

AN EVIDENCE BASED STUDY ON EFFICACY OF COLCHICUM AUTUMNALE 30 IN THE TREATMENT OF GOUT – A PILOT STUDY

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Abstract

The study was intended to investigate the efficacy of *Colchicum autumnale* 30 in the treatment of gout. For this purpose, 20 random cases of gout were taken and grouped randomly into two of 10 patients each. Group A was given dietary advice besides colchicum 30 and Group B was given only *Colchicum autumnale* 30. Duration of study was 10 months whereas the treatment period for each case was according to the need of the case. The study proved that *Colchicum autumnale* 30 is effective in treating gout in addition to it the study also confirms the importance of dietary restrictions during treatment.

KEYWORDS: Gout, Serum uric acid, *Colchicum autumnale* 30c, Diet

1. Introduction

At present with people adopting to sedentary lifestyle, gout has become one of the prevalent disease affecting almost every family which in turn reduced their productivity ⁽¹⁾. Due to the lack of awareness, mostly patients suffering from gout depend on analgesics, which are easily available over the counter bringing temporary relief but no complete cure. But such prolonged on and off usage of analgesic drugs will take a toll in health of the consumer. In Homeopathic system of medicine, many pioneers claimed the utility of *Colchicum autumnale* in treating gout ⁽²⁻⁷⁾. So, this study is intended to investigate and scientifically prove the efficacy of *colchicum autumnale* 30 in the treatment of gout and also ensure the importance of dietary restrictions using serum uric acid levels as investigatory parameter.

2. Material and methods

2.1. MATERIAL

Cases were collected from 50 Bedded Integrated AYUSH hospital, Lamphelpat.

2.2. METHODS

Informed consent forms were taken after obtaining the ethical committee clearance from institutional ethical committee. A sample size of 20 cases from the volunteers based on inclusive and exclusive criteria were shortlisted and divided into two groups randomly of 10 patients each. Their serum uric acid were monitored and detail case taking of the patients were done. Group A was given dietary advice besides *Colchicum autumnale* 30 and group B was given only *Colchicum autumnale* 30. *Colchicum autumnale* 30 was prescribed to the patient where repetition of dose was according to the need of individual cases. The serum uric acid level of the patients was re-monitored in subsequent follow ups. The total duration of study was 10 months. Treatment duration of each case differed according to the need.

2.3 INCLUSIVE CRITERIA

- Patients with gouty symptoms
- Both sexes
- All age group

2.4 EXCLUSIVE CRITERIA

- Co-morbidities
- Deformities

2.5 FOLLOW UP CRITERIA

- Pain
- Swelling
- Serum uric acid level.

3. Result

3.1 Table 1 – Group A – patients treated with *Colchicum autumnale* 30 with dietary advice

Patients sampling	Before	After
P1	8.2 mg/dl	4.4mg/dl
P2	6.2 mg/dl	3.4 mg/dl
P3	5.5 mg/dl	4.5 mg/dl
P4	6.1 mg/dl	5.4 mg/dl
P5	6.2 mg/dl	3.2 mg/dl
P6	5.8 mg/dl	4.1 mg/dl
P7	6.1 mg/dl	5.3 mg/dl
P8	5.2 mg/dl	–
P9	10.0 mg/dl	7.0 mg/dl
P10	6.0 mg/dl	5.0 mg/dl

3.2 Table 2 – Group B – patients treated only with *Colchicum autumnale* 30 without dietary advice

Patients sampling	Before	After
P11	6.0 mg/dl	4.4 mg/dl
P12	9.5 mg/dl	6.8 mg/dl
P13	5.4 mg/dl	5.4 mg/dl
P14	5.8 mg/dl	5.0 mg/dl
P15	4.3 mg/dl	–
P16	6.1 mg/dl	5.1 mg/dl
P17	4.3 mg/dl	–
P18	4.1 mg/dl	4.0 mg/dl
P19	4.5 mg/dl	–
P20	4.7 mg/dl	–

3.3 Table 3: Paired t Test

		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig(2-tailed)
Pair 1	Before-after1	1.978	1.178	393	1.073	2.883	5.038	8	.001
Pair 2	Before-after2	1.033	1.009	412	-026	2.093	2.508	5	.054

The result clearly states both the groups are statistically significant, but group A is better than group B, i.e., *Colchicum autumnale* 30 with dietary advice is better than without dietary regulation.

4. Discussion

As mentioned earlier, during the study it is noticed that dietary advice plays a very important role in managing symptomatic cases of gout. According to Dorland's Medical dictionary, gout is responsive to colchicine treatment⁽⁸⁾, where colchicine is one of the alkaloid present in *Colchicum autumnale*. The study done by Ayisha Shaukat, Khalid Hussain, Nadeem Irfan Bukhari, Naureem Shehzadi in 2020 showed that Acid uric 3X Tablet support scientific evidence of reducing uric acid level⁽⁹⁾. Another study conducted by Shifa Shaffique, Saeed Ahmed, Tayeba Rehman, Waheed Mumtaz, Haseeb Anwar, Ghulam Hussain in Anti-hyperuricemic potential of *Rhododendron tomentosum* Harmaja syn. *Ledum-palustre* 30 and 1M in potassium oxonate induced rat model showed that *Ledum-palustre* 30c and 1M significantly reduced the s.uric acid level and it is a good alternative to allopathic medicine⁽¹⁰⁾. So, further research can be done to study on these drugs- Acid uric and *Ledum-palustre* on their efficacy on gout in comparison with *Colchicum autumnale*.

One of the difficulty faced during the study was 3 patients of group A disclosed that in between the follow ups, in addition to *Colchicum* 30 they sometimes took allopathic medicine to relieve acute pain, which is not ideal condition for the study but on the same time analgesic cannot lower uric acid level as noticed in the outcome.

5. Conclusion

This study concludes that *Colchicum autumnale* 30 along with strict dietary advice is seen to be effective in treating gouty arthritis.

Therefore, further researches are required to investigate the role of alkaloid colchicine present in *Colchicum autumnale* and its influence in homeopathic treatment of gout

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