



A ROLE OF VEERTARVADI GANA IN MUTRASHMARI : A REVIEW STUDY

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ABSTRACT

sushruta has explained 37 Gana and each of them have multiple indications. The Nomenclature of Gana begins with Veertarvadi Gana. In "veertarvadi gana" - veertaru is the first drug mentioned in this Gana. veertarvadi gana is described in (su.s.su. 38/4). This gana is indicated in mutrakriccha, mutrashmari, mutragha. Mutrashmari is one of the prime disease affecting mutravaha srotas involving the basti marma. The percentage of people suffering from mutrashmari is increasing in the present era due to changes in lifestyle e.g - stress, strain, environmental pollution etc. Urolithiasis is the condition where urinary stones are formed or located anywhere in the urinary system. Urolithiasis has affected about 12% of the world's population at some stage in their lifetime. It occurs more frequently in men than in women in a ratio of 3:1 between the age of 20-49 years in India, 12% of the population is expected to have urinary stones, out of which 50% may end up with the loss of kidney function or renal damage. The action of veertarvadi gana is due to its mutrala (diuretics), vikasi (antispasmodic), Ashmarighna (lithotripsy), shothaghna (anti-inflammatory) properties which are helpful for painless disintegration and expulsion of calculi. It also helps in preventing the hyperconcentration of urine as well as further complications. The main aim of this study is to understand the importance of the veertarvadi gana and its shaman chikitsa in mutrashmari.

KEYWORDS : Mutrashmari, Urolithiasis, Veertarvadi Gana

INTRODUCTION

The disease "Mutrashmari" is one of the commonest diseases of mutravaha srotas. Acharya Shusrut has mentioned Mutrashmari as one among the ASHTA MAHAGADHA. He also termed it as 'YAMA' because it gives intolerable pain and it is kapha pradhan tridoshaja vyadhi. Acharya Charaka mentioned Ashmari as one of basti marma srotas vyadhi. In modern science, it is correlated with urolithiasis. The classification of Ashmari is based on the predominance of dosha. It is classified into 4 types vatashmari, pittashmari, shleshmashmari, and shukrashmari. The common symptoms of mutrashmari are intermittent dull or colicky pain, burning micturition, foul smell of urine, blood in urine and vomiting. The best and latest treatment for this disease is invasive surgery which requires a hospital stay, pre and post-operative complications. In the context of Ayurvedic classical drugs "veertarvadi gana" dravyas like (Veertaru, Sahchar, Kush,

Kash, Pashanbhed, Bandak, Gundra, Arni, Murva, Vasuka, Vasika, Bhalluk, Shyonak, Neel kamal, Brahmi, Gokshura.) Su.S.Su 38/4 is described as an effective drug in the management of urolithiasis.

Sloek-

वीरतसहचरद्रव्यदभिवृक्षादनीगुन्दानलकुशकाशाशमभेदकाम्निमन्थमोरटवसुकवसिरभलुक-
कुरैटकेन्द्रीवरकपोतवडुकाः ख्वदंशु चेति ।। (सु0सु0 37/10)

So a study has performed an account of the above statement. The result was assessed by using a series of parameters and it was found that Veertarvadi Gana is highly significant in relieving most of the signs and symptoms regarding Urolithiasis. Also, the drug is found effective in the removal of small (less than 5mm) stones and reduce the size of big (10-12 mm) stones present in the ureter, bladder and kidney.

Literature Review -

Table No 1: Important Medicinal Plants Of Veertarvadi Gana Explained In Ayurvedic Classics Are As Follows :-

S.no.	Drug Name	Botanical Name	Family	Morphology	Chemical Composition	Images
1	Veertaru	<i>Dichrostachys cineria</i>	Leguminaceae	Tree	Alanine, Trierpenoid, Amyrine, Epicatechin, Pyrazines, leucine	
2	Sahcharadvya	<i>Peeta-Berberia prionitis</i> <i>Neel-Berberia strigose willd.</i>	Acanthaceae	Shrub	Glycosides, Flavonoids, Melilotic acid, Steroids, Apigenin, Tannins	
3	Darbha	<i>Imparata cylindrica</i>	Graminae	Herb	5-Hydroxyflavone, Jaceidin, Daucosterol, Caffeic acid, Jaceidin	
4	Vrukshadani	<i>Loranthus longiflorus desr.</i>	Loranthaceae	Parasite plant	Quercetin, Flavonoid, Kempferol, Rutin-11	
5	Gundra	<i>Typha elephantina roxb.</i>	Typhaceae	Herb	Carbohydrate, Tannins, Flavonoids, Alkaloids	
6	Nala	<i>Arundo donex</i>	Gramineae	Herb	Alpha-amyrine acetate, Dehydro-bufotanine, Fridelin, Arundamine	
7	Kush	<i>Desmotachya bipinata</i>	Gramineae	Herb	Isoarborninale, ferinale, 5-Hydroxy methyl 2-Furfural, cylindrine	

8	Kasha	<i>Sacchram spontaneum</i>	Gramineae	Herb	Glucose,Galactose Xylose,Rhamnose	
9	Ashmabheda	<i>Bergenia ligulata</i>	Saxifragaceae	Perennial herb	Terpenoids,saponins Mucilase,catechin leucocyanidin	
10	Agnimanth	<i>Premna mucronate roxb.</i>	Verbenaceae	Large shrub	Perminine,Ganiarine Cryophylline,Betuline	
11	Morat	<i>Marsedenia lenacissima</i>	Asciadiaceae	Perennial climber	3-O-acetyl-olenane-18-ene-3B-ol,condutriol Daucosterol	
12	Vashuka	<i>Osmanthus fragrans</i>	Sapotaceae	Tree	Ursolaldehyde,5-hydro-xymethyle,lupeol,chlo-rogenic acid,	
13	Vashir	<i>Achyranths aspera</i>	Amaranthaceae	Perennial herb	Triterpenoid saponines Oleanolic acid, Ecdysterone,aglycone	
14	Bhalluka	<i>Oroxynum indicum</i>	Bignoniaceae	Tree	Biochanin-Å,Ellagic acid,oroxylin-Å,sisto-Sterol,oxoxidine	
15	kurant	<i>Argentea celasia</i>	Amaranthaceae	shrub	2-descarboxy betadin,amaranthin,betalimic acid,salanine a,b	
16	Kendivar	<i>Celasia cristata</i>	Amaranthaceae	Herb	Saponine,celosin a,b,sterals,semenosid,glycoprotein, 4-hydroxy phenoethyl ,alcohol	
17	Kapotvanka	<i>Dalbergia lanceolaria</i>	Scrophulariac eae	Herb	Triterpenoid saponine, Bacosides,apigenine D-mannitol,bramine	
18	Swadanshra	<i>Tribulus terresteris</i>	Zygophyllaceae	Herb	Steroids,saponines,Git-Onine,spirastanol lignanamides	

Table No - 2 Shows The Medicinal Properties Of These Plants According To Bhavprakash Nighantu.

S. No.	Medicinal Plant	Rasam	Gunam	Veeryam	Vipakam	Pryojyanga	Dshagnata	Karma
1	Veertaru	Kashaya	Laghu ,Ruksha	Sheeta	Katu	Moola	Kaphvatashamaka	Ashmarinashan, mutral,vednasth apana
2	Sahchar dvyā (shweta , neel)	Tikta,madhura	Laghu	Ushna	Katu	Panchang	Kaphavataghna	Mutral,Mutrakri cchahar
3	Darbha	Madhura, kashaya	Laghu Snigdha	Sheeta	Madhura	Moola	Tridoshaghna	Dahaprashman, Ashmarinashan, Mutral
4	Vrukshadani	Kashya, Tikta madhura	Laghu, Ruksha	Sheeta	Katu	Panchang	KaphaPittashamak	Mutraranam,Mu trakricchahar,As hmarinashan
5	Gundra	Madhura	Ruksha	Sheeta	Madhura	Moola	Raktapittashamaka	Dahaprashman, Mutral
6	Nala	Madhura , Kashaya, Tikta	Guru ,Snigdha	Sheeta	Madhura	Moola	Vatapittahara	Bastisothhara, Mutral, Dahashamak
7	Kush	Madhura, kashaya	Laghu, Snigdha	Sheeta	Madhura	Moola	Tridoshaghna	Bastishulnasak, Mutral
8	Kash	Madhura,Tikta	Laghu, snigdha	Sheeta	Madhura	Moola	Vatapittashamaks	Mutravirechaniy a, Ashmaribhedak
9	Ashmbheda	Kashaya, Tikta	Laghu, Snigdha, Tikshna	Sheeta	Katu	Moola ,Patra	Tridoshagna	Ashmaribhedak, Mutral
10	Agnimantha	Katu ,Tikta, kashya	Laghu, Ruksha	Ushna	Katu	Moola, Patra	Kaphavataghna	Vednasthapaka, Sothahara
11	Morat	Madhura, Tikta, Kashya	Guru, Ruksha	Ushna	Katu	Moola	Tridoshagna	Vednahara, Mutral
12	Vashuka	Katu	Guru	Sheeta	Katu	Twak, pushpa phala	Pittakaphashamaka	Bastisothhara, Dahashamak
13	Vashir	Tikta ,katu	Laghu , Rukshya	Ushna	Katu	Moola, tandul panchang	Kaphavatahara	Ashmarighna, Mutral
14	Bhalluka	Kashaya, Tikta , madhura	Laghu	sheeta	katu	Moola ,tulaka	Vatakaphahara	Bastisothhara,M utral

15	Kuranta	Tikta, Madhura	Laghu	Ushna	Katu	Panchang (Patra)	Kaphavatashamak	Mutrakricchahar ,Mutral
16	Kendivar	Tikta Madhura	Laghu ,Snigha, Picchil	Sheeta	Madhura	Panchang (Patra,beej, mool)	Kaphapittashamaka	Mutrakricchahar ,Mutravirechaniya
17	Kapotvanka	Tikta Kashaya, Madhura	Laghu sara	Sheeta	Madhura	Panchang	ValaPittashamak	Mutral
18	Shwadanstra	Madhura	Laghu, Singha	Sheeta	Madhura	Phal ,Mool	Vatapittashamaka	Ashmarinasan, Mutral

Mode Of Action Of Veertarvadi Gana

The highly promising herbs which are acting synergistically have been found to provide pronounced nephroprotective and lithotriptic activities through multiple mechanisms against various factors deleterious for kidney viz. pollutants, toxic metals, potentially nephrotoxic drug molecules or due to hypertension, renal stone and urinary infection. These herbs are also studied under modern parameters for the action on urinary system. Way of action of Veertarvadi gana is providing a new hope for chronic kidney disease patients. It is a unique gana of potential nephroprotective & phytoconstituents which are capable of restoring healthy kidney functions. Veertarvadi gana have mutral effect causing increase in intra-luminal pressure. Because of this pressure, calculi is expelled quickly as a whole from urinary system.

Dichrostachys Cineria (Veertaru), *Bergenia Ligulata (Ashmabheda)*, *Premna Integriifolia (Sehchar)*, *Tribulus Terrestris (Swadanshra)*, are significantly exhibited antihypertensive and (bhedan) lithotriptic activity. Lithotriptic action of these drugs is due to their diuretic (mutral), antispasmodic (vikasi), anti-inflammatory (shothaghna), properties which are helpful for painless disintegration and expulsion of calculus. It also helps in preventing the hyperconcentration of urine as well as further complications.

Desmotachya Bipinnata (Kush), *Saccharum Spontaneum (Kasa)*, *Arundo Donex (Nala)*, *Imparata cylindrica (Darbha)*, came under Trunpanchamool & Charak Samhita mentioned these herbs in stanyajanan & mutravirechaniya mahakashay. They are also known as traditional herbs. These herbs have excellent lithotriptic values & also a useful in increase urine volume, diminishing burning sensation of urine, decreasing size of Renal calculi & Vesicle calculi. Also helps in dyspepsia and balancing vitiated vata and pitta doshas.

Barleria Cristata (Sehchar), *Premna Integriifolia (Agnimanth)*, *Marsedenia Tenacissima (Morat)*, *Achyranthus aspera (Vashir)*, *Barleria Perionitis (Kurant)*, these herbs are ushna veerya resulting in decrease of vata, kapha doshas. This group of herbs have multiple actions such as diuretic, regulating physiological pH, crystalloid imbalance. By analyzing the ingredients of all yogas they are either diuretic or lithotriptic in nature, only single drug is not as potent as group of drugs in Veertarvadi gana to prevent urolithiasis & urinary tract infection. In different type of yoga asanas like Garudasana, Ushtrasana, Bhujangasana, etc are effective in reducing the rate of recurrence of stone as well as providing relief from the pain due to kidney stones.

Importance of Veertarvadi Gana

Today's lifestyle, Global warming, Dietary habits contributes more in formation of urinary calculus. Kidney patient may avoid surgeries by consuming NSAIDs. Analgesic commonly used to relieve pain but it can potentially disturb kidney functions. According to modern science surgery is the only treatment & at the same time there is no assurance regarding recurrence of stones. In this scenario Veertarvadi gana works wonderfully in early symptoms like Mutrakriccha, Urinary tract

infections, kidney failure, Mutrashmari along with this some combinations like Veertarvadi Kashaya, Gokshurdi churna, Pasanbhedi churna, Narikelakusuma yoga, Ushirashava, Gokshuradi guggul are beneficial in the management of Mutrashmari.

CONCLUSION

Veertarvadi Gana consists of 18 herbs with multi-dimensional properties. There are different therapies which are effective in management of renal stone like life style modification through diet, internal medicine and Kashaya. Bhavaprakash Nighantu is treatise of Indian medicinal plants. It contains various remedies among them mutrashmari dravya are explained in it. As there are no satisfactory drugs in modern medicine, herbal medicines are proved to exert their effectiveness at different stages of pathophysiology of renal calculi. Veertarvadi gana themselves possess inhibitory activity against crystallization & anti-oxident activity against free radicals. Veertarvadi gana helps in preventing the urolithiatic renal cell damage, inhibit the calcium oxalate crystal aggregation as well as crystal formation in the metastable solution. The article provides a herbal treatments that provide scope for future research also.

REFERENCES

1. Kaviraj Dr. Ambika dutta shashtri, editor. Sushruta Samhita, Nidana sthana Ashmarinidan adhyaya, Chaukhambha Sanskrita Sansthan, Varansi, India, volume 1st; 2013. p. 481.
2. Kaviraj Dr. Ambika dutta shastri, editor. Sushruta Samhita, Chikitsa sthana, Ashmarichikitsa adhyaya, Chaukhambha Sanskrita Sansthan, Varansi, India, volume 1st; 2013. p. 240
3. Pndit Kashinath pandey, editor. Charaka Samhita, Chikitsa sthana Trimarmiya chikitsa adhyaya, Chaukhambha Bhartiya Academy, Varanasi, India, Volume 2nd 2012. p. 876
4. Text book of Madhavidan, India Chaukhambha Sanskrita Pratishthan, Volume 1st 2007. p. 506.
5. Prof. P.V. Sharma, editor. Dravyaguna vigyana, Chaukhambha Bhartiya Academy, Varanasi, India volume 2nd Reprint 2009
6. Ayurvedic Pharmacopoeia of India, Part-I, 2nd edition, Government of India, Ministry of health and family welfare, Department of Indian system of Medicine and Homeopathy
7. Prof. K.C. Chuneekar, editor, Bhavaprakash Nighantu, Chaukhambha Bhartiya Academy, Varansi, India, Reprint 2021
8. Bapalal G. Vaidya editor, Nighantu Adarsa, Chaukhambha Bhartiya Academy, Varansi, India, Volume 1st & 2nd. Reprint 2018.
9. Database Of Medicinal Plant used in Ayurvedica, CCRAS, Volume 2,3, & 8, p. 493
10. Dr. P.S. Byadgi, editor, A Text Book of Kayachikitsa, Chaukhambha Sanskrita Sansthan, Varansi, India, Reprint 2021.
11. www.ayurvikimedicalplantimages.com