

EFFECT OF GANDHARVAHASTA BRIHATYADI CHOORNA IN RENAL CALCULI- A CASE STUDYPRIYANKA K R¹, P. BENEDICT MD(Ay)², SREELEKHA. M. P MS(Ay)³¹MS Scholar, Dept of Salyatantra, Govt. Ayurveda College, Thiruvananthapuram, India² Professor & HOD, Dept of Salyatantra, Govt. Ayurveda College, Thiruvananthapuram, India³ Assistant Professor, Dept of Salyatantra, Govt. Ayurveda College, Thiruvananthapuram, IndiaCorresponding Author: priyanka.vkr@gmail.com<https://doi.org/10.46607/iamj15p6062022>

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**ABSTRACT**

Urolithiasis means the presence of calculi anywhere in the urinary tract. In terms of Ayurvedic science, urinary calculi can be correlated to *Mutrashmari*. *GandharvahastaBrihatyadi choorna* which contains *Gandharvahasta*, *brihati*, *kantakari*, *gokshura*, and *kokilaksha*, is one among the formulations mentioned in *Charakasamhita*, *Ash-tangahridaya*, and *Chakradatta* in *Mootrashmarichikitsa*. This case study proves the effectiveness of *GandharvahastaBrihatyadi choorna* in renal calculi.

Key words: urolithiasis, *Mutrashmari*, *GandharvahastaBrihatyadi choorna***INTRODUCTION**

Urinary calculus is the most common disease of the urinary tract. It typically occurs in middle life during the most productive years. Urolithiasis causes dull aching pain in the renal angle, a burning sensation while micturition, dysuria, hematuria, and pus cells in urine. Mostly all these symptoms aggravate in such a manner that it may affect the normal life of an

individual. The most important complication of Urolithiasis is urinary obstruction, secondary infections due to stasis of urine, and hydronephrosis, which is often irreversible. When left untreated, urolithiasis is also responsible for renal failure. The prevalence and recurrence rates of urolithiasis are increasing, with limited options for effective drugs. *Susrutha*,

the father of surgery, has explained urinary calculus under the heading of *Asmari* in detail including etiological factors, classification, symptomatology, complications, and its management in a most scientific manner. *Mutrashmari*, according to *Susrutha*, is due to *srotovaigunya* resulting from *dushita kapha* localized in *basti*, in conjunction with *pradusita vata* and *pitta*. This disease is dreadful and hence considered as one of the '*Maharogas*'. *Acharya Susrutha* has mentioned both conservative and surgical management for treating *Mutrasmari*.

Patient information: A 26-year-old female patient visited OPD of Shalyatantra, Govt Ayurveda College, Thiruvananthapuram with complaints of dull aching pain in the low back for 6 months. It aggravated on heavy strenuous work but relieved on taking rest. A burning sensation was noticed during urination. So, she consulted at Shalyatantra Department, Govt Ayurveda College, Thiruvananthapuram for Ayurvedic management.

Symptoms and Signs

- ❖ Pain in renal angle- Grade 1(present, in undisturbed level)
- ❖ Burning micturition- Grade 1 (Present but easily bearable)
- ❖ Dysuria- Grade 1 (Occasional dysuria)
- ❖ Tenderness in renal angle – Grade 1(Occasional mild tenderness in renal angle)
- ❖ Hematuria – Grade 1 (0-5 RBC/HPF)
- ❖ Pus Cells- Grade 1(0-5 Pus cells/HPF)
- ❖ USG report dated 08-12-2020
 - 6mm mid-pole calculus was noted on the left kidney.
 - B/L PCOD.

GRADINGS FOR ASSESSMENT OF SUBJECTIVE AND OBJECTIVE PARAMETERS

Parameters

1. Pain

- absence of pain 0
- present, in undisturbed level 1

- present disturbs daily routine impossible without medication 2
- pain intolerable 3

2. Burning micturition

- no burning micturition 0
- Present but easily bearable 1
- Unbearable 2

3. Dysuria

- No dysuria 0
- Occasional dysuria 1
- Occasional severe dysuria 2
- Constant mild dysuria 3
- Constant severe dysuria, no relief after treatment 4

4 Tenderness in renal angle

- No tenderness in renal angle 0
- Occasional mild tenderness in renal angle 1
- Occasional severe tenderness in renal angle 2
- Constant mild tenderness in renal angle 3
- Constant severe tenderness in renal angle but no relief, after treatment 4

Objective parameters

1. Hematuria (on microscopic examination of urine)

- No RBC /HPF 0
- 0-5RBC/HPF 1
- 5-10RBC/HPF 2
- 10-15RBC/HPF 3
- > 15 RBC/HPF 4

2. Pus cells

- No Pus cells/HPF 0
 - 0-5Puscells/HPF 1
 - 5-10Puscells/HPF 2
 - 10-15Puscells/HPF 3
 - >15Pus cells/HPF 4
- 4 grade

3. Size (USG- abdomen & pelvis)

- Before treatment 1 After treatment

Intervention

The medicine was prepared into choorna form and was packed in airtight packets, each packet containing 6g. The mode of administration was explained to the patient in written form. 6g choorna was adminis-

tered twice daily before food and curd was advised as anupana for 90 days. Clinical assessments were done on the 30th day and the 60th day. USG was taken on the 91st day.

Table 01: Drugs of GandharvahastaBrihatyadi Choorna

Drug	Rasa	Guna	Virya	Vipaka	Karma
Gandharvahasta	Madhura Katu Kasaya	Snigdha Sookshma Teekshna	Usna	Madhura	Margasodhana Anulomana Asmanashana Kaphavataghna
Brihati	Katu Tikta	Laghu Ruksha	Usna	Katu	Kaphavataghna Pachana, Mootrala
Kantakari	Katu Tikta	Laghu Ruksha Tikshna	Usna	Katu	Kaphavatahara Dipana Pachana Mootrala Asmarighna
Gokshura	Madhura	Guru Snigdha	Sita	Madhura	Vatapittahara Mootrala Rasayana
Kokilaksha	Madhura Amla Tikta	Picchila Snigdha	Sita	Madhura	Vatapittahara Balya Asmarighna

Table 02: OBSERVATION AND RESULTS

Sl no	Assessment criteria	Before Treatment	After Treatment
1	Pain in the renal angle	Grade 1	Grade 0
2	Burning micturition	Grade 1	Grade 0
3	Dysuria	Grade 1	Grade 0
4	Tenderness in renal angle	Grade 1	Grade 0
5	Haematuria	Grade 1	Grade 0
6	Pus cells	Grade 1	Grade 0
7	Size USG (abdomen & pelvis)	6 mm	No renal calculus found

DISCUSSION

Probable mode of action of drugs

Asmari is a *kapha pradhana tridoshaja vyadhi* which can also be considered as a *salya*. Since the base of *asmari* formation is *kapha* which acts as the nucleus or nidus of pathogenesis and stagnation of urine for prolonged time in the urinary system lead to the increase in concentration and infection, the basis of the

treatment must be *Sleshmahara, srotosodhana, anulomana* followed by *ama pachaka, agnivaradhaka, mootranirharana* to remove the excess of metabolic wastes and *salyanirharana*.

✓ *Gandharvahasta, Brihati, and Kantakari* are *kaphavatahara* with *usna virya*, and *Gokshura and Ikshuraka* are *Vatapittahara* with *sita virya*-making the drug *tridoshaghna*. This property paci-

fies *kapha* which forms the substratum in the formation of *asmari*.

- ✓ Pain management is the most essential requirement in *asmari chikitsa*. *Sulaprasamana*, *sothahara*, *anulomana*, and *mootrala* properties of the drug help to relieve spasm, pain, and localized inflammation.
- ✓ *Ama pachana* and *agnivardhana* have been facilitated by the *pachana* and *dipana* properties of the drug.
- ✓ *Mootrala* property of the drug helps in reducing the solute concentration of urine, inhibits bacterial growth, and helps in expelling the stone out.
- ✓ The antioxidant property of the drug helps in relieving pain, inflammation, and infection of the tract. Antioxidant property also helps to heal the injury caused by the stone.
- ✓ In addition, *Gokshura* and *kokilaksha* have *rasayana* property which improves general health.
- ✓ *Dadhi* is *vataghna* and *mootrakrichhraghna*. These properties of *dadhi* may also have helped in reducing the pain. *Dipana* property helps to increase the *agni* and *balavardhana* property improves the general health.

CONCLUSION

The current case study reveals the effect of *GandharvahastaBrihatyadi choorna* in reducing the size of the stone and its symptoms. The drug was able to reduce the dull aching pain in the renal angle, burning micturition, dysuria, tenderness in the renal angle, hematuria, and pus cells in urine. After 90 days of intake of *choorna*, the USG report showed no evidence of renal calculi which showed its effectiveness in reducing the size of the stone.

It is hoped that the observations attained may pave way for further studies like the action of the drug on the type of stone based on its chemical composition and be fruitful for mankind.

REFERENCES

1. <http://www.ncbi.nlm.nih.gov> Kidney stone disease: an update on current concepts; TilahunAlelign and Beyene Petros,
2. <http://www.dilipraja.com/stone.html> History and milestones of the urinary calculus disease.
3. Human Embryology; Inderbir Singh & Pal. G.P; Mac Millan Publishers, 8th Edition, Reprint 2009
4. Human Anatomy Vol II; Chaurasia. B.D; CBS Publishers, 3rd edition, Reprint 1998.
5. Susruta Samhita Sarirasthana; Vaidya JadavjiTrikamjiAcarya, Published by ChowkhambaKrishnadas Academy, Varanasi; Reprint 2008.
6. Caraka Samhita Sarirasthana; Vaidya JadavjiTrikamjiAcarya, Published by ChowkhambaKrishnadas Academy, Varanasi; Reprint 2006.
7. Susruta Samhita Nidanasthana; Vaidya JadavjiTrikamjiAcarya, Published by ChowkhambaKrishnadas Academy, Varanasi; Reprint 2008.
8. Caraka Samhita Siddhisthana; Vaidya JadavjiTrikamjiAcarya, Published by ChowkhambaKrishnadas Academy, Varanasi, Reprint 2006.
9. AstangaHridayamSarirasthana; BhisagacharyaHarishastriParadkar Vaidya, Published by ChowkhambaKrishnadasAcademy; Varanasi, Reprint 2006.
10. Susruta Samhita Chikitsasthana; Vaidya JadavjiTrikamjiAcarya; Published by ChowkhambaKrishnadas Academy, Varanasi; Reprint 2008.
11. Caraka Samhita Vimanasthana; Vaidya JadavjiTrikamjiAcarya; Published by ChowkhambaKrishnadas Academy, Varanasi; Reprint 2006.
12. Principles of Anatomy & Physiology; Gerard J. Tortora, Sandra Reynolds Grabowski; Harper Collins College Publishers, 8th Edition, 1996
13. Anatomy & Physiology the Unity of Form and Function; Kenneth S. Saladin; Mc Graw Hill Publishers, 4th Edition, 2007.
14. AstangaHridayamSutrasthana; BhisagacharyaHarishastriParadkar Vaidya; Published by ChowkhambaKrishnadas Academy, Varanasi, Reprint 2006
15. <http://emedicine.medscape.com/article/440657-overview>
16. Campbell's Urology; Patrick C. W, Ruben F. Gittes, Alan D. Perlmutter, Thomas A. Stamey; W.B. Saunders Company Publishers, 5th Edition, 1986.
17. A Concise Textbook of Surgery; Somen Das: Published by Dr. S. Das, Kolkata; 6th Edition, 2010.
18. BhisajyaRatnavali; KavirajaAmbikadatta Shastri Ayurvedacharya, ChaukambhaPrakashan Publishers, Varanasi; 19th Edition, 2008.

19. DravyagunaVijnana, Vol II; J.L.N. Shastry, Published by ChaukhambhaOrientalia, Varanasi.
20. DravyagunaVijnan study of Dravya-Materia Medica, Vol II; Prof. D.S. Lucas, Published by Chaukhambha Bharati Academy, Varanasi.

21. <https://www.phytojournal.com>; review of drugs under laghupanchamoola; Kanhaiya Agarwal.

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