

Review Article

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“IMPORTANCE OF AVOIDING *MUTRAVEGADHARANA* IN THE PREVENTION OF *MUTRAKRICHCHHRAM*: A LITERARY REVIEW.”

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ABSTRACT

Background: In Ayurveda, suppression of natural urges (*Vega Dharana*) is considered a significant causative factor for various diseases. Among them, *Mutravegadharana* (suppression of the urge to urinate) plays a crucial role in the pathogenesis of urinary disorders. *Mutrakrichchhram*, characterized by difficulty and discomfort during micturition, is one such condition described in classical texts. Modern lifestyle factors such as busy schedules, lack of proper sanitation access, and negligence towards bodily signals have increased the tendency of suppressing the urge to urinate.

Aim: To evaluate the importance of avoiding *Mutravegadharana* in the prevention of *Mutrakrichchhram* through classical Ayurvedic literature. **Objectives:** To review the concept of *Vega Dharana* and its consequences To study *Mutravegadharana* as an etiological factor for *Mutrakrichchhram* To analyze preventive measures described in Ayurveda. To correlate Ayurvedic concepts with modern urinary disorders **Materials and Methods:** This is a literary review based on

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classical Ayurvedic texts such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*, along with relevant modern medical literature. References related to *Mutravegadharana* and *Mutrakrichchhram* were collected, compiled, and critically analyzed. **Results:** The review reveals that suppression of *Mutravega* leads to vitiation of mainly *Vata Dosha*, causing obstruction and dysfunction in the urinary system. Classical texts describe symptoms such as pain, burning sensation, difficulty in urination, and incomplete voiding, which closely resemble features of urinary tract infections and dysuria in modern medicine. Preventive principles like timely voiding, proper hydration, and adherence to *Dinacharya* play a vital role in maintaining urinary health. **Conclusion:** Avoiding *Mutravegadharana* is essential for the prevention of *Mutrakrichchhram*. Ayurveda emphasizes the importance of respecting natural urges to maintain physiological balance. Simple lifestyle modifications based on Ayurvedic principles can effectively prevent urinary disorders and promote overall health.

Keywords: *Mutravegadharana*, *Mutrakrichchhram*, *Vega Dharana*, *Vata Dosha*, *Dinacharya*, Urinary Disorders

INTRODUCTION

In Ayurveda, maintenance of health depends on the proper balance of *Dosha*¹, *Dhatu*,² *Mala*,³ and *Agni*.⁴ Along with these, the concept of *Vega*⁵ (natural bodily urges) holds great importance in preserving physiological harmony. Classical texts clearly emphasize that suppression of natural urges, known as *Vega Dharana*,⁶ disturbs the normal functioning of the body and leads to disease. Among the thirteen types of natural urges described, *Mutravega*⁸ (urge to urinate) is considered essential for maintaining urinary system health and proper elimination of waste products.

Mutravegadharana,⁹ the voluntary suppression of the urge to urinate, is commonly observed in modern lifestyles due to occupational stress, lack of access to clean sanitation facilities, travel, or negligence. Ayurveda explains that such suppression leads to vitiation of primarily *Vata Dosha*,¹⁰ which governs all movements in the body. Disturbed *Vata* affects the normal flow of urine (*Mutra Pravritti*¹¹), resulting in functional and structural disturbances in the urinary tract. Over time, this can manifest as various urinary disorders, prominently *Mutrakrichchhram*.¹²

Mutrakrichchhram is described in classical Ayurvedic texts as a condition characterized by difficulty, pain, burning sensation, and discomfort during urination. It is classified into different types based on *Dosha* involvement such as *Vataja*,¹³ *Pittaja*,¹⁴ *Kaphaja*,¹⁵ and

Sannipataja Mutrakrichchhram.¹⁶ The condition shares similarities with modern clinical entities like dysuria, urinary tract infections, and inflammatory disorders of the urinary system. The etiological factors (*Nidana*¹⁷) clearly include *Mutravegadharana* as a major causative factor, highlighting its clinical relevance.

In the present era, increasing prevalence of urinary disorders reflects the impact of improper lifestyle habits and ignorance towards basic physiological needs. Ayurveda provides a preventive approach by emphasizing *Nidana Parivarjana*¹⁸ (avoidance of causative factors), where avoiding *Mutravegadharana* plays a key role. Understanding this concept through classical literature not only helps in disease prevention but also offers a simple, practical approach for maintaining urinary health. Hence, this literary review focuses on highlighting the importance of avoiding *Mutravegadharana* in preventing *Mutrakrichchhram*.

AIM AND OBJECTIVES

Aim: To evaluate the importance of avoiding *Mutravegadharana* in the prevention of *Mutrakrichchhram* through classical Ayurvedic literature.

Objectives:

- To review the concept of *Vega Dharana* and its consequences
- To study *Mutravegadharana* as an etiological factor for *Mutrakrichchhram*
- To analyze preventive measures described in Ayurveda
- To correlate Ayurvedic concepts with modern urinary disorders

MATERIAL AND METHODS

This study is a literary review based on classical Ayurvedic texts and relevant modern literature. Information regarding *Mutravegadharana* and *Mutrakrichchhram* was collected from primary sources such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*, along with their commentaries. Relevant concepts including *Vega Dharana*, *Nidana*, *Samprapti*, *Lakshana*, and preventive measures were systematically reviewed and compiled. In addition, modern medical literature related to urinary disorders, dysuria, and urinary tract infections was also analyzed to establish correlation. The collected data were critically evaluated, organized, and interpreted to understand the role of avoiding *Mutravegadharana* in the prevention of *Mutrakrichchhram*.

CONCEPTUAL STUDY

MUTRAVEGADHARANA

Mutravegadharana refers to the voluntary suppression of the natural urge to urinate, which is considered one of the important types of *Vega Dharana*¹⁹ in Ayurveda. Natural urges (*Adharaniya Vega*²⁰) are physiological reflexes essential for maintaining internal balance and proper elimination of waste. Ayurveda strongly advises not to suppress these urges because doing so disturbs normal body functions. Among all urges, *Mutravega* plays a crucial role in the excretion of liquid waste (*Mutra*²¹), and its suppression directly affects the urinary system as well as overall homeostasis.

CLASSICAL DESCRIPTION

In classical Ayurvedic texts, *Mutravega* is described as a natural urge that should not be suppressed under any circumstances. Acharyas have included it among the *Adharaniya Vega*,²² emphasizing its importance in maintaining normal physiology. The formation of *Mutra* is linked with *Ahara Paka*²³ and the separation of waste products, where liquid waste is filtered and eliminated through the urinary system. The timely expulsion of *Mutra* ensures proper functioning of *Basti*²⁴ (urinary bladder) and associated channels.

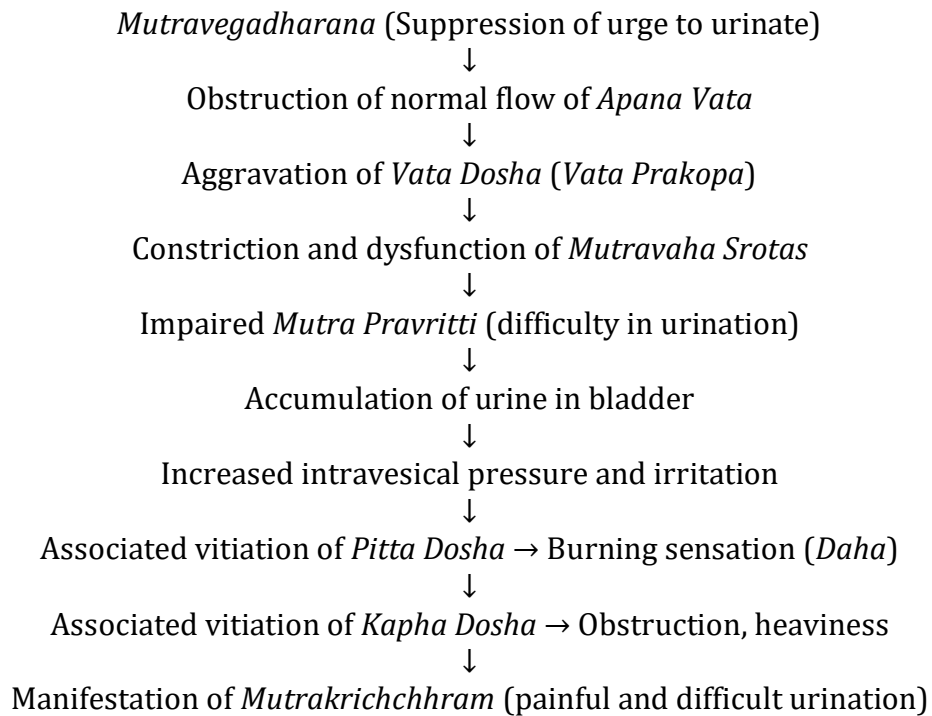
CAUSES

The suppression of *Mutravega* occurs due to various lifestyle and behavioral factors. In the present era, individuals often ignore the urge to urinate due to occupational commitments, long working hours, travel conditions, lack of hygienic toilets, and social hesitation. Students, professionals, drivers, and laborers are commonly affected groups. Apart from these, habitual negligence and lack of awareness regarding bodily needs also contribute significantly. Such repeated suppression gradually leads to functional disturbances in the urinary system.

PATHOPHYSIOLOGY (SAMPRAPTI)

The suppression of *Mutravega* leads to the vitiation of primarily *Vata Dosha*, especially *Apana Vata*, which is responsible for the downward movement and elimination of urine. When the urge is suppressed, the natural flow of *Vata* is obstructed, resulting in *Vata Prakopa*.²⁵ This disturbed *Vata* causes constriction and dysfunction of the urinary pathways (*Mutravaha Srotas*)²⁶, leading to improper voiding of urine. Over time, this results in accumulation of

urine, increased pressure in the bladder, and irritation of the urinary tract. Associated *Pitta* vitiation may produce burning sensation, while *Kapha* involvement can lead to obstruction and heaviness.



EFFECTS OF MUTRAVEGADHARANA²⁷

Continuous suppression of the urge to urinate results in various symptoms affecting the urinary and systemic functions. Classical texts describe features such as pain in the bladder region, difficulty in urination, incomplete voiding, distension of the lower abdomen, and discomfort. There may also be burning sensation, increased frequency, or retention of urine. If ignored for a long period, it can lead to complications such as *Mutrakrichchhram*, urinary tract infections, formation of stones, and chronic urinary dysfunction. These effects clearly highlight the harmful impact of suppressing natural urges.

ROLE OF DOSHA²⁸

The primary *Dosha* involved in *Mutravegadharana* is *Vata*, particularly *Apana Vata*, due to its role in excretory functions. When *Vata* is aggravated, it causes obstruction, irregular flow, and pain during urination. Secondary involvement of *Pitta* results in symptoms like burning sensation and inflammation, while *Kapha* contributes to heaviness, sluggishness, and obstruction in the urinary channels. Thus, *Mutravegadharana* leads to a combined *Dosha Dushti*, ultimately disturbing the normal physiology of *Mutravaha Srotas*.

CLINICAL SIGNIFICANCE

The concept of *Mutravegadharana* has significant clinical importance in both preventive and curative aspects. It is considered an important etiological factor (*Nidana*) for urinary disorders like *Mutrakrichchhram*. Understanding this concept helps in early identification of risk factors and implementation of preventive strategies. Ayurveda emphasizes *Nidana Parivarjana* as the first line of management, where avoiding suppression of urges becomes a simple yet powerful tool in disease prevention.

PREVENTIVE ASPECT

Avoidance of *Mutravegadharana* is a key preventive measure for maintaining urinary health. Individuals should respond promptly to the urge to urinate and should not delay micturition unnecessarily. Maintaining proper hydration, following regular lifestyle practices (*Dinacharya*)²⁹, and ensuring access to hygienic sanitation facilities are essential. Awareness regarding the harmful effects of urge suppression should be promoted, especially among high-risk groups. By following these simple measures, many urinary disorders can be effectively prevented.

MUTRAKRICHCHHRAM

Mutrakrichchhram is an important urinary disorder described in Ayurveda, characterized by difficulty (*Krichchhrata*)³⁰ in the process of urination (*Mutra Pravritti*)³¹. It is considered a condition where the patient experiences pain, discomfort, burning sensation, or obstruction while passing urine. The term itself is derived from *Mutra* (urine) and *Krichchhra* (difficulty), indicating painful or difficult micturition. It is mainly included under *Mutravaha Srotas Vikara*³² and is commonly encountered in clinical practice.

NIRUKTI (ETYMOLOGY)

The word *Mutrakrichchhram* is formed by combining two terms: *Mutra* meaning urine and *Krichchhra*³³ meaning difficulty or distress. Thus, it refers to a condition in which urination becomes difficult, painful, or obstructed. This etymological understanding clearly reflects the clinical features of the disease and helps in its conceptual clarity.

CLASSICAL DESCRIPTION

Classical Ayurvedic texts such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya* have described *Mutrakrichchhram* in detail. It is included under diseases of the urinary

system and is explained with respect to its causes (*Nidana*), pathogenesis (*Samprapti*), symptoms (*Lakshana*)³⁴, and types (*Bheda*)³⁵. The condition is primarily caused by vitiation of *Dosha*, especially *Vata* and *Pitta*, affecting the normal functioning of *Mutravaha Srotas*.

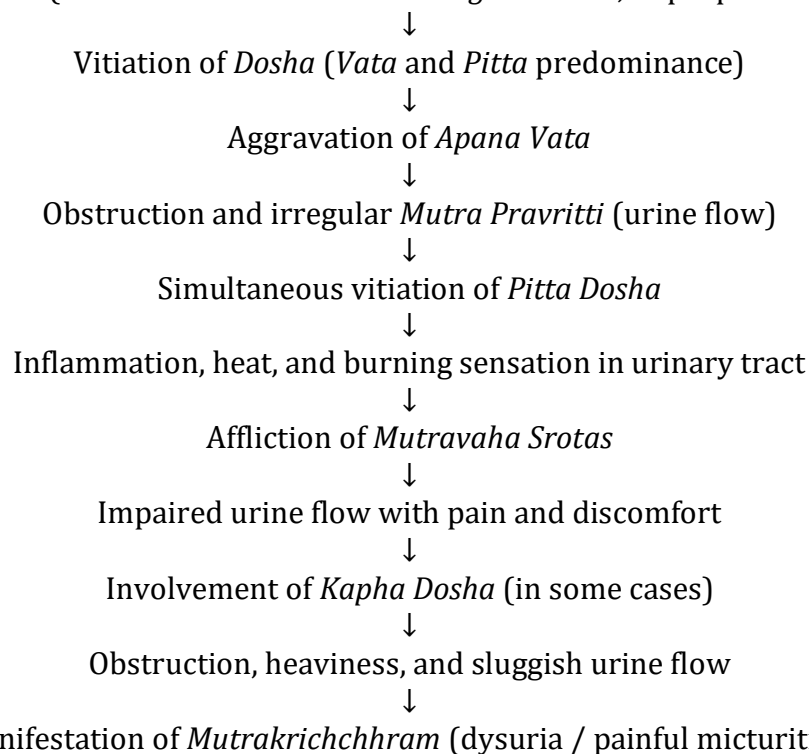
NIDANA (ETIOLOGICAL FACTORS)

The causative factors of *Mutrakrichchhram* mainly include improper dietary and lifestyle habits. Suppression of natural urges, especially *Mutravegadharana*, is considered one of the most important causes. Intake of excessively spicy, dry, hot, and irritant foods aggravates *Pitta* and *Vata*. Dehydration, excessive physical exertion, alcohol consumption, and exposure to heat also contribute to the condition. In addition, infections, trauma, and obstruction in urinary pathways may also act as causative factors.

SAMPRAPTI (PATHOGENESIS)

The pathogenesis of *Mutrakrichchhram* involves vitiation of *Dosha*, mainly *Vata* and *Pitta*. Aggravated *Vata*, particularly *Apana Vata*, leads to obstruction and irregular flow of urine. Simultaneously, vitiated *Pitta* causes inflammation, heat, and burning sensation in the urinary tract. These disturbed *Dosha* affect the *Mutravaha Srotas*,³⁶ resulting in impaired urine flow, pain, and discomfort. In some cases, *Kapha* may also contribute by causing obstruction and heaviness, leading to further difficulty in urination.

Nidana Sevana (Causative factors like *Mutravegadharana*, improper diet & lifestyle)



PURVARUPA³⁷ (PRODROMAL SYMPTOMS)

Before the full manifestation of the disease, certain early signs may be observed. These include mild discomfort during urination, slight burning sensation, increased frequency, and a feeling of incomplete voiding. Patients may also experience heaviness in the lower abdomen and occasional pain in the bladder region. Recognition of these early symptoms is important for timely intervention and prevention of disease progression.

RUPA³⁸ (CLINICAL FEATURES)

The cardinal features of *Mutrakrichchhram* include painful and difficult urination. Patients commonly complain of burning sensation, straining during urination, reduced urine flow, and frequent urge with passage of small quantities of urine. There may be lower abdominal pain, discomfort, and a sensation of incomplete emptying. In severe cases, urine may be turbid, discolored, or associated with foul smell. These symptoms closely resemble dysuria and urinary tract infections described in modern medicine.

BHEDA³⁹ (TYPES)

Ayurveda classifies *Mutrakrichchhram* into different types based on the predominance of *Dosha*. *Vataja Mutrakrichchhram* is characterized by severe pain and obstruction. *Pittaja Mutrakrichchhram* presents with burning sensation, yellowish urine, and inflammation. *Kaphaja Mutrakrichchhram* shows heaviness, turbidity, and sluggish urine flow. *Sannipataja Mutrakrichchhram* involves all three *Dosha* and presents with mixed symptoms. Some texts also describe specific types such as *Ashmarija* (associated with stones) and *Shukraja Mutrakrichchhram*.

DOSHA⁴⁰ INVOLVEMENT

The role of *Dosha* is central in the development of *Mutrakrichchhram*. *Vata Dosha*, especially *Apana Vata*, is responsible for pain and difficulty in urination. *Pitta Dosha* causes burning sensation, inflammation, and discoloration of urine. *Kapha Dosha* contributes to obstruction, heaviness, and turbidity. The interplay of these *Dosha* leads to the manifestation of different clinical features and types of the disease.

DUSHYA⁴¹ AND SROTAS⁴² INVOLVEMENT

The main *Dushya* involved in *Mutrakrichchhram* are *Rasa Dhatu*, *Rakta Dhatu*, and *Mutra*. The disease primarily affects *Mutravaha Srotas*, which are responsible for the formation and

excretion of urine. Any disturbance in these channels due to *Dosha Dushti* leads to impaired urine flow and associated symptoms. Chronic involvement may also affect surrounding tissues and structures.

UPADRAVA⁴³ (COMPLICATIONS)

If *Mutrakrichchhram* is not treated properly, it may lead to complications such as urinary retention, recurrent infections, formation of urinary calculi (*Ashmari*), and chronic inflammation of the urinary tract. In severe cases, it may also affect kidney function and lead to systemic complications. Therefore, early diagnosis and management are essential.

CHIKITSA SIDDHANTA⁴⁴ (PRINCIPLES OF MANAGEMENT)

The management of *Mutrakrichchhram* is based on *Dosha* predominance and underlying causes. The primary approach includes *Nidana Parivarjana* (avoidance of causative factors), especially avoiding *Mutravegadharana*. Therapies aimed at balancing *Vata* and *Pitta*, reducing inflammation, and promoting smooth urine flow are advised. Use of *Mutrala* (diuretic), *Shothahara* (anti-inflammatory), and *Vata-Pitta Shamana* drugs is beneficial. Proper hydration and dietary regulation also play an important role.

PREVENTIVE ASPECT

Prevention of *Mutrakrichchhram* mainly involves maintaining healthy urinary habits and avoiding suppression of natural urges. Adequate water intake, proper hygiene, balanced diet, and adherence to *Dinacharya* help in maintaining urinary health. Awareness regarding the importance of responding to natural urges is essential in preventing this condition.

RESULT AND FINDINGS

- Suppression of *Mutravega* (*Mutravegadharana*) is identified as a significant etiological factor in the development of *Mutrakrichchhram*.
- Repeated urge suppression leads to vitiation of *Vata Dosha*, especially *Apana Vata*, resulting in disturbed urinary flow.
- Associated involvement of *Pitta Dosha* produces classical features like burning sensation (*Daha*) and inflammation in the urinary tract.
- In some cases, *Kapha Dosha* contributes to obstruction, heaviness, and sluggish urine flow, aggravating the condition.

- The *Mutravaha Srotas* are primarily affected, leading to impaired *Mutra Pravritti* (difficulty in urination).
- Clinical features observed include pain during urination, burning sensation, increased frequency, incomplete voiding, and discomfort in the lower abdomen.
- The disease shows close similarity with modern conditions such as dysuria and urinary tract infections.
- Classical Ayurvedic texts consistently emphasize *Mutravegadharana* as an important *Nidana* for urinary disorders.
- Preventive approach through *Nidana Parivarjana* (avoiding urge suppression) is found to be highly effective in reducing disease occurrence.
- Proper lifestyle practices like timely voiding, adequate hydration, and following *Dinacharya* help in maintaining urinary health.
- The study highlights that simple behavioral modifications can play a major role in preventing *Mutrakrichchhram*.
- Overall, the findings support the classical Ayurvedic principle that respecting natural urges is essential for maintaining physiological balance and preventing disease.

DISCUSSION

The present literary review clearly highlights that *Mutravegadharana* plays a crucial role in the pathogenesis of *Mutrakrichchhram*. Ayurveda strongly emphasizes that suppression of natural urges disturbs the normal physiological functioning of the body, particularly affecting *Vata Dosha*. The aggravation of *Apana Vata* leads to obstruction and irregularity in urine flow, which forms the basic pathology of the disease. Classical references consistently describe *Mutravegadharana* as an important *Nidana*, indicating that even simple behavioral factors can initiate disease processes when ignored over time⁴⁵.

Further, the involvement of *Pitta Dosha* explains the inflammatory features such as burning sensation, heat, and discomfort during urination, while *Kapha Dosha* contributes to obstruction and heaviness in the urinary channels. This *Tridosha* involvement results in impairment of *Mutravaha Srotas*, leading to clinical manifestations like pain, difficulty in urination, and incomplete voiding. When correlated with modern science, these features resemble conditions like urinary tract infections and dysuria, where infection, inflammation,

and urinary stasis play a major role. Thus, the Ayurvedic explanation of *Samprapti* provides a holistic understanding of both functional and structural disturbances.⁴⁶

The most important aspect observed in this study is the preventive potential of avoiding *Mutravegadharana*. Ayurveda gives prime importance to *Nidana Parivarjana*, which in this context means timely voiding of urine and respecting natural urges. Simple lifestyle corrections such as maintaining hydration, following *Dinacharya*, and ensuring hygienic urinary habits can significantly reduce the incidence of *Mutrakrichchhram*. Therefore, this concept is not only theoretical but also highly practical, offering an easy and effective approach for prevention and maintenance of urinary health in daily life.⁴⁷

CONCLUSION

The present study concludes that *Mutravegadharana* is a major and preventable etiological factor in the development of *Mutrakrichchhram*. Suppression of the natural urge to urinate leads to vitiation of *Vata*, along with involvement of *Pitta* and *Kapha*, resulting in dysfunction of *Mutravaha Srotas* and manifestation of urinary symptoms such as pain, burning, and difficulty in urination. Ayurveda clearly emphasizes the importance of *Nidana Parivarjana*, where avoiding urge suppression plays a key role in disease prevention. Simple measures like timely voiding, proper hydration, and adherence to *Dinacharya* can effectively maintain urinary health. Thus, respecting natural urges is a fundamental and practical principle for preventing *Mutrakrichchhram* and promoting overall well-being.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NONE

REFERENCES

1. Agnivesha, Charaka, Dridhabala. *Charaka Samhita*, Sutra Sthana, Chapter 7 (Vega Dharaniya Adhyaya). Varanasi: Chaukhambha Orientalia; Reprint 2018.
2. Agnivesha, Charaka, Dridhabala. *Charaka Samhita*, Sutra Sthana, Chapter 30. Varanasi: Chaukhambha Orientalia; Reprint 2018.
3. Agnivesha, Charaka, Dridhabala. *Charaka Samhita*, Nidana Sthana, Chapter 3. Varanasi: Chaukhambha Orientalia; Reprint 2018.
4. Agnivesha, Charaka, Dridhabala. *Charaka Samhita*, Chikitsa Sthana, Chapter 26. Varanasi: Chaukhambha Orientalia; Reprint 2018.

5. Acharya Charaka. *Charaka Samhita* with Ayurveda Dipika commentary by Chakrapani. Varanasi: Chaukhambha Sanskrit Series; 2019.
6. Sushruta. *Sushruta Samhita*, Sutra Sthana, Chapter 24. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint 2017.
7. Sushruta. *Sushruta Samhita*, Nidana Sthana, Chapter 3 (Mutraghata Nidana). Varanasi: Chaukhambha Sanskrit Sansthan; 2017.
8. Sushruta. *Sushruta Samhita*, Chikitsa Sthana, Chapter 7 (Mutrakrichchhram Chikitsa). Varanasi: Chaukhambha Sanskrit Sansthan; 2017.
9. Sushruta. *Sushruta Samhita* with Dalhana commentary. Varanasi: Chaukhambha Sanskrit Series; 2018.
10. Vagbhata. *Ashtanga Hridaya*, Sutra Sthana, Chapter 4. Varanasi: Chaukhambha Orientalia; Reprint 2019.
11. Vagbhata. *Ashtanga Hridaya*, Nidana Sthana, Chapter 9. Varanasi: Chaukhambha Orientalia; 2019.
12. Vagbhata. *Ashtanga Hridaya*, Chikitsa Sthana, Chapter 11. Varanasi: Chaukhambha Orientalia; 2019.
13. Vagbhata. *Ashtanga Sangraha*, Sutra Sthana, Chapter 9. Varanasi: Chaukhambha Sanskrit Series; 2018.
14. Vagbhata. *Ashtanga Sangraha*, Nidana Sthana, Chapter 10. Varanasi: Chaukhambha Sanskrit Series; 2018.
15. Vagbhata. *Ashtanga Sangraha*, Chikitsa Sthana, Chapter 12. Varanasi: Chaukhambha Sanskrit Series; 2018.
16. Sharangadhara. *Sharangadhara Samhita*, Purva Khanda. Varanasi: Chaukhambha Orientalia; 2017.
17. Bhavamishra. *Bhavaprakasha*, Madhyama Khanda. Varanasi: Chaukhambha Sanskrit Bhavan; 2018.
18. Madhavakara. *Madhava Nidana*, Chapter on Mutrakrichchhram. Varanasi: Chaukhambha Orientalia; 2019.

19. Kashyapa. *Kashyapa Samhita*, Sutra Sthana. Varanasi: Chaukhambha Sanskrit Series; 2018.
20. Bhela. *Bhela Samhita*. Varanasi: Chaukhambha Sanskrit Series; 2016.
21. Tripathi KD. *Essentials of Medical Pharmacology*. 8th ed. New Delhi: Jaypee Brothers; 2019.
22. Davidson S. *Davidson's Principles and Practice of Medicine*. 23rd ed. Elsevier; 2018.
23. Walker BR, Colledge NR. *Davidson's Principles of Medicine*. Elsevier; 2018.
24. Kumar P, Clark M. *Clinical Medicine*. 9th ed. Elsevier; 2017.
25. Guyton AC, Hall JE. *Textbook of Medical Physiology*. 13th ed. Elsevier; 2016.
26. Tortora GJ, Derrickson B. *Principles of Anatomy and Physiology*. 15th ed. Wiley; 2017.
27. Ganong WF. *Review of Medical Physiology*. 25th ed. McGraw Hill; 2016.
28. Park K. *Preventive and Social Medicine*. 25th ed. Jabalpur: Banarsidas Bhanot; 2019.
29. WHO. Nutritional and health guidelines. Geneva: World Health Organization; 2020.
30. CDC. Urinary tract infection guidelines. Atlanta: Centers for Disease Control; 2020.
31. Foxman B. Epidemiology of urinary tract infections. *Am J Med*. 2014;127(1):S3–S10.
32. Flores-Mireles AL, Walker JN. Urinary tract infections: epidemiology and pathogenesis. *Nat Rev Microbiol*. 2015;13(5):269–284.
33. Stamm WE, Norrby SR. Urinary tract infections. *N Engl J Med*. 2001;345:1055–1062.
34. Nicolle LE. Urinary tract infection. *Crit Care Clin*. 2013;29(3):699–715.
35. Hooton TM. Clinical practice of UTIs. *N Engl J Med*. 2012;366:1028–1037.
36. Medina M, Castillo-Pino E. UTIs epidemiology. *Ther Adv Urol*. 2019;11:1–7.
37. Wagenlehner FM. UTI management. *Lancet Infect Dis*. 2020;20(1):e1–e10.
38. Ronald A. The etiology of UTIs. *Clin Infect Dis*. 2003;17(4):589–597.
39. Wilson ML. Laboratory diagnosis of UTIs. *Clin Infect Dis*. 2004;38:1150–1158.
40. Griebing TL. Urologic diseases. *Urol Clin North Am*. 2008;35(1):1–12.
41. Sharma PV. *Dravyaguna Vijnana*. Varanasi: Chaukhambha Bharati Academy; 2017.

42. Sharma RK, Dash B. *Charaka Samhita* (English Translation). Varanasi: Chaukhambha Sanskrit Series; 2019.
43. Srikantha Murthy KR. *Sushruta Samhita* (English Translation). Varanasi: Chaukhambha Orientalia; 2017.
44. Srikantha Murthy KR. *Ashtanga Hridaya* (English Translation). Varanasi: Chaukhambha Orientalia; 2018.
45. Sharma H. Concept of Vega Dharana in Ayurveda. *AYU Journal*. 2013;34(2):120–125.
46. Singh RH. Ayurveda and modern medicine correlation. *J Ayurveda Integr Med*. 2010;1(2):91–95.
47. Lad V. *Textbook of Ayurveda*. Albuquerque: Ayurvedic Press; 2018.