



Original Article

Role of individualized homoeopathic medicine in the treatment of gout - An observational study

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ABSTRACT

Objectives: The objectives of the study were to evaluate the effects of homoeopathic treatment on patient distress, sociodemographic factors and outcomes in patients with gout.

Materials and Methods: This was an observational study conducted using secondary data from hospital records, pathological reports, patient prescription sheet and the sociodemographic data from computerised records in Mahesh Bhattacharyya Homoeopathic Medical College and Hospital.

Results: A total of 150 patients (94 men and 56 women) were included in the study. Gout was diagnosed based on clinical symptoms and laboratory reports. All patients were prescribed homoeopathic medicines along with dietary management. The patients were prescribed *Lycopodium* (n=22, 14.67%), *Colchicum* (n=17, 11.38%), *Natrum sulph* (n=18, 12%) and nitric acid (n=14, 9.38%) on the basis of totality and symptoms and individualisation. Improvement was assessed in four different categories: Marked, moderate, mild and no improvement. The patients improved clinically as well as pathologically. Uric acid (UA) reduction was marked in 26 (17.33%) patients, moderate in 67 (44.67%) patients and mild in 25 (16.67%) patients. Almost 125 (83.33%) among the 150 reported reduction in physical discomfort and have been doing well after treatment.

Conclusion: This study showed that homoeopathic treatment is very effective in reducing clinical symptoms and serum UA levels in subjects having gout.

Keywords: Gout, Homoeopathy, Hyperuricaemia, Observational study

INTRODUCTION

Gout is a metabolic disease that primarily affects middle aged to elderly men and postmenopausal women.^[1] Gout is among the most prevalent aetiologies 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.^[2] Hyperuricaemia is the biologic hallmark of gout. In this condition, the plasma and extracellular fluids become supersaturated with uric acid (UA); under certain conditions, the UA crystallises and may result in a spectrum of clinical manifestations occurring singly or in combination.^[1] Gout is characterised by deposition of monosodium urate (MSU) monohydrate crystals in the tissues.^[3,4]

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

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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]

Role of homoeopathy in cases of gout

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

A prospective, randomised, single-blind placebo-controlled study was conducted with an objective to evaluate improvement in the SUA level and visual analogue scale score of pain. The mean score reduction in the medicinal group was higher than in the placebo group; the difference was statistically significant.^[18]

It is being claimed that homoeopathic medicines are efficacious in treating gout but enough evidences are lacking.

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 individualised homoeopathic medicines; and also the frequently indicated remedies [Table 1]. This has helped to state the effectiveness of homoeopathy in cases of gout.

MATERIALS AND METHODS

Process of study

An observational study on homoeopathic treatment of gout was conducted. Individualisation 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.

Study design

This was an observational cohort study.

Declaration of patient consent

Not applicable.

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

Table 1: Most frequently prescribed medicines.

Frequently prescribed medicine	No. of patients	Percentage
<i>Lycopodium</i>	n= 22	14.67
<i>Nitric acid</i>	n=14	9.38
<i>Natrum sulph</i>	n=18	12
<i>Colchicum autumnale</i>	n=17	11.38
<i>Medorrhinum</i>	n=7	4.67
<i>Calcarea fluor</i>	n=13	8.67
<i>Calcarea carb</i>	n=10	6.67
<i>Sulphur</i>	n=8	5.33
<i>Benzoic acid</i>	n=11	7.33
<i>Pulsatilla</i>	n=9	6
<i>Coffea cruda</i>	n=9	6
<i>Rhus toxicodendron</i>	n=6	4
<i>Thuja occ</i>	n=6	4

4. Patients undergoing treatment but without any improvement.

Exclusion criteria

The following criteria 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.

Study design

This study was conducted in the outpatient department of the Mahesh Bhattacharyya Homoeopathic Medical College and Hospital, Dumurjola, Howrah. A majority of the patients are from the lower socioeconomic strata. The study sample was retrospectively selected from patients with hyperuricaemia who underwent estimation of UA during a 9-month period from November 2018 to February 2021. Due to the COVID-19 lockdown, data from March 2020 to September 2020 were not included. All pathology data were provided by the pathology department.

A total of 150 patients had undergone UA estimation for the treatment of gout in the above-mentioned study period. Sociodemographic data were available only regarding patient sex, age, name and religion [Table 2]. The body mass index (BMI) was calculated using the height and weight that were measured for the pathology records. The patients were classified into different groups according to the BMI as per the WHO criteria for South Asia.^[19]

Sociodemographic features	Numbers with percentage
Sex	
Male	94 (62.67)
Female	56 (37.33)
Age (years)	
18–30	18 (12)
31–45	99 (66)
46–70	33 (22)
BMI (kg/m ²)	
Underweight < 18	7 (4.67)
Normal 18–24.99	80 (53.33)
Overweight 25–29.99	47 (31.33)
Obese >30	16 (10.67)
Occupation	
Labour	79 (52.66)
Housewife	64 (42.66)
Teacher	2 (1.33)
Sedentary jobs	5 (3.33)
BMI: Body mass index	

Homoeopathic intervention

The homoeopathic medicine was selected on the basis of individualisation for each case with a proper totality of symptoms created using homoeopathic philosophy. Medicines [Table 3] were prescribed in the centesimal potency and dispensed by the hospital dispensary. The doses comprised six globules (size 10) 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 patients' condition, susceptibilities and nature of disease. The follow-up interval was 2 weeks, 1 week in case of acute pain. UA levels were rechecked 4 weeks after symptoms ameliorated and compared with the pre-treatment values [Tables 4 and 5].

Table 3: Indications of the prescribed medicines.^[20]

Medicine	Indication
<i>Lycopodium</i>	Chronic gout, with deposits in joints. Toes and fingers contracted. Worse in right side. Better by motion
<i>Nitric acid</i>	Pain as from splinters. Sticking pain in toe. Pain appears and disappears quickly
<i>Natrum sulph</i>	Gout. Worse in damp cold weather. Frequently changing position, worse left side
<i>Colchicum</i>	Inflammation of great toe, gout in heel. Cannot bear to have it touched or moved. Worse motion, sundown to rise
<i>Medorrhinum</i>	Gouty concentration. Heel and balls of feet tender. Finger joints enlarged. Worse from daylight to sunset, better at seashore, damp weather
<i>Calcarea fluor</i>	Gouty enlargements of the joints of the fingers. Worse during rest, change of weather. Better by warm application
<i>Calcarea carb</i>	Gouty nodosities. Swelling of joints. Worse cold weather, washing, better by dry climate, pressure
<i>Sulphur</i>	Rheumatic gout with itching, with stiffness in joints. Worse standing, rest. Better by warm weather
<i>Benzoic acid</i>	Rheumatic gout, nodes very painful, gouty deposits, swelling of wrist. Worse uncovering. Better by warmth
<i>Pulsatilla</i>	Boring pain in heels, tensive pain. Better in open air, warm room. Worse from heat
<i>Coffea cruda</i>	Over use of coffee causing rheumatic gout. Better warmth
<i>Rhus toxicodendron</i>	Hot painful swelling of joints. Better by motion. Worse at night
<i>Thuja occ</i>	Gout. Pain in heels. Tips of fingers swollen red. Cracking of joints. Worse at night, from heat. Better by while drawing up the limb

Table 4: UA level estimation.

Reduction value	UA level (mg/dL)	Number of patients	Percentage
Marked reduction	Below 6 mg/dL	n=26	17.33
Moderate reduction	Borderline: 6 mg/dL	n=67	44.67
Mild reduction	6.5 mg/dL	n=32	21.33
No change	Above 7 mg/dL	n=25	16.67

UA: Uric acid

Table 5: Degree of improvement after homoeopathic treatment.

Degree of improvement	Clinical pictures	Number of patients (%)
Marked improvement	Pain in joints is completely gone. No episodes of pain. Patient doing very well after treatment. UA level normal	26 (17.33)
Moderate improvement	Patient feels occasional low-intensity pain. UA level slightly raised. Otherwise, patient doing well	67 (44.67)
Mild improvement	Pain occurs suddenly at night and but lower than before. UA level is 6.5–7 mg/dL	32 (21.33)
No improvement	Same as before	25 (16.67)

UA: Uric acid

RESULTS

Treatment outcome was assessed on the basis of pathological report and symptomatic improvement of pain in joints and general well-being. Four categories of improvement were determined: Marked, moderate, mild and none. Complete reduction of joint pain with no functional disturbances and lower UA levels was considered marked improvement. Moderate improvement was defined as occasional lower intensity of joint pain with border line UA level. Mild improvement was defined as UA levels between 6.5 mg/dL and 7 mg/dL with sudden pain at night. No amelioration in symptoms and the UA level remaining the same as before treatment was defined as no improvement.

DISCUSSION

The various studies have shown that homoeopathic treatment was very successful in the treatment of gout. This study was done to confirm the same.

This is an observational study and results were obtained very quickly and the cost to carry out the study was minimal. There was also no risk of loss to follow up of patients. The

frequently indicated homoeopathic remedies prescribed in case of gout were found out and this will help in treatment of more such cases. However, there were also a few limitations of this study – the study was based on secondary data and no patient interaction was done.

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 randomised controlled trials and observational studies, are required to obtain a deeper knowledge of clinicopathological and Materia Medica correlations.

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Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J. Harrison's Manual of Medicine. 18th ed., Ch. 175. New York: McGraw Hill Publication; 1978. p. 1091.
2. Kuo CF, Grainge MJ, Zhang W, Doherty M. Global epidemiology of gout: Prevalence, incidence and risk factors. *Nat Rev Rheumatol* 2015;11:649-62.
3. Neogi T. Gout. *Ann Intern Med* 2016;165:ITC1-16.
4. Dalbeth N, Merriman TR, Stamp LK. Gout. *Lancet (London, England)* 2016;388:2039-52.
5. Richette P, Bardin T. Gout. *Lancet (London, England)* 2010;375:318-28.
6. Abhishek A, Roddy E, Doherty M. Gout a guide for the general and acute physicians. *Clin Med (London, England)* 2017;17:54-59.
7. Schlesinger N. Diagnosing and treating gout: A review to aid primary care physicians. *Postgrad Med* 2010;122:157-61.
8. Dalbeth N, Merriman TR, Stamp LK. Gout. *Lancet* 2016;388:2039-52.
9. Emmerson BT. The management of gout. *N Engl J Med* 1996;334:445-51.

10. 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.
11. Singh JA. Challenges faced by patients in gout treatment: A qualitative study. *J Clin Rheumatol* 2014;20:172-4.
12. Sachs L, Batra KL, Zimmermann B. Medical implications of hyperuricemia. *Med Health RI* 2009;92:353-5.
13. National Institute of Arthritis and Musculoskeletal and Skin Diseases; 2015.
14. Gout: Differential Diagnoses and Workup eMedicine Rheumatology. *Medscape*; 2019.
15. Gout and Pseudogout: Differential Diagnoses and Workup eMedicine Emergency Medicine. *Medscape*; 2019.
16. Amnik J, Rehman S, Mejia SB, de Souza RJ, Khan TA, Leiter LA, *et al.* Fructose intake and risk of gout and hyperuricemia: A systematic review and meta-analysis of prospective cohort studies. *BMJ Open* 2016;6:e013191.
17. Saha S, Sarkar P, Chattopadhyay R, Saha S. An open label prospective observational trial for assessing the effects of Homoeopathic medicines in patient's sufferings from gout. *Indian J Res Homoeopathy* 2019;13:236-43.
18. Deep A, Kumar A. Homoeopathic management of hyperuricemia in primary gout: A randomized single blind placebo-controlled study. *Int J Health Sci*;4:73-7.
19. World Health Organization. WHO Global Database on Body Mass Index, BMI Classification, Criteria for South-Asian Region. Geneva: World Health Organization.
20. Boericke W. In: Boericke OE, editor. Pocket Manual of Homoeopathic Materia Medica Comprising the Characteristic and Guiding Symptoms of all Remedies. 9th ed. India: Modern Homoeopathic Publication; 2003.

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