



A CLINICAL STUDY TO SHOW THE EFFICACY OF CONSTITUTIONAL MEDICINE IN THE TREATMENT OF CHRONIC RHINOSINUSITIS

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Abstract: Sinusitis, the inflammation of mucous membranes in paranasal sinuses is often associated with nasal mucosa inflammation, so the term "rhinosinusitis" is commonly used. Chronic rhinosinusitis, persisting for over 12 weeks, affects nasal and paranasal sinus mucosa. A prevalent issue in India, sinusitis afflicts one-eighth of the population. Homoeopathy, based on similia, administers highly diluted substances mimicking symptoms to boost natural healing. This study aims to evaluate the efficacy of constitutional medicine in managing chronic rhinosinusitis patients, to gain insights into various drugs for constitutional prescription & to assess the symptoms of the patients with 31 – item Rhinosinusitis Outcome Measure (RSOM-31). Thirty chronic rhinosinusitis cases were purposively selected, meeting inclusion/exclusion criteria. Recorded in Sarada Krishna Homoeopathic Medical College and Hospital's format, cases were analysed, and constitutional medicine was prescribed. Symptoms were assessed using 31 – item Rhinosinusitis Outcome Measure (RSOM-31) pre intervention & post intervention every two weeks. Of the patients, 19 showed marked improvement, and 11 showed moderate improvement. Statistical analysis indicated a satisfying t-value of 12.980, supporting the hypothesis. The study demonstrates homoeopathic constitutional medicine's efficacy in management of patients with chronic rhinosinusitis.

Index Terms - Chronic rhinosinusitis, Homoeopathic constitutional medicine, RSOM - 31.

I. INTRODUCTION

Sinusitis refers to the inflammation of the mucous membranes in one or more of sinus cavities. These cavities located within the facial skeleton contributing to cranial lightening and vocal resonance. ⁽¹⁾ Although it is commonly associated with inflammation affecting the mucous membranes lining the nasal passages, the term "rhinosinusitis" often used. Chronic rhinosinusitis denotes a persistent inflammatory condition affecting the mucous membrane lining nasal cavities and adjacent sinuses, persisting over three months. ⁽²⁾ Homoeopathy relies on the principle of similia, administering highly diluted substances that mimic the patient's symptoms to enhance the body's natural healing capacity. These remedies are tailored to the patient's overall constitution, supporting the body's innate ability to heal itself. ⁽¹⁾

NEED OF THE STUDY

Sinusitis emerges as a prevalent malady afflicting one-eighth of the populace in India. Notably, its incidence is more pronounced in adults, owing to the incomplete maturation of sinus structures in the paediatric demographic. On a global scale, sinusitis casts its influence over approximately 15% of the world's inhabitants, underscoring its pervasive nature across diverse regions. This respiratory ailment, marked by inflammatory processes within the sinuses, stands as a substantial contributor to the collective burden of health challenges, necessitating sophisticated and comprehensive approaches to its management and treatment on an international spectrum. ⁽³⁾

OBJECTIVE OF THIS RESEARCH

To determine the efficacy of constitutional medicine for managing chronic rhinosinusitis patients, to gain insights into various drugs for constitutional prescription & to assess the symptoms of the patients with 31 – item Rhinosinusitis Outcome Measure (RSOM-31)

II. RESEARCH METHODOLOGY

2.1 Source of data

A cohort of 30 cases was selected from patients diagnosed with Chronic Rhinosinusitis who visited the Outpatient Department, Inpatient Department, and Rural Health Centres affiliated with Sarada Krishna Homoeopathic Medical College and Hospital, Kulasekharam.

2.2 Selection of sample

30 participants were selected using purposive sampling

2.3 Data collection method

A purposive sampling approach was employed to select 30 patients diagnosed with Chronic Rhinosinusitis from the Outpatient Department, Inpatient Department, and Rural Centres affiliated with Sarada Krishna Homoeopathic Medical College. Detailed case information was documented using standardized and pre-structured formats provided by Sarada Krishna Homoeopathic Medical College. These cases were then analysed to identify symptom patterns and develop a comprehensive symptom profile. Symptoms were assessed, and based on the totality of symptoms, the patient's constitutional type was determined. Repertorization of the case was conducted if necessary and an appropriate remedy was prescribed. The selection of potency and frequency of doses was determined in accordance with the principles of homeopathic philosophy. Patients were assessed every two weeks, and any changes in symptoms were carefully recorded.

2.4 Inclusion criteria

Patients who had symptomatology of chronic rhinosinusitis, belonging to the age group between 6 - 75 years and of both sexes.

2.5 Disqualifying factors

Participants outside the age range of 6 to 75 years, individuals who were diagnosed with other severe systemic illness, cases in which surgical intervention becomes necessary, pregnant women, chronic rhinosinusitis related to chronic and systemic diseases undergoing current medical intervention.

2.6 Outcome assessment

Changes in the symptoms of patients with chronic rhinosinusitis was noted accordingly & improvement in chronic rhinosinusitis symptoms was validated using 31 – Item Rhinosinusitis Outcome Measure (RSOM-31).

2.7 Statistical techniques and data analysis

Statistical analysis was conducted utilizing paired 't' test. Data visualization was incorporated in bar chart, table and columns

III. RESULTS AND DISCUSSION

Categorization of cases by age

Among the thirty cases examined, there are 4 patients (13%) between the age of 11 and 20, 5 patients (17%) between the age of 21 and 30, 8 patients (27%) between the age of 31 and 40, 5 patients (17%) between the age of 41 and 50, 3 patients (10%) between the age of 51 and 60, 4 patients (13%) aged 61 to 70 years, and 1 patient (3%) aged 71 to 75 years.

Distribution in accordance with gender specifically

Among the 30 cases, 11 (37%) are male patients, while 19 (63%) are female patients.

Distribution of cases according to past history

In the group of 30 cases, 20 individuals (67%) reported a past record of repeated cold attacks, two individuals (7%) experienced a background of recurring headaches, one individual (3%) experienced a background of asthma, another 1 patient (3%) experienced a background of allergic rhinitis, balance 6 individuals (20%) experienced no such medical history.

Research Through Innovation

Allocation of cases based on constitutional medicines, range of potencies used and improvement

Table 1: Improvement exhibited by a range of potencies

SI. NO	CONSTITUITONAL MEDICINES & POTENCY	MARKED IMPROVEMENT	MODERATE IMPROVEMENT
1.	Calcarea Carbonica 200C	7	
2.	Calcarea Carbonica 0/3	2	3
3.	Calcarea Carbonica 0/1		1
4.	Silicea Terra 200C	2	1
5.	Sepia Officinalis 200C	1	
6.	Sulphur 200C	1	
7.	Sulphur 0/1	1	1
8.	Natrum Muriaticum 200C	1	3
9.	Natrum Muriaticum 0/3	2	
10.	Pulsatilla Nigricans 200C	2	
11.	Lycopodium Clavatum 200C		1
12.	Phosphorus 200C		1

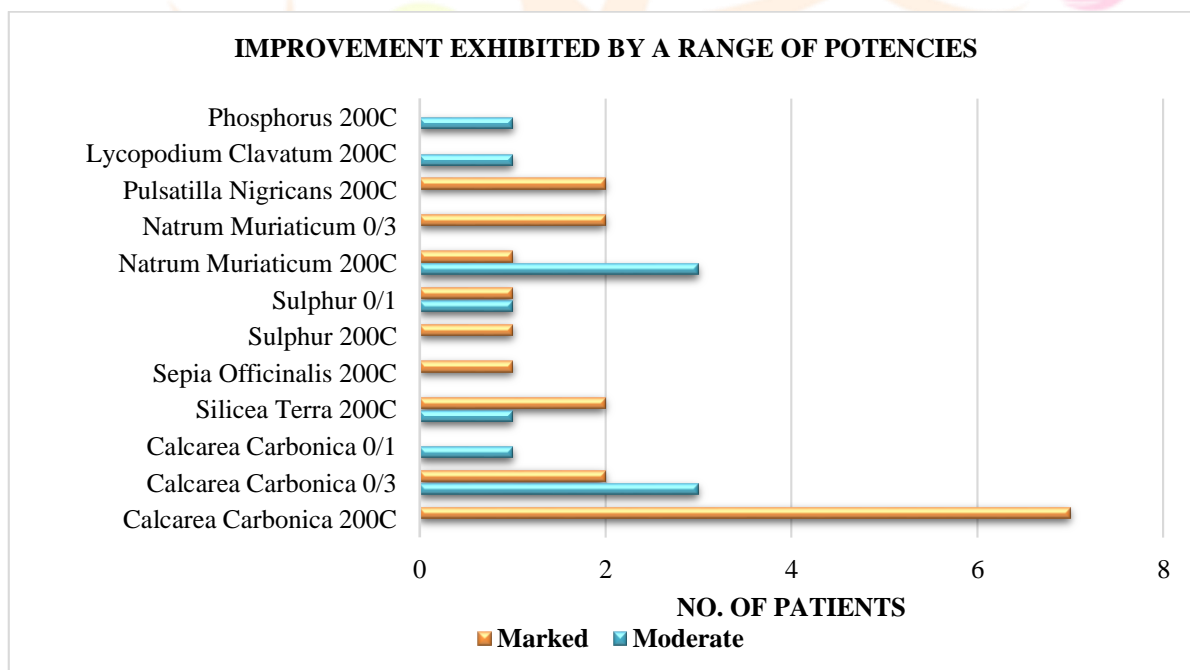


Figure 1: improvement exhibited by a range of potencies

Allocation of cases based on pre & post intervention score:

All the 30 cases were assessed using 31 – item Rhinosinusitis Outcome Measure (RSOM-31) before & after medications, the score has reduced after medicine.

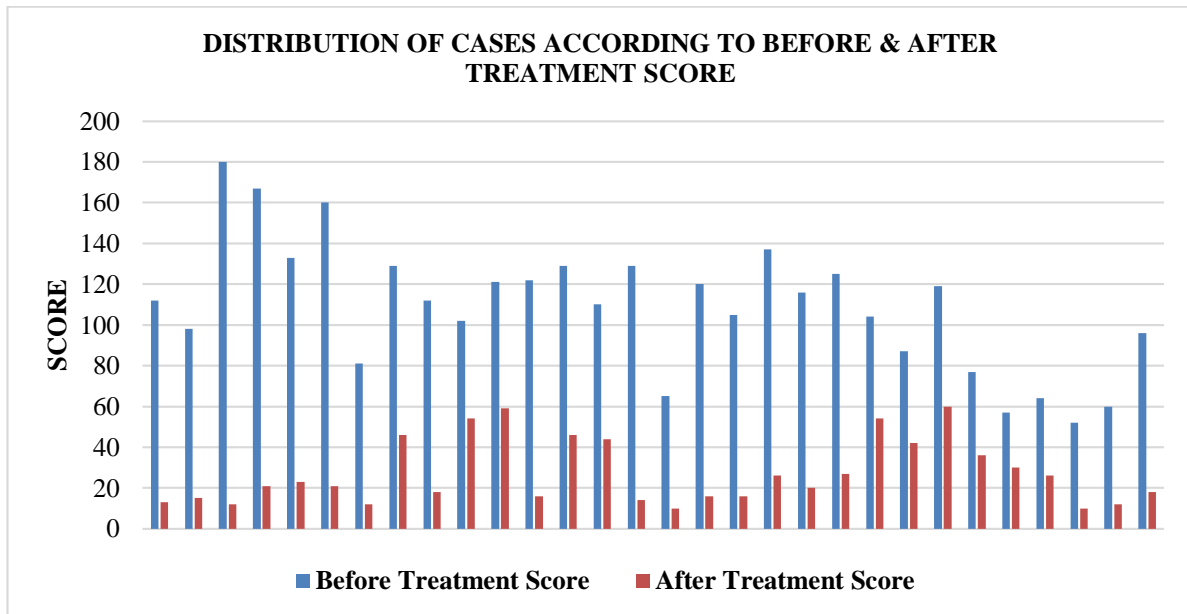


Figure 2: Distribution of cases according to before & after treatment score

IV. DISCUSSION

In this examination involving 30 cases, chronic rhinosinusitis is notably prevalent in 8 patients (27%) who fall within the age range of 31 to 40 years. This finding aligns with the outcomes of the retrospective study titled "The Correlation Between Sinusitis and Deviated Nasal Septum at a Tertiary Hospital" was carried out by Zahraa H. Alsaggaf et al., That particular study involved a cohort of individuals aged 18 and above, totalling 676 participants. Within this larger group, it was observed that individuals in the 31 to 40 age categories were more prone to experiencing sinusitis compared to those in other age groups. ⁽⁴⁾

In our analysis of 30 cases, we observed a predominant occurrence of chronic rhinosinusitis among 19 females. This aligns with the findings from the study by N. Y. Busaba et al. conducted on "The Influence of Gender on the Clinical Presentation of Chronic Rhinosinusitis with and without Polyposis." The study noted that women were more commonly diagnosed with chronic rhinosinusitis without polyposis ⁽⁵⁾

In our study of 30 patients, 20 had a predisposing factor of recurrent cold attacks. This corresponds with the findings from the research conducted by Eugene H. Chang and colleagues, titled "Factors in Early Life Associated with Chronic Sinusitis," which identified childhood sinusitis as a strong contributing risk factor for sinusitis in adults. ⁽⁶⁾

In our study involving 30 patients, 13 were prescribed Calcarea carbonica, 3 received Silicea, and Lycopodium was administered to one patient. Similarly, in the study conducted by Sunil S. Ranteke et al., entitled "A clinical observational inquiry on the efficacy of predetermined homoeopathic remedies in the treatment of chronic sinusitis," a cohort of 42 participants was enrolled. Silicea and Calcarea carbonica were administered to 67% and 14% of patients, respectively, yielding an 86% amelioration rate in the former and an 88% enhancement rate in the latter. ⁽⁷⁾

In a study titled "A Prospective Observational Study with an 8-Year Follow-Up on Homoeopathic Management of Chronic Sinusitis in Patients" by Claudia M. Witt et al., Sepia, Pulsatilla, Lycopodium, Phosphorus, Carcininum, Nux vomica, Sulphur, Natrium muriaticum, Staphysagria, and Silicea were frequently administered. Potencies employed included 200C, 30C, 1M, and 10M. ⁽⁸⁾

After treatment, all 30 cases exhibited significant changes in the 31-item Rhinosinusitis Outcome Measure (RSOM-31) scoring. Among them, 19 cases demonstrated marked improvement, while 11 cases showed moderate improvement. Similarly, in Pravin Hissaria's study, "A Double-Blind, Randomized, Placebo-Controlled Trial Assessing the Effects of a Brief Systemic Corticosteroid Regimen on Sinonasal Polyposis, Including Evaluation of Outcome Measures" on an average 31 parameters in the RSOM was calculated for each participant, the active treatment demonstrated a substantial 53% improvement, whereas the placebo exhibited a 21% improvement. ⁽⁹⁾

V. CONCLUSION

The study demonstrates homoeopathic constitutional medicine's efficacy in management of patients with chronic rhinosinusitis. Conducting research on the influence of occupation and past medical history on chronic rhinosinusitis could provide valuable insights into potential risk factors and contribute to more tailored treatment approaches for affected individuals. Investigating the occurrence of chronic rhinosinusitis, its association with nasal growths would enhance our understanding of the condition's epidemiology and potential comorbidities, guiding both prevention strategies and treatment interventions.

Conflict of interest: Nil

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