

ROLE OF INDIVIDUALIZED HOMOEOPATHIC MEDICINES IN THE NON-SURGICAL MANAGEMENT OF RENAL CALCULI

G. Karthikeyani^{1*}, A. Saravanan² and N. Nirubanraj³

¹PG Scholar, Department of Homeopathic Materia Medica, Vinayaka Mission's Homoeopathic Medical College & Hospital, Vinayaka Mission's Research Foundation (DU), Salem, Tamil Nadu, India. ORCID: 0009-0004-6980-9534 Email: drkarthikeyani711@gmail.com

²Guide & Associate Professor, Department of Homeopathic Materia Medica, Vinayaka Mission's Homoeopathic Medical College & Hospital, Vinayaka Mission's Research Foundation (DU), Salem, Tamil Nadu, India. ORCID: 0000-0002-9898-898X Email: arsbhms@gmail.com

³Professor & Head, Department of Homeopathic Materia Medica, Vinayaka Mission's Homoeopathic Medical College & Hospital, Vinayaka Mission's Research Foundation (DU), Salem, Tamil Nadu, India. ORCID: 0000-0001-7076-205X Email: nirubanraj@gmail.com

*Corresponding Author Email: drkarthikeyani711@gmail.com

ABSTRACT

Background: Renal calculi (urolithiasis) are a common urological condition characterized by the formation of crystalline stones in the urinary tract. The global prevalence ranges from 1–15%, with frequent recurrence influenced by dietary habits, lifestyle changes, and environmental factors. Conventional treatments mainly focus on symptom relief and surgical removal of larger stones; however, recurrence remains a major concern. Homoeopathy, a holistic system of medicine, aims to treat both the symptomatic manifestations and the constitutional predisposition of the individual. The present study was conducted to evaluate the effectiveness of individualized homoeopathic medicines in the management of renal calculi. **Methods:** This prospective observational study was conducted in the outpatient department of a homoeopathic medical institution. Patients with clinically and radiologically confirmed renal calculi were included. Individualized remedies were prescribed based on detailed homoeopathic case taking, repertorization, and materia medica consultation. Patients were followed periodically to assess changes in symptoms and radiological findings, including reduction in stone size or stone expulsion. **Results:** The study showed overall improvement in most patients receiving individualized homoeopathic treatment. Symptoms such as renal colic, burning micturition, and urinary discomfort were reduced. Several patients showed decreased stone size, and some passed small calculi spontaneously. Commonly prescribed remedies included *Berberis vulgaris*, *Lycopodium clavatum*, *Hydrangea arborescens*, and *Cantharis*. These findings suggest that homoeopathy may provide symptomatic relief and support the natural expulsion of small renal calculi. **Conclusion:** Individualized homoeopathic therapy showed potential effectiveness in relieving symptoms of renal calculi and may aid in the reduction or expulsion of small stones without invasive procedures. Further controlled studies with larger samples and objective evaluations are needed to validate these findings.

KEYWORDS: Renal calculi; Urolithiasis; Homoeopathy; Individualized treatment; Renal colic; Non-invasive therapy; Complementary medicine.

INTRODUCTION:

Renal calculi or kidney stones are among the most common disorders of the urinary tract and are an important source of morbidity worldwide. The pathology occurs on the crystallization of crystals in supersaturated urine, which in turn aggregate into solid calculi that can be located in the renal parenchyma structures. Urolithiasis is not limited to a specific demographic and its lifetime prevalence is estimated to be between 10 to 15 percent in affluent societies and gradually increases in the developing regions due to changes in diet, climatic and lifestyle influences. The recurrence rate is also considerable with almost half of affected individuals experiencing a subsequent episode within a time frame of five to ten years of the first event thus requiring effective long-term therapeutic strategies (1).

The pathogenesis of kidney stones is multifactorial in nature where the interplay between metabolic, environmental, and genetic factors are all important. Calcium oxalate stones are by far the most common (makes up around seventy to eighty percent of all

cases), followed by calcium phosphate, uric acid, struvite and cystine calculi in decreasing order of frequency. Supersaturation of urine with lithogenic salts - especially calcium, oxalate, uric acid and phosphate - causes nucleation, crystal agglomeration and finally the formation of stones. Additional contributory factors include dehydration, dietary habits rich in animal proteins and sodium, obesity and metabolic derangements and urinary tract infections (2).

Clinically, renal calculi present as a major symptom of severe flank pain or renal colic (occasionally radiating to the groin), with haematuria, dysuria, nausea and emesis. The intensity of symptomatic expression is usually dependent on the size of the stone, anatomic site of the stone, and the degree of obstruction. Contemporary forms of diagnostic modalities such as ultrasonography, non-contrast computed tomography (CT) and plain radiography have greatly improved the detection and exact localization of ureteric and renal calculi (3).

Conventional strategies for the management of renal calculi include

conservative methods and interventional methods. Small stones are usually managed using observation and medical therapy to expel the stone, while pharmacological supplements are used to aid passage. More definitive interventions (extracorporeal shock wave lithotripsy (ESWL), ureteroscopy and percutaneous nephrolithotomy) are reserved for larger or refractory stones. Although these modalities have a high rate of stone freedom, they often fail to prevent recurrence and have high procedural complication rates and healthcare expenditure. As a result, there is an increasing interest in complementary and alternative modalities which may facilitate stone dissolution, improve symptoms and reduce recurrence (4).

Homeopathy is a system of therapy which is based on the principle of "similia similibus curentur" in which the choice of remedies will be individualized based on the constellation of symptoms presented by the patient (5). Within homeopathic literature, there are a number of remedies that have been recommended in the treatment of renal colic such as *Berberis vulgaris*, *Lycopodium clavatum*, *Hydrangea arborescens*, and *Cantharis* for the

management of renal colic and theermis. It is postulated that these agents alleviate the pain, continue to facilitate the passage of the stone(s) and treat the underlying predisposition to lithogenesis (6).

Given the increasing occurrences of renal calculi and of the limitations in the conventional therapeutic approaches, it is clinically relevant to consider the value that homeopathic medicine can add to the management of this condition (7). Accordingly, the present study aims at evaluating the efficacy of individualised homeopathic treatment in patients diagnosed to renal calculi.

MATERIALS AND METHODS:

Study Design:

This investigation, the idea was to conduct the efficacy of individualized homeopathic remedies in the administration of renal calculi in a prospecting study. The main goals were evaluating clinical amelioration, decreasing of symptoms and change in stone dimensions or expulsion during the course of the treatment.

Study Setting:

The study was conducted in the Outpatient Department of Vinayaka Mission's Homeopathic Medical College & Hospital where patients with

clinical features suggestive of the presence of renal calculi were screened, enrolled and then followed later.

Study Population:

Participants with a confirmed diagnosis of renal calculi, supported by clinical presentation and confirmed by radiological modalities such as ultrasonography (USG), X-ray KUB, or CT scanning, were included in the study cohort.

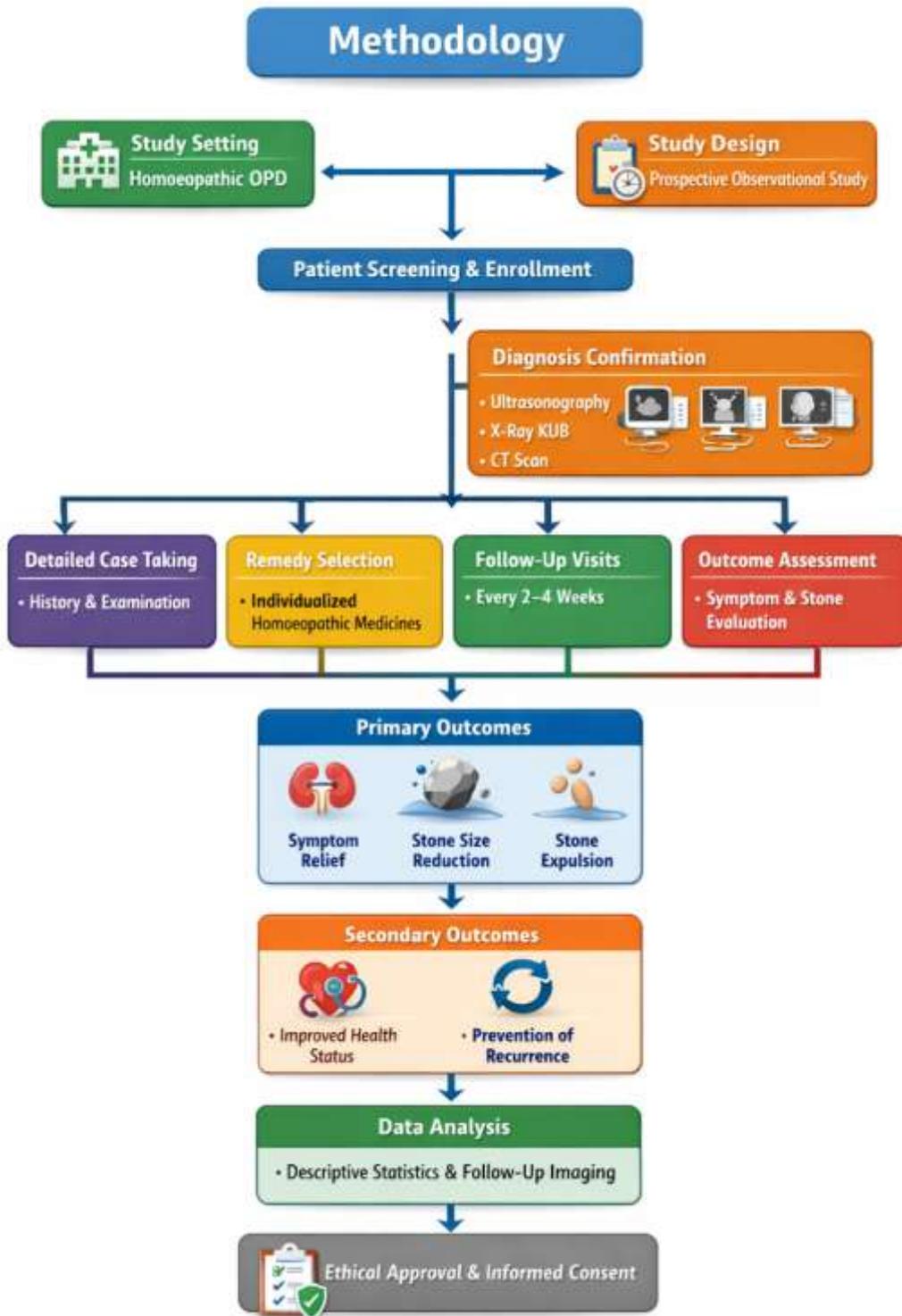


Figure 1: Study Methodology for Renal Treatment

Inclusion Criteria:

Patients between 18 to 60 years inclusive, diagnosed for renal calculi as confirmed by the imaging investigations, symptoms of renal colic, haematuria, dysuria or burning micturition and the patient would be willing to participate in the homeopathic treatment by giving informed consent.

Exclusion Criteria:

Patients requiring immediate surgical intervention because of the presence of large obstructive calculi; patients with severe renal impairment or renal failure; patients with congenital abnormalities in the urinary tract; patients currently under surgical or invasive treatment for renal calculi; pregnant women and patients with serious systemic illness.

Sample Size:

A total of patients satisfying the inclusion criteria were selected using a convenience sampling approach in the study.

Case Taking and Clinical Assessment:

Each participant had extensive case taking for homeopaths (according to homeopathic principles) and included

recording of primary complaints, history of present illness, past medical history, family predispositions, diet, lifestyle factors, mental and physical generalities and constitutional characteristics. Clinical examination was done to detect the signs relevant to the renal calculi, including flank tenderness, renal angle tenderness, and urinary symptoms.

Homoeopathic Prescription:

Remedies were chosen on the basis of individualisation and totality of the symptoms. Repertorisation used the standard homeopathic repertories, this was then followed by confirmation of the remedy in the materia medica. Some preparations that are commonly indicated for renal calculi are *Berberis vulgaris*, *Lycopodium clavatum*, *Hydrangea arborescens*, *Cantharis*, etc. Medicines were prescribed on the basis of the symptom-similarity of each case. Potency choice and repetition of doses was decided by the susceptibility of the patient, the nature of the symptoms and therapeutic response.

Follow-Up and Monitoring:

Participants were followed at regular intervals (normally every 2 weeks to 4

weeks) to measure the improvement of their symptoms and the improvement of their clinical status. Follow up

evaluations included are measuring the intensity of pain and urinary symptoms; monitoring of the changes in the size of the stones through ultrasonography or other imaging techniques and the assessment of stone expulsion if applicable.

Outcome Measures:

The primary outcome measures are decrease in renal colic and urinary symptoms, reduction in the size of renal calculi on imaging and spontaneous passage of calculi. The secondary Outcome Measures are improvement in general health and related symptoms and prevention of recurrence at follow – up.

Data Analysis:

Gathered data were collated and analysed by descriptive statistical methods. Outcomes were assessed on the basis of clinical improvement,

reduction in stone size and calculi expulsion during the follow up period.

Ethical Considerations:

The study followed the ethical principles for conducting medical studies with humans. Informed consent was sought and obtained from all participants before they were enrolled and scrupulous care was taken to maintain patient confidentiality through the duration of the study.

RESULTS:

Patient's Demographic Characteristics

A cohort of thirty individuals diagnosed with renal calculi were taken and thus maintained through to the end of the follow up period. The demographic scrutiny provided highlights of the prevalence of renal calculi among thirty to fifty age demographics thus representing the population majority of the sample.

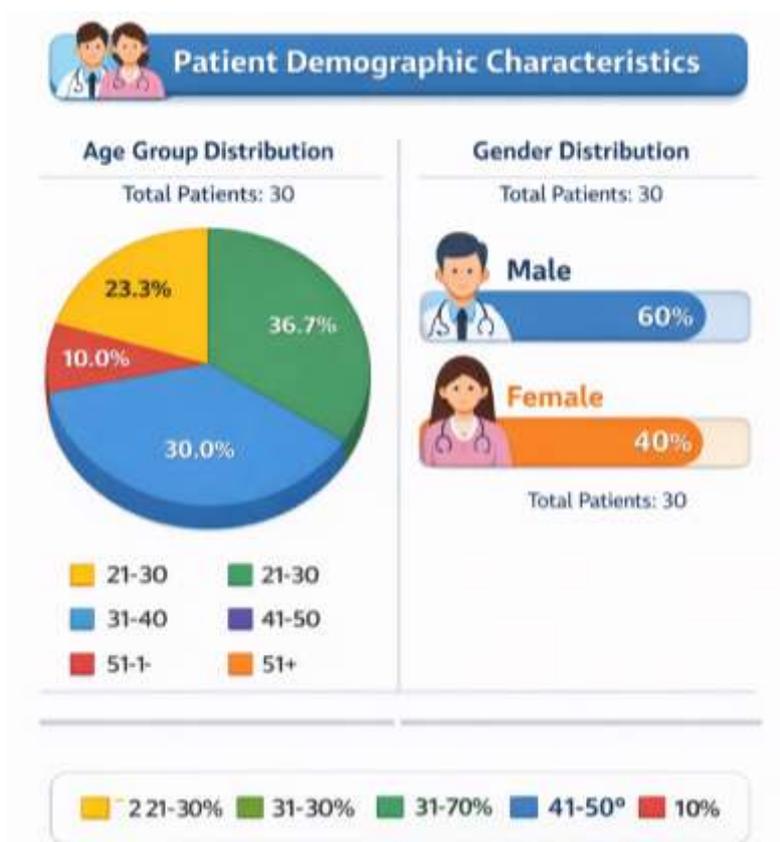


Figure 2: Patient's Demographic Characteristics

This cohort had eighteen patients (60%), as male patients, while twelve patients or forty percent were female patients, which hints of a marginally higher incidence in the male sex. The majority of subjects were within the thirty to forty years of age group which represented 36.7% of the cohort, followed by forty to fifty years (30%), twenty to thirty years (23.3%), and above fifty years (10%).

Clinical Manifestation of Patients

The one symptom most commonly elicited in the patient population was

renal colic, which was manifest in twenty-six individuals (86.7%). Ancillary symptoms included odourless micturition burning in twenty patients (66.7%), dysuria in sixteen patients (53.3%), and haematuria in nine subjects (30%). A subset of patients also reported nausea and vomiting, which were common co-morbidities of the episodes of severe renal colic. These data taken together suggest that pain and urinary irritants are the major clinical manifestations in persons affected by renal calculi.

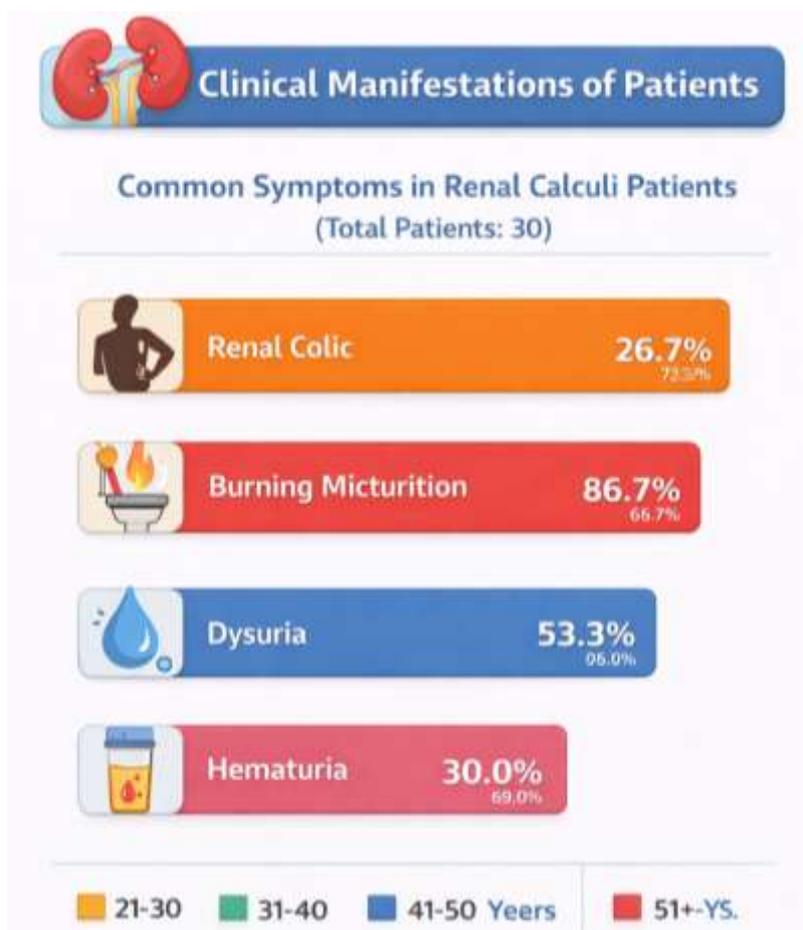


Figure 3: Clinical Manifestation of Patients

Distribution of the Location of Stones

Radiological examinations revealed that the localisation of calculus was different in the urinary tract. The primary locus of the renal parenchyma was the most frequent, being found in nineteen cases (63.3%) followed by

ureteric stones in nine cases (30%) and vesical calculi in two cases (6.7%). A preponderance of stones encountered during the investigation were of small to moderate dimension (less than 10mm), a range of size which is generally amenable to conservative therapeutic modalities.

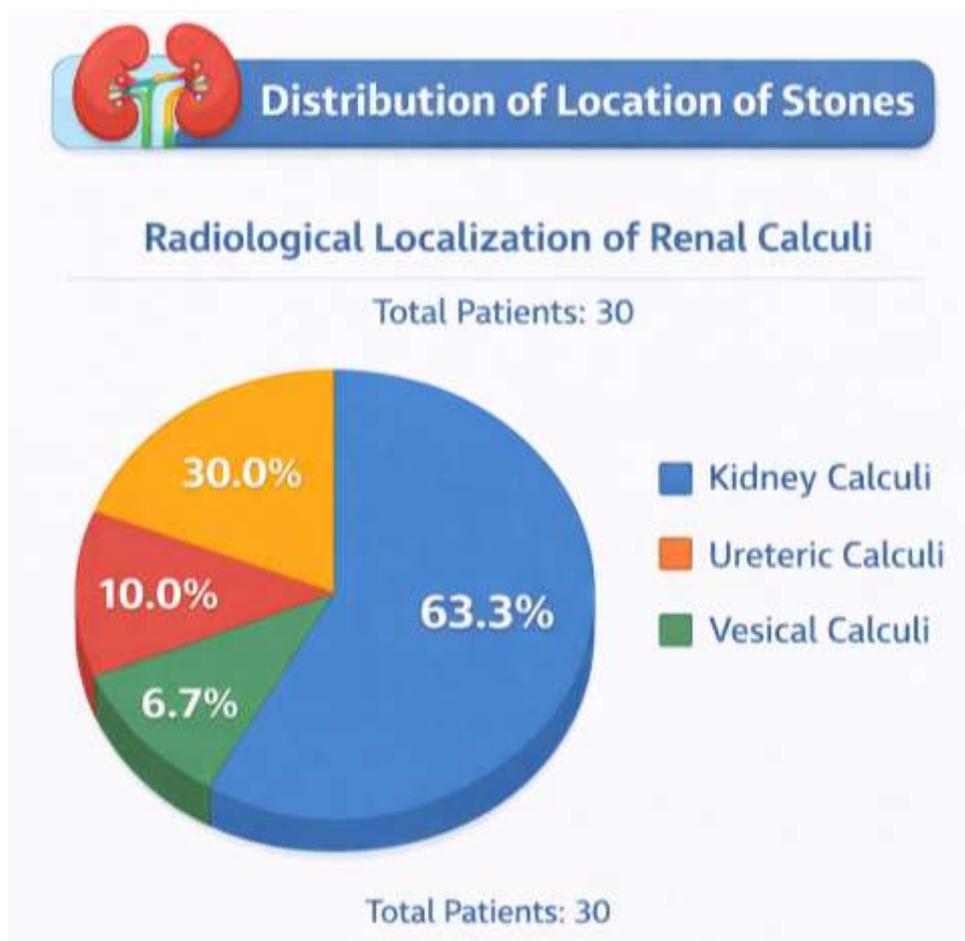


Figure 4: Stone distribution in the renal system

Homoeopathic Medicines prescribed

Remedial selection was based on out on the homoeopathic principles of individualisation and totality of symptoms. Berberis vulgaris proved to be the most commonly prescribed remedy and was the prescribed remedy for 9 (30%) of the patients. Other

remedies that were used frequently included Lycopodium clavatum (six patients, 20%), Hydrangea arborescens (five patients, 16.7%), Cantharis (4 patients, 13.3%) and Benzoicum acidum (three patients, 10%). A minority of the patients were given alternative remedies based on their own particular symptomatology.

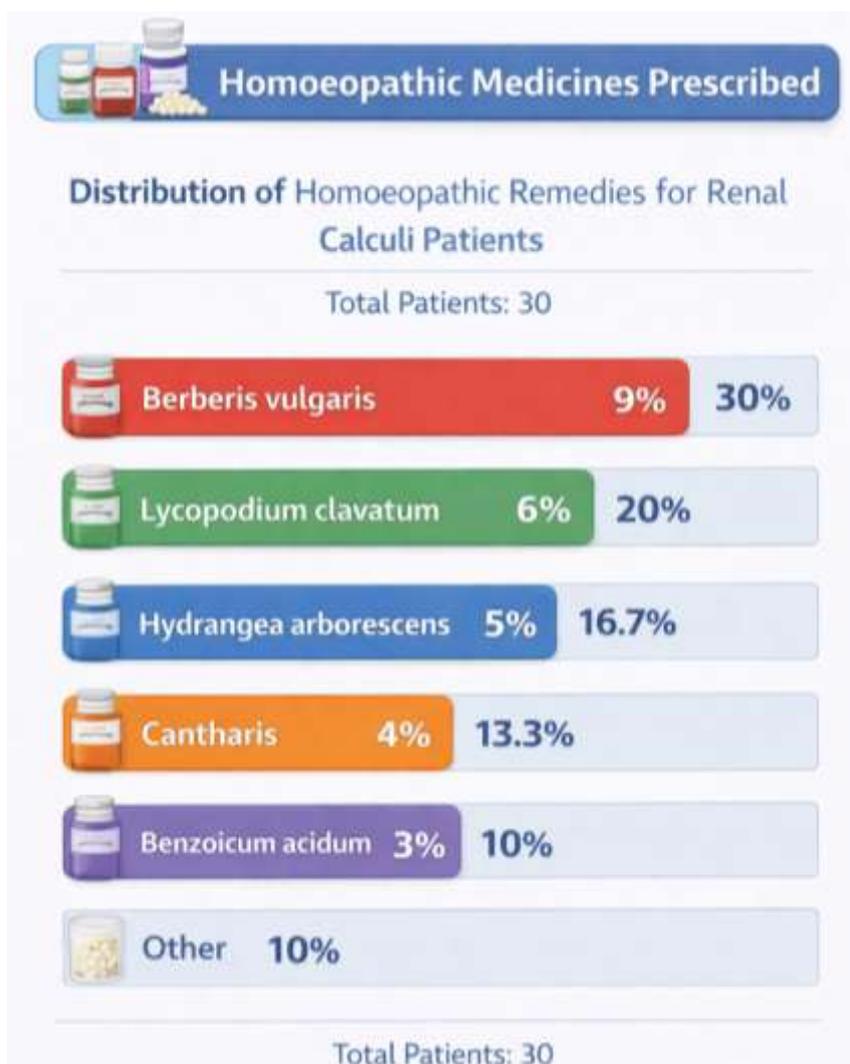


Figure 5: Homoeopathic remedies for renal calculi

Outcome Following Treatment

Following individualistic homeopathic intervention and systematic follow-up there was a significant improvement of clinical manifestations in the majority of the study cohort. Of the whole study population, 18 individuals (60%) achieved complete symptomatic relief, especially as it related to renal colic, dysuria and burning micturition. A moderate degree of improvement was

reported in 9 patients (30%) in which symptoms were greatly improved but not fully resolved. Two patients (6.7% of the patients) showed a mild enhancement, as indicated by a partial reduction in severity of their symptoms during the follow-up period. Conversely, one patient (3.3%) did not show a noteworthy response despite persistence of therapy. Overall, a progressive decrease in urinary discomfort and intensity of pain was

reported by most of the participants on subsequent clinic visits, which therefore points to a favorable therapeutic effect

of these individual homeopathic remedies.

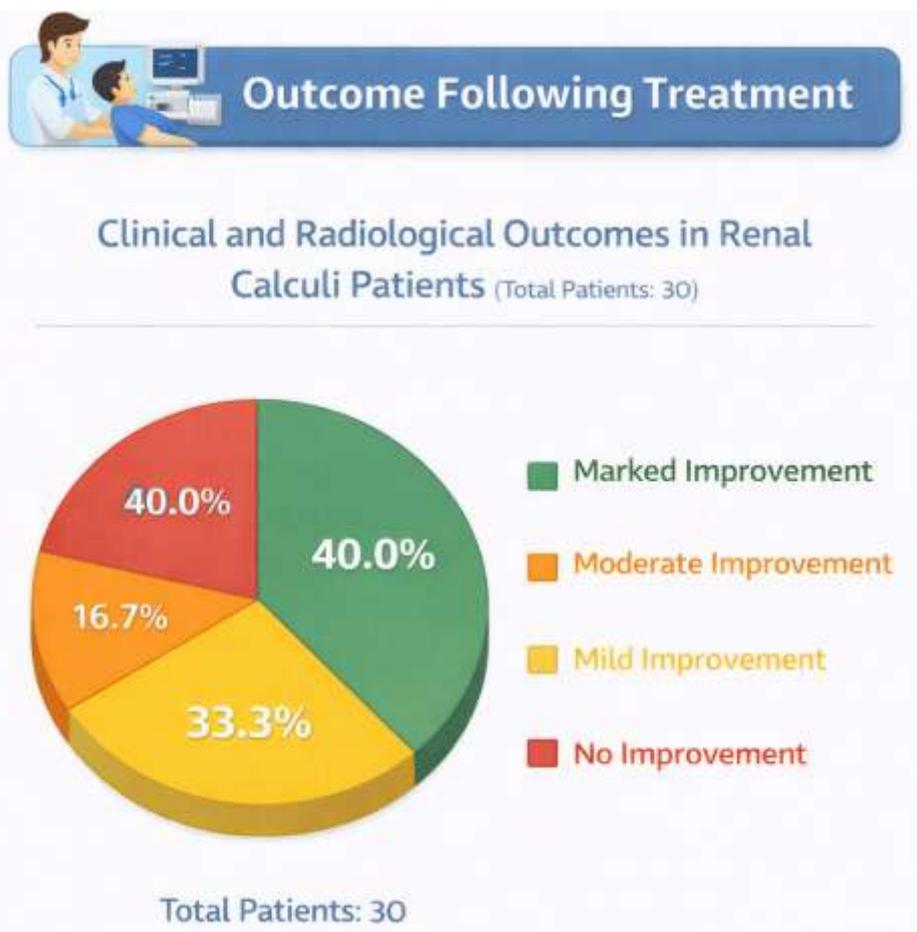


Figure 6: Outcome Following Treatment

Radiological Outcomes

Radiological evaluation, done by follow-up ultrasonography, was used to evaluate the modifications in the state of the stone in the therapeutic course. The imaging results showed that the full expulsion of renal calculi occurred in 12 patients (40%) which indicated spontaneous expulsion during the intervention. A further 10 patients (33.3%) showed a reduction in calculi

dimensions indicating a positive response with partial dissolution or fragmentation of the calculi. In contrast, 8 patients (26.7% patients) showed no significant change in stone size on serial imaging studies. These findings would suggest that personalized homeopathic treatment may be helpful in natural elimination of smaller renal calculi and possibly may reduce the stone burden in selected cases.

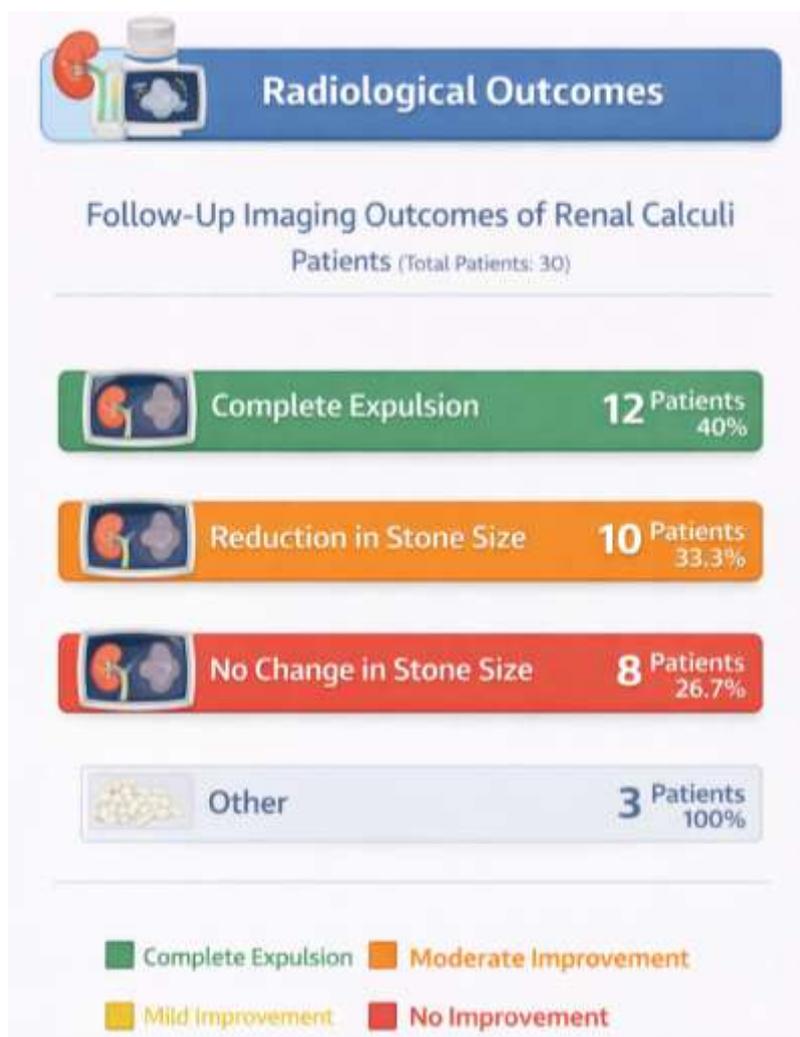


Figure 6: Radiological Outcomes

Overall Treatment Outcome

Integrating the clinical and radiologic information, the aggregate therapeutic results were separated into different improvement categories. Marked improvement was noted in 40% of patients which was manifested by complete alleviation of symptoms together with expulsion or substantial reduction in calculi size. Moderate improvement was seen in 33.3% of the participants indicating clinical benefit in

addition to partial radiographic change. Mild improvement was observed in 16.7% of cases with limited improvement in symptoms and limited radiological change. About 10% of the patients had no significant improvement during the study period. Collectively these results indicate that individual homeopathic treatment could provide beneficial results in the symptomatic treatment of renal calculi

and may promote spontaneous resolution of smaller stones.

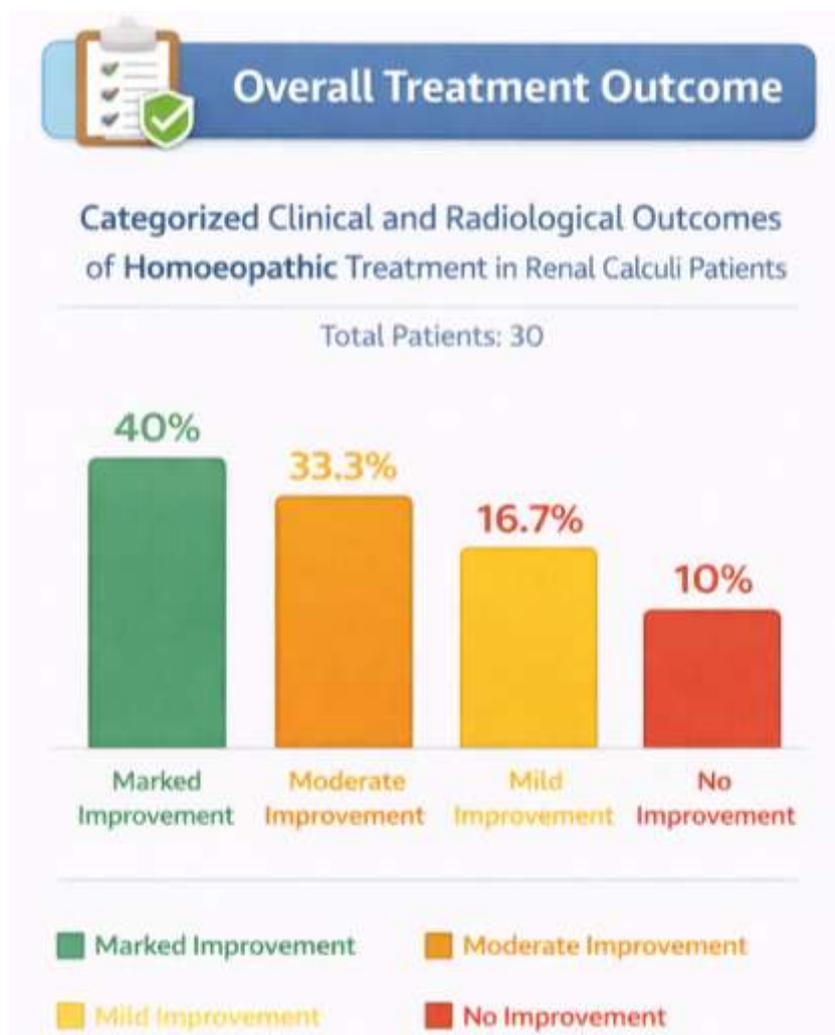


Figure 7: Clinical outcomes of homoeopathic treatment

DISCUSSION:

Renal calculi are a significant worldwide urological health issue associated with high prevalence, frequent recurrence and significant morbidity. The present investigation appraises the efficacy of individualized homeopathic therapy for the patients diagnosed with renal calculi and reports predominantly

favorable clinical as well as radiological outcomes. These results suggest that homeopathic formulations may be able to reduce/abate symptoms and promote the spontaneous passage or diminution of renal calculi i.e., on patients with small stones.

In the current analysis renal calculi were found to be more common in

people aged 30-50 years with a higher incidence in males than in females. This is consistent with previous epidemiological data that shows urolithiasis to be more common in males, mainly because of dietary habits, metabolic and hormonal factors (8). Scales et al. reported that kidney stones affect about 10 to 12 percent of men and 5 to 7 percent of women during their lifetime with the highest incidence found in middle-aged adults. Similarly, Romero et al emphasized the effect of lifestyle factors such as decreased fluid intake, high animal protein consumption, and obesity on the rising prevalence of renal calculi in this age group (4).

The most frequent clinical manifestation seen was renal colic, followed by burning micturition, dysuria and hematuria. These symptoms align with the classical clinical presentation of renal calculi that were found in previous studies (3). According to Turk et al., renal colic is the main symptom of ureteric obstruction due to stones and is often accompanied by the symptoms of urinary irritation such as dysuria and hematuria. Consequently, the results of this analysis agree with the existing clinical profile of urolithiasis (6).

The radiological evaluation showed that the most frequent location of stone formation was the kidney, and ureteric calculi were found next. Similar results have been reported in past research to suggest that most urinary stones start inside the kidney and travel to the ureter (9). Pearle et al stated that about 70-80% of urinary calculi form in the calyces or pelvis of the renal pelvis and may later shift to the ureter, causing obstruction and severe pain.

The individualized homeopathic remedies used in this study were *Berberis vulgaris*, *Lycopodium clavatum*, *Hydrangea arborescens*, *Cantharis* and *Benzoicum acidum*. Among these the most frequently indicated remedy was *Berberis vulgaris*. This drug is well known in the homeopathic literature in relation to its remedies during the urinary system and its efficiency in renal colic and calculous. Boericke's "principal remedy" for renal calculi with radiating pain from kidney to bladder and urethra and associated urinary irritation and sediment formation was *Berberis vulgaris* (5).

Rest of the clinical outcomes indicated majority of the patients experienced statistically significant relief of

symptoms after individual homeopathic treatment. A large proportion of patients showed complete or moderate improvement proving a good therapeutic response. Similar findings have been documented in studies of complementary and alternative methods in the management of urolithiasis (10). Pareek et al. highlighted the fact that conservative medical management and lifestyle modification can be useful in the management of small renal calculi and may avoid the need for surgical intervention. Through the individualized nature of therapeutic treatment, homeopathy may contribute to symptom relief and increase in well-being of the patient.

Radiological follow up further showed that, many patients had complete expulsion of calculi or reduction in stone size in treatment period. These results indicate that homeopathic medicines might contribute to the supportive promotion of natural passage (elimination) of small stones of the urinary tract. Prior research has pointed out that sufficient hydration, dietary modification and pharmacological therapies are helpful in allowing spontaneous stone passage, especially for stones below 10 mm (3). The

improvement in this analysis seen by us is therefore to be attributed to the natural course of the stone-disease as well as to the therapeutic influence of individualised homeopathic remedies.

An overall treatment outcome analysis showed that a substantial proportion of the patients had professible marked or moderate improvement and only a small number reported minimal or no change. These results highlight the possible role of homeopathic treatment in being used as a non-invasive therapeutic option in the management of renal calculi, particularly when the case is in its early/ less complicated stage. However, caution should be taken to interpret these findings because of limitations such as small sample size and lack of control group. Further studies with randomized controlled trials and greater number of patients with objective biochemical evaluation are needed to confirm the therapeutic efficacy of homeopathic medicines in the management of renal calculi. Such studies would yield more scientific evidence and contribute to the integration of complementary approaches to the treatment of urolithiasis.

CONCLUSION:

Present work evaluated the efficacy of individualized homeopathic medicines in the treatment of renal calculi and showed encouraging clinical and radiological results in most of the patients. Most of the participants experienced significant relief of symptoms (renal colic, burning micturition, dysuria, hematuria) throughout the treatment. Follow up imaging also revealed that a significant number of patients showed decrease in the stone size or expulsion of calculi spontaneously, which suggests a good response to homeopathic management.

The results of this study show that individualized homeopathic treatment may be a safe and non-invasive therapeutic option in the symptomatic treatment of renal calculi especially in cases involving small calculi. By treating the totality of the symptoms and the constitutional predisposition of patient's homeopathy may contribute not only to the relief of the symptoms but also to a better overall well-being. However, the findings should be interpreted with caution because they have certain limitations, such as the relatively small sample size and the lack of a control group. Further large - scale randomized controlled trials

including objective biochemical and radiological assessments are suggested to provide better scientific evidence on the role of Homeopathic medicines in the management of renal calculi. The individualized homeopathic therapy may be a promising complementary therapy approach in the management of renal calculi and needs further study via rigorous clinical research.

PATIENT CONSENT

Written informed consent was obtained from all patients prior to their participation in this study. The patients were informed about the nature and purpose of the study, and confidentiality of their personal and clinical information was assured. Participation was voluntary, and patients were free to withdraw from the study at any time without affecting their treatment.

ACKNOWLEDGEMENT

The author expresses sincere gratitude to the Management, Principal, and faculty members of the Vinayaka Mission's Homeopathic Medical College & Hospital for their guidance, support, and for providing the necessary facilities to conduct this study. The author also extends heartfelt thanks to the patients who participated

in this study and to all colleagues and staff who contributed directly or indirectly to the successful completion of this research.

REFERENCES:

1. Scales CD Jr, Smith AC, Hanley JM, Saigal CS, Urologic Diseases in America Project. Prevalence of kidney stones in the United States. *Eur Urol* [Internet]. 2012 July;62(1):160–5. Available from: <http://dx.doi.org/10.1016/j.eururo.2012.03.052>
2. Pearle MS, Goldfarb DS, Assimos DG, Curhan G, Denu-Ciocca CJ, Matlaga BR, et al. Medical management of kidney stones: AUA guideline. *J Urol* [Internet]. 2014 Aug;192(2):316–24. Available from: <http://dx.doi.org/10.1016/j.juro.2014.05.006>
3. Türk C, Petřík A, Sarica K, Seitz C, Skolarikos A, Straub M, et al. EAU guidelines on diagnosis and conservative management of urolithiasis. *Eur Urol* [Internet]. 2016 Mar;69(3):468–74. Available from: <http://dx.doi.org/10.1016/j.eururo.2015.07.040>
4. Romero V, Akpınar H, Assimos DG. Kidney stones: a global picture of prevalence, incidence, and associated risk factors. *Rev Urol* [Internet]. 2010 Spring;12(2–3):e86–96. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/20811557>
5. Boericke W. *Pocket Manual of Homoeopathic Materia Medica*. Rarebooksclub.com; 2012.
6. Sankar ASS, Goswami AD, Sugathan NV, Gopukumar ST. Homoeopathic perspective of environmental factors in stone diseases: A mini review. *Ann Trop Med Public Health* [Internet]. 2020;23(6):736–44. Available from: <http://dx.doi.org/10.36295/ASRO.2020.23621>
7. Uma Maheswari , P. R. Sisir , S. T. Gopukumar. Mucocoele of lower lip treated with constitutional homoeopathic medicine Silicea – A case report. *Ind J Res Homeopat* [Internet]. 2023;17:167–72. Available from: <http://dx.doi.org/10.53945/2320-7094.1197>
8. Scales C, Smith A, Hanley J, Saigal C. 2293 the new prevalence of kidney stones in the United States. *J Urol* [Internet]. 2012 Apr;187(4S):e925. Available from: <http://dx.doi.org/10.1016/j.juro.2012.02.2473>
9. Pearle MS, Goldfarb DS, Assimos DG. Medical management of kidney stones: American Urological Association guideline. *Journal of Urology*. 2014;192(2):316–24.
10. Pareek G, Hedican SP, Lee FT Jr, Nakada SY. Shock wave lithotripsy success determined by skin-to-stone distance on computed tomography. *Urology* [Internet]. 2005 Nov;66(5):941–4. Available from: <http://dx.doi.org/10.1016/j.urology.2005.05.011>