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Effective Treatment for Kidney Stone with Local Plants from Aadilabad Telangana State, India

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Authors' contributions

This work was carried out in collaboration among all authors. Author JC planned the work and programmed, experimental part was carried out by Authors SH, AS and PMS Monitoring, execution of the work and recording the date. Authors GP and KS collected the literature and assisted in bringing out the paper in the prescribed format. All authors read and approved the final manuscript.

Article Information

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Original Research Article

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ABSTRACT

Aim: We aim to treat the poor and downtrodden tribal people of Adilabad district of Telangana State, South India, who are suffering from kidney stones, with locally available plants and with any side effects also without financial burden on them.

Design of the study: Identifying the infected people with kidney stones based on the lab reports, explaining about our treatment, educating them, counseling them, treatment and precautionary measures.

Place and Duration of Study: Adilabad district, Telangana State, South India. Duration of study is for two years that is 2018 to 2019.

Methodology: We have identified around 24 patients (male and female) suffering from kidney stone ailment, but we have presented only six patients details in table form. Treatment is with locally available plants for two days, the results were very much success.

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Results: After our treatment the kidney stones, though they are large in size they dissolved and were passed through the urinary tract.

Conclusions: Our treatment is pure with plants without any side effects and free of cost. The patients were very much satisfied with our treatment.

Keywords: Kidney stones; medicinal plants; calcium crystals.

1. INTRODUCTION

Kidney stone formation was recorded from the early Sanskrit documents that are from India between 3000 and 2000 BC. From centuries ago the caveman started using the plants for food, shelter, armory and medicinal. WHO identified 20,000 medicinal plants overall on our planet. The kidney stones are also termed as renal calculi, this is nothing but a group of calcium crystals formed in the kidney this formation of stone may not have any symptom in the beginning, hence it is difficult to realize or feel the formation of kidney stone. Only at 2 - 3 mm the size of the stone is identified due to colicky pain which causes severe pain in the lower back of the human being [1].

Though kidney stone disease is common in developed and undeveloped countries and rampant in rural areas of India, the medical treatment is not within the reach and cannot afford for the treatment by the poor man, the people are suffering silently. The formation of kidney stone is mainly due to food habits, lifestyle, and geography. The composition of kidney stone is calcium phosphate. Our work carried out from Adilabad area of Telangana State, South India the people of Adilabad are mainly tribes dwell in forests of Adilabad. Many of the workers gave the names of plants used for the treatment of kidney stones, but no one mentioned the quantity of dosage, treatment, and period, etc. We have mentioned the quantity of dosage of a plant used, the treatment, and period, etc. to this effect we have the doctors *i.e* radiologist report, before and after our treatment for kidney stone, our treatment was appreciated by the local tribal head and local political leaders, the treatment is free of cost.

Kidney stones formation is common in the country like Iran around 75% of cases were recorded [2]. In India also it is observed in rural areas. Kidney stones are becoming more common [3,4] a large number of people are suffering from urinary stones problems all over the globe [1] the formation of kidney stones are influenced by lifestyle, food habits or dietary

habit, sometimes may be intake of proteins and geography. The kidney stone composition is of calcium oxalate or calcium phosphate [5]. Many people worked on medicinal plants used for kidney pain from Iran [6] they gave a list of plants used for therapeutic effect by reviewing related articles, they did not mention dosage of medicine and treatment. [1] gave a list of plants and their parts for the treatment of kidney stone, they also did not mention the dosage of the medicine and period of treatment. Pharmacological treatment of kidney stone disease worked in the USA by [7]. Our practical study carried out in the district of Adilabad Telangana State India. Here, the temperatures are between 5°C in winter and 47°C in the summer season, this kind of pattern shows extreme climatic conditions prevailing in this region. The people living in this area are mainly depending on agriculture and they are daily wage workers they cannot afford the medical expenditure for the treatment of kidney stones.

1.1 Symptoms

People suffering from kidney stone suffer from colic pains occur in the lower backside of the body, passing of blood in the urine, pus in the urine, burning sensation while passing urine, palpitation, restlessness, no free flow of urine it drops wise, the patient feels feverish, abdominal bloating, and indigestion.

2. MATERIALS AND METHODS

Leaves of *Bryophyllum pinnatum* (*Lam.*) were collected and given to the patient 12hrs before the treatment and patient is advised to eat the leaf.

Seeds of *Tectona grandis* L.f. collected, grind, and made them into a fine powder, out of this 25 g of powder is collected in a beaker to this added 4 g of potash and mixed it thoroughly. Out of this mixture 5 g (1 teaspoon full) taken and added to this 100 ml of water mixed this content without the formation of lumps and boiled it until it reduced to 50 ml. Later made it upto1L with water.

3. TREATMENT

The patient was prescribed to eat raw leaves of *"Bryophyllum pinnatum (Lam.)"* in the morning in empty stomach for two days. We have collected 12-15 seeds of *"Tectona grandis L.f."* and made powder, to this added approximately 4g of potash mixed thoroughly in 100 ml of water boiled until it becomes 50 ml, to this added water and made up to 1 L and the patient was advised to drink the same water throughout the night. The medicine consumed by the patient will dissolve the kidney stone and reduces the size of the stone, it helps for easy discharge of the stone in the urine. Though we have treated more than 15 affected kidney stone patients, we are presenting only six patients reports.

The following patients were treated by us in the year between 2018-2019. The scanning reports issued by the radiologist doctor and abdomen scanning indicated the size of the stone.

- 1. Mr. Mohd Khaja a 26 years old male, the kidney stone is measuring 7mm in the left kidney dated 31-8-2018. After treatment of the scanning report dated 12-10-2018.
- Mrs. Ameena aged 40 years old female, with multiple calculi largest measuring 19mm in the right kidney, is noticed report dated 24-5-2019.
- Mr. Shaik Mahod aged 51 years male, observed 23mm calculus in the right kidney.
- 4. Mr. Majeed aged 35 years male, from Bhainsa Nirmal dist, Telangana State was suffering from back pain for the last two years and from the medical report, it was proved that he is having 4mm kidney stone in right kidney, with our treatment he was cured and relieved from the back pain.
- 5. Mr. Arvind Kumar aged 25 years male from Bhainsa, Nirmal dist, Telangana State was suffering from backache for the last one

year. It was proved that he has 9.7mm ureteric calculus in the left kidney (Plate - 1).

 Mr. Syed Basheer aged 32 years male, from Nirmal dist, Telangana State, was suffering from back pain for the last one year. He is suffering from kidney stones measuring 4mm in right kidney and 5mm form the left kidney (Plate – 2).

All the above patients are from a rural background (Table –1).

The treatment by us was explained to the above kidney patients and we have counseled them, taken the consent and undertaking. The treatment was carried out and there were no side effects reported from the patients, our treatment is purely from the plant products. The patients were very happy as the treatment was safe and painless.

4. RESULTS AND DISCUSSIONS

Based on the symptoms of the patients we have directed them to approach the doctor for his advice, the scanning report showed the presence of calculus in their kidneys. The kidney stone patients though visited the doctor for their treatment, as they are not in a position to meet the expenses for the operation, they thought the plant treatment is simple without side effects, and the treatment is free of cost.

The kidney patients were advised to drink 2 liters of given water and instructed not to urinate in the night time. Early in the morning when the patient went for urination the kidney stone came out with a force and with little pain. Then the patient became normal and the pain vanished. The seeds of *Strychnus potatorum* L.F.Fa: *Loganiaceae* are chewed for kidney problems and also the bark powder of *Syzigium cuimini* (L) SK. Orally taken to cure urinary problems [8].

S.No	Name of the patients	Sex		Age Yrs	Left kidney	Right kidney	Size of the
		Μ	F		-		stone
1	Md.Khaja	Μ		26	L	-	7mm
2	Mrs. Ameena		F	47	-	R	19mm
3	Shaik	Μ		51	-	R	23mm
	Mahamood						
4	M.Majeed	Μ		35	-	R	4mm
5	Mr.Arvind	Μ		25	L	-	9.7mm
	Kumar						
6	Syeed Basheer	Μ		32	L	R	5mm & 4mm

Table 1. Details of the infected persons & kidney stones

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Plate 1. Kidney stone of Arvind



Plate 2. Kidney stone of Syed Basheer

Usage of Thiazides and alkali citrate have shown decrease recurrent stone formation, the uriage inhibitors have shown side effects. There are three ways to remove stones shock-wave lithotripsy (SWL) utereoscopy (URS) and percutaneous nephrolithotomy (PNL) each of those have advantages and disadvantages. SWN is done with a machine that can break stones, the stone comes outside of the body.

5. CONCLUSIONS

Our treatment is a simple one and the patients can afford to undergo this sort of treatment, the treatment did not cost anything for the patient. It is a free treatment. The same above treatment was given to Mr. Ansari from Secundrabad, Telangana, he was cured and expressed the gratitude. As per the literature, our treatment is simple with proof and the plants used by us are reporting the first time for the curing kidney stones. Our main aim is to cure the backward tribal and rural people who are deprived of medical attention.

As per the literature, none of them gave the dosage of the medicine, period for the treatment, which part of the plant or combination of plants used for the treatment. Their reporting is purely based on literature or through questioner from the villagers, and also none of the authors have the practical experience in the treatment of kidney stones.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

CONSENT

It is not applicable.

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ETHICAL APPROVAL

It is not applicable.

REFERENCES

- Choubey A, Parasar A, Choubey A, Lyer D, Pawar RS, Patil UK. Potential of medicinal plants in kidney, gall and urinary stones. International Journal of Drug Development & Research. 2010;2(2): 431-447.
- Mahmoud B, Babak BA, Pegah T, Mahmoud RK, Narsollah N. Identification of medicinal plants for the treatment of kidney and urinary stones. Journal of Renal Injury Prevention. 2016;5(3): 129-133.
- Scales CD JR, Smith AC, Hanley JM. Prevalence of kidney stones in the United States. European Urology. 2012;62:160.

- 4. Coppi F, Trinchieri A, Montanari E. Increase in the prevalence of symptomatic upper urinary tract stones during the last ten years. European Urology. 2000;37:23.
- Stamatelou KK, Feancis MF, Jones CA. Time trends in reported prevalence of kidney stones in the United States. 1976-1994, Kidney International. 2003;63:1817-23.
- Mehrdad K, Nasrollah N, Siamak NH, Farzaneh B. Medicinal plants used for kidney pain. Journal of Pharma Science & Research. 2017;9(5):542-546.
- Eisner MD, Brian H, David S, Goldfarb MD. Pharmacologic treatment of kidney stone disease. Urologic Clinics of North America. 2013;40:21-30.
- Murthy EN. Ethno medicinal plants used by gonds of Adilabad district, Andhra Pradesh, India. International Journal of Pharma & Life Sciences. 2012;3(10):2034-2043.

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