体化同济疗法治疗后2个月内肩部疼痛的变化。次要目标是评估QoL的变化和对日常生活影响的结果（ORIDL).

方法:在印度西孟加拉邦西里古里的临床研究单位（顺势疗法）的风湿病门诊，对40名患有AC的参与者进行了单臂前测后测的临床研究。药品的处方是根据全部症状来决定的. 使用肩痛和残疾指数（SPADI）评估2个月内的肩痛变化。QoL是用SF-12v2和ORIDL（参与者和医生评估）分别进行评估的. .

结果: 36名参与者完成了研究，4名参与者退出了研究。对符合协议的样本（n＝36）进行了分析。在统计学上，SPADI 得分有显著下降（91.92 ± 10.22 vs. 10.22）。. 34.14±24.43；平均减少57.78，95%CI49.41-66.14，P＜0.001），SF-12 v2 得分有统计学意义的增加 （44.39±9.70 vs. 72.27±10.97；平均增加27.87，95%CI 23.89-31.85，P＜0.001）。医生评估的 ORIDL分数的变化和参与者评估的ORIDL分数在2个月内的斯皮尔曼斯相关性表明有统计学意义的相关性（rs = 0.998, P＜0.01）。.

总结:研究结果显示，同济疗法治疗后，症状得到缓解，QoL得到改善。有必要进一步进行随机对照试验。.