

A CASE STUDY ON THE AYURVEDIC MANAGEMENT OF BILATERAL RENAL CALCULI (VRIKKASHMARI)

Dr. Sneh Ranga*¹, Sugandh Koul², Tanu Jangir²

¹Principal and HOD Department of Shalya Tantra, Mai Bhago Ayurvedic Medical College
for Women and Hospital, Sri Muktsar Sahib, Punjab.

²U.G. Scholar, Mai Bhago Ayurvedic Medical College for Women and Hospital, Sri Muktsar
Sahib, Punjab.

Article Received on 27 August 2026,
Article Revised on 17 Sept. 2026,
Article Published on 01 Oct. 2026,

<https://doi.org/10.5281/zenodo.23036000>

***Corresponding Author**

Dr. Sneh Ranga

Principal and HOD Department of
Shalya Tantra, Mai Bhago Ayurvedic
Medical College for Women and
Hospital, Sri Muktsar Sahib, Punjab.



How to cite this Article: Dr. Sneh Ranga*¹,
Sugandh Koul², Tanu Jangir² (2026). A Case
Study On The Ayurvedic Management Of
Bilateral Renal Calculi (Vrikkashmari). World
Journal of Pharmaceutical Research, 15(19),
497-508.

This work is licensed under Creative Commons
Attribution 4.0 International license.

ABSTRACT

Ashmari is one of the most common conditions described in Ayurveda as an ailment of the Mutravaha Srotas, or urinary system.^[1] Because of its extreme agony, recurrence, and difficulties, Sushruta classifies "Ashmari," which literally translates to "stone-like structure," as one of the "Ashtamahagada."^[2] Ashmari is associated in contemporary medicine with urolithiasis, also known as nephrolithiasis, which is the development of calculi in the urinary tract. The increasing prevalence of the disease can be attributed to sedentary lifestyles, inadequate dietary practices, dehydration, and metabolic disorders. Current medical research indicates that between 70 and 80 percent of urinary calculi start in the kidneys, mostly in the renal pelvis and renal calyces, particularly the lower calyx. The ureters account for 15–25% of stones, whereas the bladder accounts for 2–10%.^[3] Calyceal

stones, especially those in the lower calyx, can last for extended periods of time, cause symptoms, and may eventually result in stone development, infection, or urinary blockage, even if smaller calculi may have the ability to pass spontaneously. As a result, "watchful waiting" is frequently insufficient on its own, necessitating active therapeutic involvement.^[4] In the current investigation, Ayurvedic medicine was used to treat a 23-year-old female patient who had bilateral renal calyceal calculi. Calculi measuring 5 mm in the right kidney and 4 mm in the left kidney were discovered by ultrasonography. Pashanbhed Churna was

used to treat the patient in addition to the proper dietary and lifestyle changes (Pathya-Apathya). Following treatment, ultrasonography showed a considerable improvement in clinical symptoms along with a marked reduction in stone size and partial to total disintegration. This example suggests that treating renal calyceal calculi with Ayurvedic medicine may be a secure and successful treatment choice.

• INTRODUCTION

Renal calculi are a prevalent issue brought on by altered lifestyles. It mostly affects men rather than women and is recurring in nature. Renal calculi occur most frequently in individuals aged 20 to 40 years and their incidence decreases after the age of 50. Renal calculi can be brought on by a diet high in salt, red meat, gout, excessive consumption of medications like calcium and vitamin D, dehydration, and hot, humid weather. The majority of people who drink less water get kidney stones. Renal stones comprise cystine, uric acid, calcium oxalate, and struvite. In Ayurveda, renal stone is similar to ashmari.^[5]

Ashmari is classified as one of the "Ashtamahagada" in Ayurveda under the Mutravaha Srotas diseases because of its painful character and tendency to repeat. In contemporary medical practice, the condition is closely associated with urolithiasis, also known as urinary calculi.

The illness is represented by the development of stone-like structures in the urinary tract, which can cause symptoms like burning micturition, hematuria, dysuria, acute abdomen or flank pain, and urinary blockage. Inadequate hydration, poor eating habits, metabolic abnormalities, and sedentary lifestyles are all thought to be significant etiological factors that contribute to its rising incidence globally.^[6]

According to Ayurveda, Ashmari is a Kapha-Vata dominating Tridoshaja Vyadhi brought on by the accumulation of crystalline materials in the urinary tract and the vitiation of Doshas. Detailed pathophysiology, classification, symptomatology, and management concepts, such as herbal formulations, Kshara preparations, dietary changes, and Panchakarma therapies, are described in classical Ayurvedic scriptures. Modern therapies like lithotripsy and surgery relieve symptoms, but they are frequently linked to recurrence and financial hardship.

Ashmari is Mutravaha Srotas' vyadhi. According to Acharya Sushruta, Ashmari is a darun (fatal) ailment as Basti falls under Trimarma (the three folds of life). According to Ayurveda,

Ashmari comes in four varieties. The structure and symptoms of Vatajasmari, Pittaj Ashmari, Kaphaj Ashmari, and Shukraj Ashmari differ. The symptoms of Vattaj Ashmari are similar to those of a calcium oxalate type stone, Pittaj Ashmari is similar to those of a uric acid type stone, and Kaphaj Ashmari is similar to those of an oxalate/phosphate type stone. In Ashmari, Kaphaj Pradhyanya Dosh is primarily involved.

The three primary principles of Ayurvedic Ashmari management are normalization of the Mutravaha Srotas, correction of Agni, and removal of Ama. The purpose of this case study is to assess the clinical effectiveness of traditional Ayurvedic treatments for Ashmari.

- **Definition of ashmari**

Ashma means "stone" in Ayurveda. Urine contains solid accumulations of mineral materials known as renal calculi. These are typically located in the kidneys, bladder, or ureters and can vary in size and quantity. The largest kidney stones might be the size of a grapefruit, while the smallest might be as big as a pinhead. They typically pass out along with the urine. However, they are not removed in the typical manner if the mineral accretions grow to large sizes over time.^[7]

Ashmari is caused by several factors, including walking in hot weather, walking longer distances, suppressing the urge to urinate, not following shodhana therapy on a regular basis, not getting enough sleep, and eating a diet rich in madhura rasa, guru, snigdha, and sheeta guna.

- **Samprapti of Ashmari**

Ashmari is formed by the involvement of tridoshas. However, kapha is significant since it is a samavayi karana. The vitiated vata dries up urine in mutravaha srotas and pitta through ushna guna, causing kapha to progressively become Ashmari (hyper saturation), similar to how gorochana is generated in cows. According to Sushruta, Ashmari hardens with kapha crystals found in the urinary tract, similar to how pure water precipitates at the bottom of a pot over time.

The concentration of solutes leads to the precipitation of calcium salt, facilitating the formation of calculi. Modern pathology classifies stones into three categories: supersaturation of urine, nucleation, and crystal formation inhibitors.^[8]

Ashmari is formed by the involvement of tridoshas. However, kapha is significant since it is a samavayi karana. The vitiated vata dries up urine in mutravaha srotas and pitta through ushna guna, causing kapha to progressively become Ashmari (hyper saturation), similar to how gorochana forms in cows. According to Sushruta, Ashmari hardens with kapha crystals in the urinary tract, similar to how pure water precipitates at the bottom of a pot over time. The concentration of solutes leads to the precipitation of calcium salt, facilitating the formation of calculi. Modern pathology classifies stones into three categories: supersaturation of urine, nucleation, and crystal formation inhibitors.

- **Poorva roopa of Ashmari**

Bastyadhmanam, Asannadeshe ruja, Basti peeda, muska veedana, Mutra kruchra, Dushta, sandra and avila mutrata and Bastagandhatwam.^[9]

- **Samanya roopa of Ashmari**

Nabhi, basti, sevani and mehana vedana, visheerna dhara mutra.

- **Vishesha roopa of ashmari:^[10]**

Vataja Ashmari

Varna: Shyava, aruna

Swaroopa: Kadamba pushpavat, kantakavat, parusha, vishama, khara, katina

Any lakshana: Teevra vedana in nabhi, mehati bindushaha

Pittaja Ashmari

Varna: Krishna, peeta, madhu varna, sarakta

Swaroopa: Bhallataka asthivat

Any lakshana: Dahyate, pachyate, dushyate –Vedana

Kaphaja Ashmari

Varna: Madhuka pushpa varna, shweta, sita, Shukla

Swaroopa: Kukkutanda sadrusha, mahati

Any lakshana: Basti guruta, bhidhyate, nistudhyate, visheryate, nistudhyate

- **MATERIALS AND METHODS**

A 23-year-old female patient presented to the Outpatient Department of Shalya Tantra at Mai Bhago Ayurvedic Medical College and Hospital for Women, Sri Muktsar Sahib, Punjab, with

complaints of acute right-sided abdominal and flank pain radiating to the posterior region. The pain was associated with burning micturition occurring 6–8 times per day, along with nausea, vomiting and symptoms were relieved after vomiting. There was history of hematuria once in 2023. The patient had a known history of renal calculi from past 10 years and had previously received modern medical treatment, which provided no significant or sustained relief. Patient was given Pashanbhed churna 5mg BD and Triphala churna 5mg at bedtime for three months.

- **Family History**

Father: Unilateral renal stone on right side

Mother: Bilateral kidney stone (operated and removed)

- **Personal history**

Bowel: Constipated

Appetite: normal

Micturition: 2-4 times a day and 2-3 times at night

Sleep: disturbed due to pain

Water intake: 4-5 litres

- **Medical history**

Painkiller injections: Tramadol, Drotin

Temporary relief within 1-1:30 hrs

- **Asthvidh Pariksha**

Nadi- Vata-Pitta

Mala- avbadh

Mutra- daha

Jiva- Prakrut

Shabd- Prakrut

Sparsh- Ushna

Druka- Prakrut

Aakruti- Madhyam

- **Physical Examination**

B.P: 120/80 mmHg

P.R: 78 bpm

Height: 167.5 cm

Weight: 60 kg

Spo2-95

RR-20 breaths/minute

Pallor-Absent

Icterus-Absent

- **Systemic examination**

CVS: S1, S2 heard, No added sounds

CNS: patient is well oriented to person, place and time

RS: normal B/L airway entry

GIT: Inspection- No scars, Palpation- Renal angle tenderness-Present

- **Investigation**

USG: Routine blood was normal,

HIV & HBs Ag was non-reactive

Urine routine was normal, Cast & Crystals was nil

Ultrasonography of abdomen & pelvis was suggestive of

- Right kidney: 5mm calyceal calculi
- Left kidney: 4mm calyceal calculi

- **Clinical Diagnosis**

Vrikkashmari

- **Management**

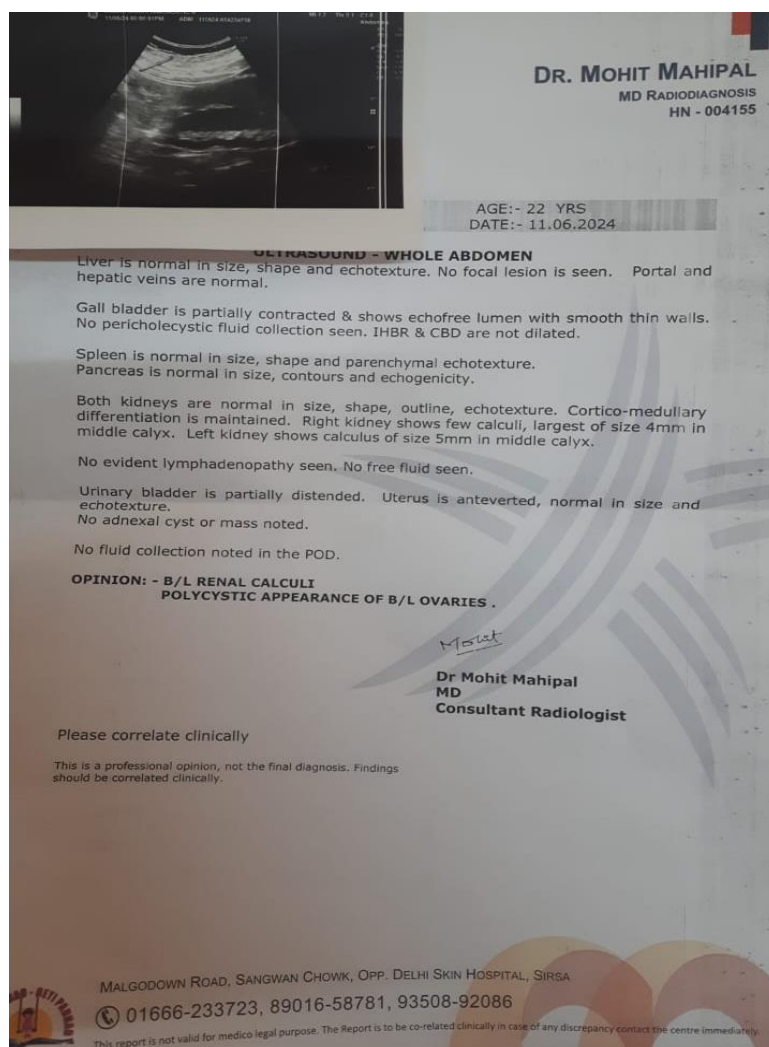
The patient was managed with classical Ayurvedic formulations as follows: Pashanbhed Churna was administered in a dose of 5 g twice daily with lukewarm water. Additionally, Triphala Churna was administered at a dose of 5 g at bedtime with lukewarm water for three months.

- **Pathya–Apathya in Ashmari**

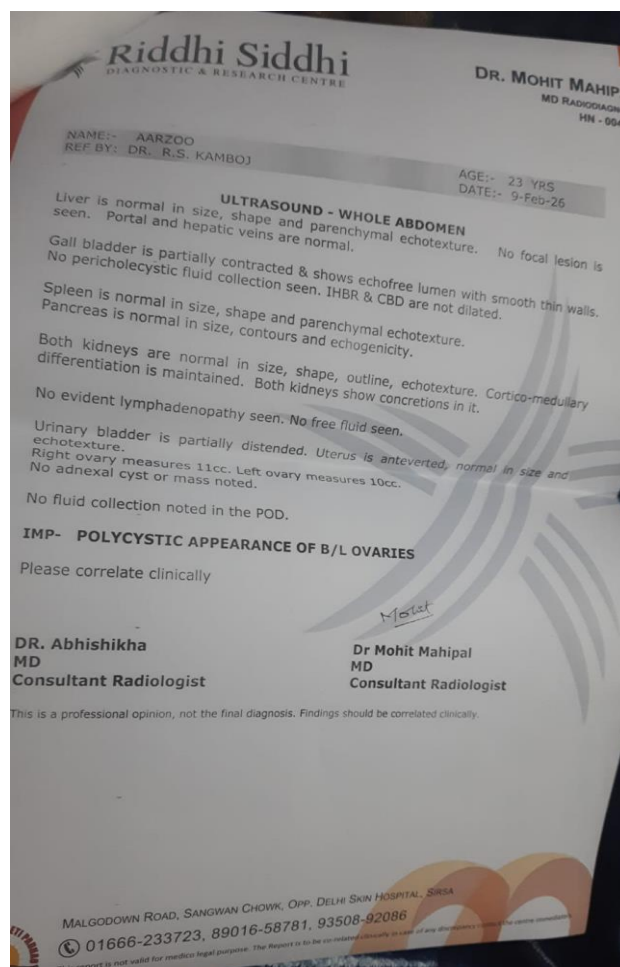
Proper nutrition and lifestyle can avoid stone formation in Ashmari (urolithiasis). Ashmari is a Kapha-pradhana condition of the Mutravaha Srotas. Avoid meals and activities that are

Kapha-vardhaka, heavy, unctuous, and obstructive. Instead, choose Mutrala (diuretic), Lekhana (scraping), and Ashmari-bhedana (stone-breaking). A diet rich in barley (Yava), old rice, Kulattha,^{[11],[12]} Kushmanda (Ash gourd)^[13], bottle gourd, ridge gourd, grapes, amla, and coconut water promotes urine production and reduces stone formation. Consuming lukewarm water, Kulattha decoction, and Gokshura kwatha promotes urinary cleansing and helps remove stones. Takra and modest amounts of old ghee can help maintain digestive fire and prevent Kapha aggravation. Avoid heavy foods like meat, fish, eggs, curd, cheese, fried and spicy foods, excess salt, spinach, tomato, banana, alcohol, and carbonated beverages, as they promote Kapha, increase urine concentration, and enable crystallisation. Avoid suppressing the urge to urinate, sedentary habits, dehydration, late-night awakening, and excessive alcohol consumption. Adherence to suitable Pathya-Apathya and medical therapy is vital to manage and prevent recurrence of Ashmari.

• RESULT



Before treatment



After treatment

Condition / Parameter	Before Treatment	After Treatment
Right Kidney Stones	4mm in middle calyx	Concretions present
Left Kidney Stones	5mm in middle calyx	Concretions present
Burning Micturition	Present	Absent
Abdominal Pain	Present	Greatly reduced
Nausea	Present	Absent
Vomiting	Present	Absent
Constipation	Present	Greatly reduced

• DISCUSSION

Correcting Agni, removing Ama, removing Srotorodha, and facilitating the breakdown and ejection of urinary calculi are the main goals of Ayurvedic treatment for Ashmari. Acharya Sushruta categorized Ashmari under Ashta Mahagada and highlighted the significance of conservative treatment in the early stages by emphasizing Bhedana, Lekhana, and Mutrala therapies before surgical intervention.^[14]

Ashmari chikitsa can be divided into three stages: Nidana parivarjana (avoidance of causative elements), Prakrutivighatana (shodhana and shamana), and Apakarshana (shasta karma,

surgical intervention). The following qualities should be present in shamanoushadhis chosen in Ashmari: Apana vayu anulomana, Mutra virechana, and Kaphahara.

Shodana in poorva roopavastha, Shodana and Shamana in the early stages of the disease, Shastra chikista in the progressive condition of the disease, and Nidana parivarjana, which is required in all phases of the disease, are the techniques of care that can be used in the various stages of Ashmari.^[15]

Following are some properties and mode of action of the medicines prescribed to the patient **Pashanbhed** (most commonly *Bergenia ligulata*) acts on renal calculi through a combination of diuretic, lithotriptic (stone-dissolving), and crystal-inhibiting properties.^[16] Its primary modes of action include.

- **Crystal Growth Inhibition:** Active compounds in the plant—specifically **bergenin** and **protocatechuic acid**—interact with calcium and oxalate ions. They bind to the calcium sites of crystals, preventing the nucleation, growth, and aggregation of calcium oxalate stones.
- **Diuretic Action:** Pashanbhed significantly increases urine output (*Mutral* effect), which helps naturally flush out tiny kidney stones, gravel, and toxins without causing excessive electrolyte depletion.
- **Stone Dissolution (Lithotriptic):** The herb contains saponins and polyphenols that help break down the mucin—the binding agent that holds stone crystals together—allowing larger calculi to soften and dissolve.
- **Enzyme Regulation:** It reduces the activity of lactate dehydrogenase, an enzyme involved in the formation of oxalate crystals in the kidneys.
- **Anti-inflammatory & Analgesic:** The herb reduces inflammation in the renal lining caused by the sharp edges of stones, easing the pain of urinary retention and painful urination.
- The **laghu guna** scrapes the stone, the **snigdha guna** lowers the vata, and the **kashaya tikta rasa** functions as kaphahara. Here, **Sheeta Veerya** serves as both Pittahara and Mootrala. Hence, it acts both as Ashmarighna and Tridosahara.

Triphala churna is believed to help manage and prevent renal calculi (kidney stones) primarily through its diuretic, antioxidant, and anti-inflammatory properties. This Ayurvedic

formulation consists of three fruits—*Amla*, *Haritaki*, and *Bibhitaki*—which work synergistically to reduce stone formation.^[17]

Mode of Action on Renal Calculi

- **Inhibition of Crystal Formation:** Triphala reduces the excretion and urinary concentration of calculogenic chemicals like oxalates and calcium. This prevents the crystallization and subsequent aggregation of minerals that form kidney stones.
- **Antioxidant Effect (Nephroprotection):** The formulation contains potent polyphenols and tannins (such as gallic acid and ellagic acid). These compounds combat oxidative stress in the kidneys, preventing cellular damage caused by stone formation and reducing overall renal inflammation.
- **Diuretic Action:** It promotes diuresis (increased urine production), which helps to flush out toxins, dilutes urine, and aids in the natural passage of small, sand-like stone particles.
- **Metabolic Support:** By regulating the digestive system and improving lipid metabolism, it addresses underlying metabolic imbalances that contribute to recurrent stone formation.
- It was used to promote digestion and rectify bowel patterns. Preventing Ama development, a contributing element to Ashmari Samprapti, requires correcting Agni and regulating Apana Vata.
- Triphala is referred to in traditional scriptures as Anulomana and Rasayana, which promote long-term metabolic equilibrium and lessen the recurrence of urinary calculi.

Renal calculi were significantly improved clinically and reduced radiologically as a result of these formulations' combined and synergistic activity. This result supports the Ayurvedic concept of Samprapti-Vighatana, which holds that Ashmari can be effectively managed by correcting metabolic imbalance and restoring Mutravaha Srotas function.

• CONCLUSION

Ashmari, one of the Ashtamahagada described in Ayurveda, remains a significant clinical challenge due to its recurrent nature, associated morbidity, and impact on patients' quality of life. The present case study highlights the successful management of bilateral renal calyceal calculi in a 23-year-old female patient through a conservative Ayurvedic approach. The administration of Pashanbhed Churna and Triphala Churna, along with strict adherence to Pathya-Apathya, resulted in considerable symptomatic relief and favorable radiological outcomes.

The therapeutic effect observed in this case can be attributed to the Ashmaribhedana (lithotriptic), Mutrala (diuretic), Lekhana (scraping), Shothahara (anti-inflammatory), and Tridosahara properties of the prescribed formulations. These interventions likely facilitated the dissolution and expulsion of calculi, improved urinary flow, reduced inflammation of the urinary tract, and prevented further crystal aggregation. The treatment also addressed the underlying Ayurvedic pathogenesis by correcting Agni, eliminating Ama, restoring the normal functioning of Mutravaha Srotas, and balancing the vitiated Doshas, particularly Kapha and Vata.

The marked reduction in symptoms such as abdominal pain, burning micturition, nausea, vomiting, and constipation, along with ultrasonographic evidence of stone disintegration, suggests that Ayurvedic management can provide effective, non-invasive, and economical care for selected cases of renal calculi. Furthermore, dietary regulation and lifestyle modifications played a vital role in preventing disease progression and reducing the likelihood of recurrence.

This case reinforces the relevance of classical Ayurvedic principles in the management of urinary calculi and demonstrates the potential of herbal formulations as a safe therapeutic alternative or complementary approach to modern treatment modalities. Given that this report is based on a single case, additional well-designed clinical trials with larger sample sizes and extended follow-up periods are necessary to validate these findings and to establish standardized treatment protocols. Nevertheless, the present study provides encouraging evidence that Ayurvedic management can be an effective strategy for the treatment and prevention of Ashmari, particularly in the early stages of the disease.

• REFERENCES

1. Agnivesha. Charaka Samhita, revised by Charaka and Dridhabala, with Ayurveda Dipika commentary by Chakrapanidatta. Edited by Kashinath Shastri & Gorakhnath Chaturvedi. Sutrasthana 25/40–41. Varanasi: Chaukhambha Bharati Academy.
2. Sushruta. Sushruta Samhita, edited with Nibandhasangraha commentary by Dalhana. Nidanasthana 3 (Ashmari Nidana). Varanasi: Chaukhambha Orientalia.
3. Jameson JL, Fauci AS, Kasper DL, Hauser SL, Longo DL, Loscalzo J, editors. Harrison's Principles of Internal Medicine. 21st ed. New York: McGraw-Hill Education; 2022. Chapter: Nephrolithiasis and urinary tract stones.

4. Türk C, Petřík A, Sarica K, et al. EAU Guidelines on Urolithiasis. Arnhem (The Netherlands): European Association of Urology; 2024.
5. Dr. Ravindra B. Ghaywate, Ayurveda Management of ashmari (kidney stone): A case study, ejpmr, 2020, Vol 7, Issue 11, 2020, pg 589.
6. Dr. Ravindra B. Ghaywate, Ayurveda Management of ashmari (kidney stone): A case study, ejpmr, 2020, Vol 7, Issue 11, 2020, pg 590.
7. Pt Shastri Kashinath, Charaka samhita, edited by Dr.Pandeya Gangashaya, vol 11, Chaukamba Sanskrit sansthan, Varanasi, 2012; pp 640-641.
8. Prof Murthy Srikantha, Sushruta Samhita, Vol 1, Chaukamba Orientalia, Varanasi, 2012; pp 483.
9. Prof Murthy Srikantha, Ashtanga sangraha of Vagbhata, Vol 11, Chaukamba Orientalia,, Varanasi, 2012; pp 199.
10. Prof Murthy Srikantha, Sushruta Samhita, Vol 1, Chaukamba Orientalia, Varanasi, 2012; pp 484 - 485.
11. Charaka, Charaka Samhita, Sutrasthana 27, Shukadhanya Varga. Chaukhamba Bharati Academy, Varanasi.
12. Sushruta. Sushruta Samhita, Chikitsa Sthana, Chapter 7 (Ashmari Chikitsa). Edited by Kaviraj Ambikadatta Shastri. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint 2018; 405–408.
13. Bhavamishra. Bhavaprakasha Nighantu, Phala Varga. Edited by Dr. K. C. Chuneekar. Varanasi: Chaukhambha Bharati Academy; Reprint 2016; 560.
14. Acharya Sushruta. Sushruta Samhita, Sutrasthana, Ashtamahagada Adhyaya. Varanasi: Chaukhambha Sanskrit Sansthan; 2013.
15. Prof Murthy Srikantha, Sushruta Samhita, Vol 1, Chaukamba Orientalia, Varanasi, 2012; pp 484 - 485.
16. Chauhan Rajani et al, Global Research online journal – Pashana bheda a golden herb of Himalaya – a review. July 31, 2012; 24 – 30.
17. Acharya Vagbhata. Ashtanga Hridaya, Sutrasthana. Varanasi: Chaukhambha Sanskrit Sansthan; 2012.