



Research Article

An Experimental non controlled study to evaluate the effectiveness of individualised homoeopathic medicines in the management of gout

Sunetra D. Shirale^{1,*}, Sachin M. Magdum², Meghana M. Athavale³

Associate Professor¹, Assistant Professor^{2,3}

Department of Practice Medicine

SJPES's Homoeopathic Medical College & Hospital Kolhapur, Maharashtra, India-416003

Article Received on: 01/07/2022; Accepted on: 14/08/2022.

*Corresponding Author: Dr. Sunetra D. Shirale, E-mail: sunetraashirale@gmail.com

ABSTRACT:

This is an experimental non controlled trial with individualized homoeopathic medicines in the management of gout. The study was focused on the Homeopathic Law of Similars, where a single most similar remedy was chosen according to the unique characteristic symptoms of each patient suffering with gout. It was an experimental study to evaluate the efficacy of individualized Homoeopathic medicines in cases of gout. In this study, it was observed that after individualized Homoeopathic treatment, there is marked improvement in gout symptoms. Although more research is required, the preliminary findings of this study suggest that the correct Homeopathic similimum treatment is an effective treatment for the symptoms of gout.

KEY WORDS: Gout, Similimum, Hyperuricemia, Individualization

INTRODUCTION:

Gout is an inflammatory arthritis associated with hyperuricaemia and intra-articular monosodium urate crystals, resulting in pain, activity limitation, disability and impact on patients quality of life. Gout is a metabolic disease that primarily affects middle aged to elderly men and postmenopausal women.[1]. Gout is among the most prevalent etiologies of chronic inflammatory arthritis in the United States. The general prevalence of gout is 1–4% of the general population and can rise to 10% in men and 6% in women in those aged above 80 years. Globally, the occurrence is 2–6 times higher in men than in women. Hyperuricaemia is the biologic hallmark of gout[2]. In this condition, the plasma and extracellular fluids become supersaturated with uric acid (UA); under certain conditions, the UA crystallizes and may result in a spectrum of clinical manifestations occurring singly or in combination.[1]. Gout is characterized by deposition of monosodium urate (MSU) monohydrate crystals in the tissues [3,4].

Homoeopathy is one of the most popular 'Holistic systems of medicine'. The selection of remedy is based upon the theory of individualization and symptoms similarity by using holistic approach. This is the only way through which a state of complete health can be regained by removing all the sign and symptoms from which the patient is suffering.

Modernization and affluence on lifestyle, including decreased physical activity, increased consumption of foods rich in purine, fructose and alcoholic beverages and smoking, have been shown to contribute to hyperuricaemia resulting in gout[3], and thus, developed countries tend to have a higher burden of gout than developing countries. Its incidence is 2–6 fold higher in men than in women. The prevalence of gout in India is 0.12% as per the International League of Nations against Rheumatism.

It is well known that reduced physical activity, higher intake of purine-rich food and alcoholic

beverages as well as smoking cause hyperuricaemia.[5]. Hyperuricaemia is the leading cause of gout[1,6]. Increased serum UA (SUA) level above a specific threshold (<6 mg/dL in women and <7 mg/dL in men) is a requirement for the formation of UA crystals. Although hyperuricaemia is the main pathogenic process in gout, many people with hyperuricaemia do not develop gout or form UA crystals. In fact, only 5% of people with UA levels above 9 mg/dL develop gout. Thus, the diagnostic utility of measuring UA levels is limited.[7]. Genetic predisposition also affects the incidence of gout[8, 9].

While MSU crystals can be deposited in all tissues, deposition mainly occurs in and around the joints, forming tophi. Early presentation of gout is often acute joint inflammation that is quickly relieved by nonsteroidal anti-inflammatory drugs (NSAIDs) or colchicine. Renal stones and tophi are late presentations. Lowering SUA levels below the deposition threshold through dietary modification and/or using SUA-lowering drugs are the main goal in the management of gout. This results in dissolution of MSU crystals, preventing further attacks [10,11].

The most common presentation of gout is recurrent attacks of acute inflammatory arthritis (a red, tender, hot, swollen joint)[12]. The metatarsophalangeal joint at the base of the big toe is affected most often, accounting for half of cases [7]. Other joints, such as the heels, knees, wrists and fingers, may also be affected[3]. Joint pain usually begins during the night and peaks within 24 h of onset[3]. This joint pain increases due to lower body temperature[4]. Other symptoms may rarely occur along with the joint pain, including fatigue and a high fever[7,13].

Other blood tests commonly performed are white blood cell (WBC) count, electrolytes, kidney function and erythrocyte sedimentation rate (ESR). However, both the WBCs and ESR may be elevated due to gout in the absence of infection[14,15]. WBC counts as high as $40.0 \times 10^9/l$ ($40,000/mm^3$) have been documented[13].

UA levels can be reduced by lowering the intake of alcohol, fructose, purine-rich foods, red meat, sea food, coffee and stimulants. Patients are advised to consume low-fat products such as yoghurt, fresh fruits and vegetables along with

Vitamin C supplementation[16].

Rationale of the study:

The number of evidence-based studies on homeopathic treatment of gout are very limited. An open-label observational trial to assess the effect of individualized homeopathic medicine in patients with gout was found to have a positive result[17].

An experimental trial was conducted with an objective to evaluate the effectiveness of individualized homeopathic medicines in the management of gout.

It is being claimed that homeopathic medicines are efficacious in treating gout but enough evidences are lacking. Gouty arthritis has been identified as the neglected & one of the universal contributors to the complications of the joint deformity and this disease carries special importance for number of reasons.

This study was undertaken for that very purpose. We collected secondary data from hospital records and pathological reports to find out the degrees of improvement in cases of gout after administration of individualized homeopathic medicines.

MATERIALS AND METHODS:

Research Question:

Are homeopathic medicines effective in the management of gout?

Aim:

To know the effectiveness of homeopathic medicines in the management of gout.

Null Hypothesis (H₀):

Homeopathic remedies are not effective in improving the symptoms of gout.

Alternative Hypothesis (H₁):

Homeopathic remedies are effective in improving the symptoms of gout.

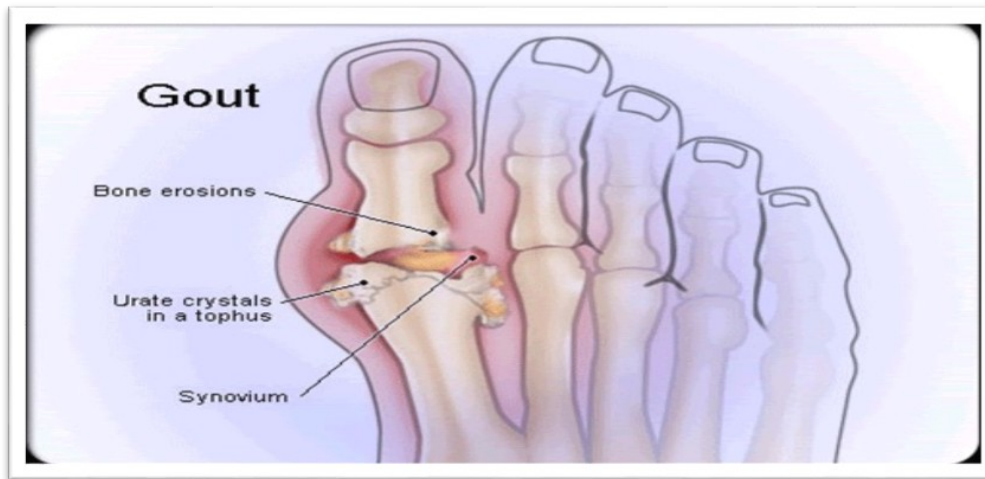
Study type: Non-controlled experimental study.

Study Setting: OPD, IPD and peripheral OPD.

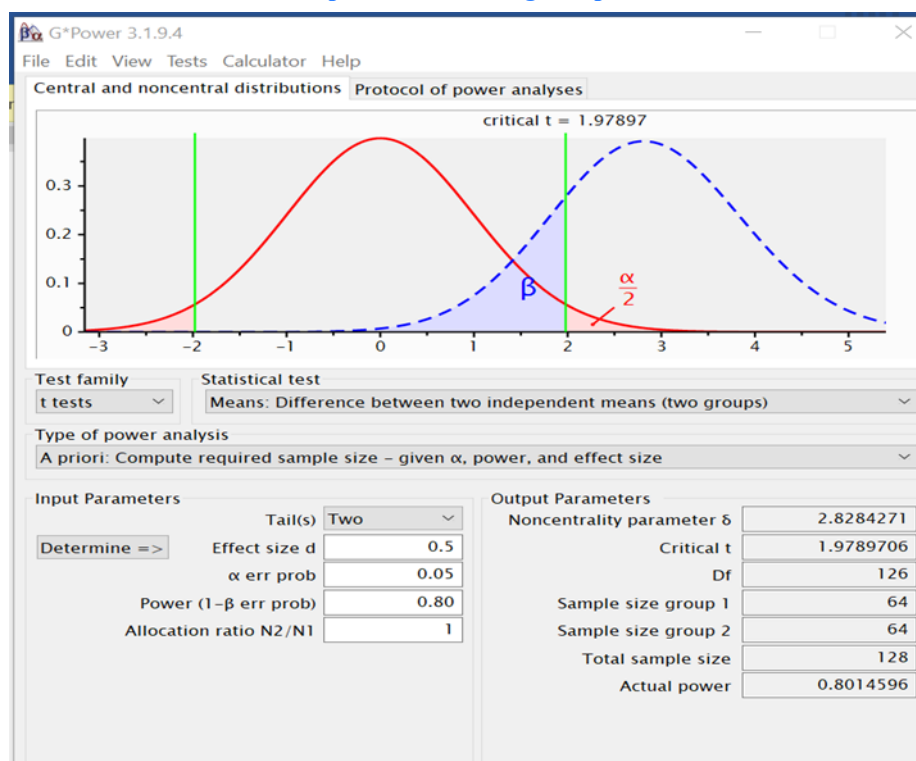
Sampling: Simple Random sampling Method

Sample size: Per group 64 samples are given as below with G power tools

Figure No. 1: Showing Gout



Graph No. 1: Showing Sample size



Study Duration: 3 years

Methods:

An experimental study on homoeopathic treatment of gout was conducted. Individualizations of each case was done by evaluating the totality of symptoms with the help of a proper case taking proforma. Data collection was through the secondary method; data were obtained from laboratory records, case taking proforma and records – both paper and computer method. Patients were screened with the questionnaire in the OPD, IPD and Peripheral OPDs.

After fulfilling the criteria of inclusion, written informed consent were taken from the patients/ key informant. Then they were enrolled in the study. Outcome data was obtained with follow ups and recovery is graded according to improvement in gout symptoms in reference to pain, reduction in swelling of joints and SUA levels.

Case taking was done by a standard case sheet proforma prepared for this study, followed by analysis and evaluation of the symptoms. Framing up the symptom totality, repertorization were done. With final consultation of Materia-Medica, an individualized Homoeopathic medicine was selected based on the standard homeopathic guidelines. Individualized doses were selected according to the principles of homeopathy.

Homoeopathic intervention:

The homoeopathic medicines were selected on the basis of individualization for each case with a proper totality of symptoms created using homoeopathic philosophy. Medicines were prescribed in the centesimal potency and dispensed by the hospital dispensary. The doses comprised of four globules(size30) to be taken on an empty stomach early in the morning.Repetition of doses and patient follow-up were conducted according to Kent's second prescription[3]. The potencies varied according to the patient's condition, susceptibilities and nature of disease. The follow-up interval was 2 weeks, 1week in case of acute pain. UA levels were rechecked 4 weeks after symptoms ameliorated and compared with the pre-treatment frequently indicated homoeopathic remedies prescribed in case of gout were found out and this will help in treatment of more such cases. However, there will be also a few limitations of this study.

Kali carb – pains stitching, stabbing and burning character relieved temporarily by cold application and not by rest or motion. The patient shrieks on account of pain. Backache accompanied by great weakness and profuse sweating. If he covers the painful part, the pain goes to the uncovered part. Aggravation after eating and uncovering.

Berberis vulgaris – pain in heels relieved by putting most of the weight on them. Arthritic and rheumatic affection if attended by renal sticking pain and backache. This urine of this remedy corresponds to many cases of gout, yet it will be rarely indicated unless the characteristic tearing cutting pains are present. These pains are in the renal region and extend down the ureters to the bladder or into pelvis and hips. The urine is hot, dark or bright yellow or blood red, with white, grayish or bright red mealy

sediment, or red granules, or yellowish red crystals.

Chelidonium – rheumatism with edema, heat, tenderness and stiffness. Constipation and whitish stools. Pain is aggravated by slightest movement or touch. The only relief is constant bathing with hot water.

Asclepius tub – Acts well in cases of osteoarthritis when pains run diagonally.

Calcarea carb. – Arthritic swelling, knee pain especially in fleshy people which is worse by cold.

Lycopodium – When red sand appears in the urine, our first thoughts is for Lycopodium, and indeed it will clear up many cases of gout. Its general digestive disturbances, flatulent conditions are often met with in gout. Particularly is it indicated by its scanty, high-colored urine depositing a red or yellowish red sandy sediment. It has severe backache relieved by passing urine. Burning between scapulae, and the 4 to 8 P.M. aggravations are useful characteristics to decide the choice of this remedy.

Sepia – This remedy must not be neglected in gout treatment. It has a deposit of urates in the urine and of uric acid. Then, too, the general symptoms of venous stagnation, liver troubles, manifested by such symptoms as yellow spots on the face or over dorsum of nose, are important indications.

Cantharis – Dr. W. P. Laird says that the great remedy for gout, the one which most accurately corresponds to the totality of the morbid phenomena, and which we may prescribe with confidence in at least two cases out of three, is Cantharis. The special symptoms are soreness in the region of the kidneys, cutting, contracting pains in the ureters extending to bladder and urethra and down spermatic cord, with retraction of testicles. Urination painful and difficult, passe in drops; cutting before and after urination; urine scanty, dark colored, with oftentimes a sediment looking like old mortar or a reddish brick-dust sediment.

Bryonia alba – pain with inflammation, which is aggravated by movement and relieved by moderate pressure and rest. There is inflammation of joints which are hot and swollen. The patient feels chilly.

Ledum pal. – Remarkable remedy helpful in treatment of osteoarthritis, gout and rheumatism, which is of ascending nature, better by cold application, there is deposition of chalk stones in finger joints, wrists and toes. Irritable patient with desire to be alone. Pain may be caused by alcoholism, insect stings, and punctured wound. Pain worse by warm applications.

Colchicum: This homeopathy medicine is the primary homeopathic medicine for treating gout because of its effectiveness. It is mostly used in chronic cases of gout. Usually, a patient experiences extreme pain in the big toe, which is too intense to be touched. The toe and other parts that get affected become swollen, red, and hot. The pain worsens in the evening and at night.

Benzoic acid: This homeopathic medicine is used for treating gout where offensive urine is experienced. The urine becomes very offensive with a very strong odor, which can be detected from a distance. The odor is usually repulsive and the color of the urine is brown. Extreme pain is experienced in the big toe and the knees are swollen

Inclusion Criteria:

1. Patients suffering from chronic and acute gout with high UA levels (≥ 7 mg/dL)
2. The gout had to be clinically apparent, with symptoms such as joint pains
3. Patients aged 18–70 years, both sexes, all religions and socioeconomic status.

Exclusion Criteria:

The following patients were excluded from the study:

1. Patients already undergoing treatment with other system of medicine
2. Patients with other systemic diseases such as high blood pressure and diabetes mellitus.

Plan of analysis:

The cases were statistically analyzed using SPSS software version 20.0 with Friedman’s test and Repeated ANOVA test as well as t test.

Intervention:

The medical intervention was truly homoeopathic.

Selection of tools:

1. *Questionnaire interviews.*
2. *Clinical examination.*
3. *Investigations if necessary.*
4. *Repertorization.*

Investigations:

Investigations were done according to need & requirement of cases – (Blood test – , Sr. uric acid, RFT etc.)

Other Tests – x-ray joint.

Data collection:

Primary data collection of cases were obtained from patient, attendants, observations & examination findings & investigation reports.

Table No. 1: Showing remedies given in Gout patients

Remedy	Number of patients	Percentage
Lycopodium	n=14	21.8%
Kali carb	n=11	17.18%
Bryonia	n=10	15.64%
Berberis vulgaris	n=7	10.9%
Chelidonium	n=6	9.37%
Colchicum	n=6	9.37%
Sepia	n=3	4.68%
Benzoic acid	n=3	4.68%
Cantharis	n=2	3.13%
Ledum pal	n=2	3.13%

Graph is showing that out of 64 patients 14 patients received lycopodium, 11 patients received Kali carb remedy, 10 patients received Bryonia, 7 patients received Berbvulg, 6 patients received cheledonium and colchicum, 3 patients received Sepia, 3 patients received Benzoic acid, 3 patients received cantharis and ledumpal.

Table No. 2: Showing Improvement in patients of Gout:

Improvement in grades	Description	No of patients	Percentage
0	Totally resolved	39	60.93%
1	Improved more than 50%	15	23.43%
2	Improved less than 50%	4	6.23%
3	No change	2	3.13%
4	Unchanged or worse than before	2	3.13%

Out of 64 patients 39 patients totally recovered, 15 patients were improved more than 50%, 4 patients were improved less than 50%, in 2 patients there were no change and in 2 patients symptoms get aggravated.

CONCLUSION:

Homoeopathic treatment has a significant role to reduce UA levels and provide symptomatic relief in the treatment of patients with gout. Further studies, including randomized controlled trials and observational studies, are required to obtain a deeper pathological understanding and results.

REFERENCES:

- [1] Kuo CF, Grainge MJ, Zhang W, Doherty M. Global epidemiology of gout: Prevalence, incidence and risk factors. *Nat Rev Rheumatol* 2015;11:649-62.
- [2] Neogi T. Gout. *Ann Intern Med* 2016;165:ITC1-16.
- [3] Dalbeth N, Merriman TR, Stamp LK. Gout. *Lancet (London, England)* 2016;388:2039-52.
- [4] Richette P, Bardin T. Gout. *Lancet (London, England)* 2010;375:318-28.
- [5] Abhishek A, Roddy E, Doherty M. Gout a guide for the general and acute physicians. *Clin Med (London, England)* 2017;17:54-59.
- [6] Schlesinger N. Diagnosing and treating gout: A review to aid primary care physicians. *Postgrad Med* 2010;122:157-61.
- [7] Dalbeth N, Merriman TR, Stamp LK. Gout. *Lancet* 2016;388:2039-52.
- [8] Emmerson BT. The management of gout. *N Engl J Med* 1996;334:445-51.
- [9] Pascual E, Sivera F. Time required for disappearance of urate crystals from synovial fluid

after successful hypouricemic treatment relates to the duration of gout. *Ann Rheum Dis* 2007;66:1056-8.

- [10] Singh JA. Challenges faced by patients in gout treatment: A qualitative study. *J Clin Rheumatol* 2014;20:172-4.
- [11] Sachs L, Batra KL, Zimmermann B. Medical implications of hyperuricemia. *Med Health R I* 2009;92:353-5.
- [12] National Institute of Arthritis and Musculoskeletal and Skin Diseases; 2015.
- [13] Gout: Differential Diagnoses and Workup eMedicine Rheumatology. *Medscape*; 2019.
- [14] Gout and Pseudogout: Differential Diagnoses and Workup eMedicine Emergency Medicine. *Medscape*; 2019.
- [15] Helmstädter A. Parenteral administration of formic acid in alternative medicine. *Med Gesch* 2001;20:197-211.
- [16] Kluczykowska B. Effect of homeopathic remedies. *Przegl Lek* 1985;42:794-6.
- [17] ColciGel – A homeopathic colchicine gel for gout. *Med Lett Drugs Ther* 2016;58:5-6.

Cite this article as:

Sunetra D. Shirale, Sachin M. Magdum, Meghana M. Athavale, An Experimental non controlled study to evaluate the effectiveness of individualised homoeopathic medicines in the management of gout, *PDEAS Int. J. R. Ayu. & A. Sc.*, 4(2); Aug 2022, p. 02-07.