

A Literary Review on Vrikka (Kidney) with Special Reference to Mutravaha Srotas

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Abstract

The ancient Ayurvedic texts have extensively described various organs and physiological systems under the framework of Sharir Rachana (anatomy). Among these, the study of Vrikka (kidneys) plays a vital role in understanding the Mutravaha Srotas (urinary system). This paper aims to provide a literary review of Vrikka with special reference to its role in Mutravaha Srotas. The review will explore the classical references of Vrikka, its anatomical and physiological aspects, and how the ancient knowledge aligns with the modern understanding of the urinary system.

Introduction

In Ayurveda, the urinary system, or Mutravaha Srotas, is responsible for the excretion of Mutra (urine) and the maintenance of fluid balance. The Vrikka—a term traditionally interpreted as kidneys—plays an essential role in the filtration and formation of urine. However, Ayurvedic anatomy does not perfectly align with modern anatomical studies, which makes it essential to review classical Ayurvedic references and interpret them in the context of contemporary science. This article undertakes a literary review of the concept of Vrikka, its structural role in Mutravaha Srotas, and its functions as mentioned in classical Ayurvedic texts.

Materials and Methods

This study is based on a review of classical Ayurvedic texts, including the Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, and commentaries by renowned scholars. The comparative analysis between classical descriptions and modern anatomical insights was performed using secondary sources, including research papers, modern anatomy textbooks, and peer-reviewed journals.

Review of Literature

1. Concept of Vrikka in Ayurvedic Texts

The kidneys (Vrikka) have been described in ancient texts like Sushruta Samhita as organs situated on either side of the vertebral column (Prishtha). The primary function of the kidneys, as explained by Sushruta, is the regulation of water and electrolyte balance, similar to their role in modern physiology. While the exact anatomical resemblance to contemporary kidneys is debatable, classical Ayurveda emphasizes their importance in maintaining homeostasis. Srotas are channels where all the body constituents, namely- Dosh, Dhatu, Malas are formed and transported⁽³⁾.

Sushruta Samhita: The moolsthana of Mutravaha srotas is Basti and Medhra (Penis). Also, mentions the Vrikka under structures that are involved as organs that help extract waste from circulating fluids

(Meda and Kapha). He also mentions the symptoms of Viddha[injury] to mutravaha srotas- Anaddha Bastita [obstruction in bladder], Mutra Nirodha [obstruction in urinary tract] & Stabdha Medhrata [erect penis]^[1].

Charaka Samhita: Highlights the kidneys' role in water metabolism and their dysfunctions, which lead to disorders like Mutrakricha (dysuria) and Mutraghata (urinary obstruction). The Mutravaha srotas has vankshana (inguinal region) & Basti (Urinary Bladder) as its moolsthana, while Vrikka is the moolsthana of Medovaha srotas^[2]. The symptoms of Viddha mentioned are- Ati-srushtam(excessive micturition), Ati-Baddham(obstruction), Prakupitam(diseased-urine vitiated with dosha) , Alpam-Alpam Abhikshnam(frequency becomes more while quantity is reduced), Bahalam(excessive and viscous) and Sashulam (painful micturition).

2. Mutravaha Srotas and Its Components

Mutravaha Srotas^[1,2] refers to the channels responsible for urine formation and excretion. Classical texts identify the Basti (bladder) as a vital organ of this system, with Vrikka serving as a filtering mechanism. The Moola (root) of the Mutravaha Srotas is traditionally understood to include the kidneys and the bladder, emphasizing their combined role in urinary regulation. The role of Pakwasahaya (Large Intestine) is more pronounced and described in the formation of urine. Acharyas have not mentioned the role of kidneys in formation of urine.

Moola Sthana of Mutravaha Srotas: The Mutravaha srotas has vankshana (inguinal region) & Basti (Urinary Bladder) as its moolsthana, while Vrikka is the moolsthana of Medovaha srotas. Vrikka and Basti are described as the origin points, suggesting that any pathological condition affecting these can impair urine production or flow.

Srotas Vikara: Disorders like Mutrakricha and Ashmari (urinary stones) are attributed to imbalances in Mutravaha Srotas, with the kidneys playing a key role in the manifestation of these conditions.

3. Modern Correlation of Vrikka with Kidneys

In contemporary anatomical and physiological terms, the kidneys function as vital organs involved in filtering blood, regulating electrolyte levels, and maintaining fluid homeostasis. The ureters, bladder, and urethra together constitute the excretory pathway. Many modern concepts, such as nephron filtration and electrolyte balance, resonate with the Ayurvedic understanding of the kidneys' role in eliminating waste and maintaining the internal balance of doshas.

4. Disorders of Vrikka and Mutravaha Srotas

Classical Ayurveda identifies several disorders related to the urinary system:

Mutrakricha^[7] (difficulty in urination)

Mutraghata^[8] (Retention of urine)

Ashmari^[11] (urinary stones)

Prameha^[1,2,3,8] (Diabetes mellitus)

Mutrasada^[9] (Urinary Stasis)

There are 8 types of Mutrakrichha, 13 types of Mutraghatas,^[2] 4 types of Ashmaris and 20 types of Prameha. The management of these conditions involves diuretic therapies, lifestyle modifications, and the use of herbal formulations like Gokshura (Tribulus terrestris) and Punarnava (Boerhavia diffusa). Many of these treatments aim to restore the balance of Kapha and Vata doshas, which are believed to

cause obstructions in Mutravaha Srotas. In Prameha as multiple factors are in play the treatment aligns as per the types.

Discussion

The Ayurvedic understanding of Vrikka and its role in Mutravaha Srotas shows remarkable parallels with the modern view of the urinary system. While the terminology and conceptual framework differ, both systems recognize the importance of kidneys in filtration, fluid balance, and waste removal. However, Ayurveda adopts a holistic view, linking renal health with overall systemic balance, including the influence of mental and lifestyle factors.

This literary review highlights the need for further research to explore the synergy between traditional Ayurvedic knowledge and modern nephrology. Integrative approaches could offer novel insights for managing renal disorders.

Conclusion

The classical concept of Vrikka in Ayurvedic texts aligns with the modern understanding of the kidneys to a significant extent. Both systems emphasize the importance of filtration, fluid balance, and the removal of waste. The interpretation of Mutravaha Srotas provides a valuable framework for understanding the kidneys' role from an integrative perspective. Further studies can explore the clinical relevance of Ayurvedic therapies for renal health, promoting a comprehensive healthcare approach.

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