



Review Article

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A REVIEW ON EFFECT OF MUTRAVEGA DHARANA WITH SPECIAL REFERENCE TO IMPACT OF SOCIOCULTURAL & PSYCHOLOGICAL EFFECT ON MICTURITION

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ABSTRACT

The basic principles of Ayurveda are the unique themes of nature that have been analyzed and researched by the different Ayurvedic Scholars and then applied to the cure of human ailments. There is thirteen Adharaniya Vega mentioned in ayurvedic classics. Mutravega is one of the non-suppressible urges; if a person suppresses the urge, it will produce different complications. The brain and the urinary bladder communicate to ensure that we only urinate when and where it is appropriate. A variety of etiological environmental, sociocultural, psychological factors like housing conditions and the availability of toilets & clean water supply are responsible for the development of voiding difficulty. Bladder health may be affected by sociocultural influences on repealing behaviour, including religious practice, occupational conditions, and environmental factors. This review aimed to identify etiological factors related to voiding behavior in the population.

Keywords: Vega, Adharaniya vega, Mutra vega, Voiding behavior, Urinary urgency.

INTRODUCTION

Ayurveda is a science that guides to maintaining a healthy body and mind. The main aim of Ayurveda is to achieve Dharma, Artha, Kama & Moksha. When Dosha, Agni, Dhatu & Mala are in the state of equilibrium is known as Swastha.¹ There are two types of Vega (natural urges), one type is suppressible (Dharaniya) & one is non-suppressible (Adharaniya).

Mutra is formed in Pakvashaya; after digestion, there are two parts Sara & Kitta. The liquid portion of Kitta formed Mutra, which collected in Basti & expelled through Mutravaha Srota. The Brihatrayee (great trio) had described non-suppressible urges. Mutra is among one of the Adharaniya vega.

The whole process is classified into two parts: urination, where urine eliminates from the kidney & another part is micturition, where urine expels out from the bladder through the urethra. Micturition is coordinated by the spinal cord & brainstem, especially the limbic system.² The social environment & psychological factor has a close association with micturition, especially stress & fear.

REVIEW OF LITERATURE

There is thirteen Adharaniya vega in the classics: Mutra, Purisha, Retasa, Vata, Chardi, Kshavathu, Udgara, Jrumbha, Kshudha Pipasa, Vashpa, Nidra, Shramajanya shwasa.³ Acharya Vagbhata mentions Kasa vega instead of Udgara.^{4,5} Suppression of Mutravega can produce various features (Table 1).

Physiology of Micturition

The urinary bladder is a muscular reservoir of urine, but the amount of urine depends on age & psychic factors. Two types of sphincters control the process of internal micturition sphincter or sphincter vesicae (involuntary) & external sphincter or sphincter urethrae. The average capacity of the bladder is about 120 to 320 ml, maximum capacity of about 450 ml. The Sense of filling starts at 100 to 150 ml. The desire of micturition feels when the volume reaches 150 to 250 ml; above 800 ml, the bladder loss its voluntary control.

Micturition is a complex neural phenomenon controlled by the central nervous system at various levels. Several micturition centres (neural centres) manage the process of micturition (Table 2).

Prolonged holding of urine May feels pain around perineum region also causes of weakness of pelvic floor muscles, stretching & weakness of urinary bladder. In some rare cases, the bladder may burst.

DISCUSSION

Micturition is an essential body function, a complex interaction among the central and peripheral nervous systems and lower urinary tract structures. Availability & accessibility of toilets in households & public place is a significant problem in India and subcontinental countries. This problem affects bladder health, especially in the workplace; another major problem is privacy, often associated with stigma and embarrassment.

Impaired bladder function can compromise physical, mental and social aspects of health. These effects are burdensome at both the individual and societal levels. Bladder emptying depends on a relaxed position and adequate time to empty.¹¹ The posture adopted for micturition, which may affect bladder health, especially in women, in the western country the posture is sitting position on a flush toilet, but in African & Asian country squatting position using a squat toilet. This squatting position increases blood pressure & the chance of stroke in hypertensive patients.¹² Religious phenomena and bladder health may strongly link individuals with orthodox religious beliefs. In the case of Muslims, incontinence is due to religious restrictions related to the need for cleanliness during prayer.¹³

Occupational choice (teachers, nurses, production workers, farmworkers, airline pilots and IT employees) & work environment may impact bladder health due to lack of adequate restroom breaks, lack of toilet parity, lack of opportunity based on daily activities and responsibilities, or restricted access to

toilets.¹⁴ Workplace conditions, such as toilet inaccessibility and organizational pressure to increase productivity by restricting breaks or setting salary deductions for breaks, can affect bladder health. Some workers also impose a fluid restriction to avoid frequent micturition. In such circumstances, the person may decide to delay or hold urine despite the sensation of the need to micturate. Exposure to foul odors and other urine, faeces, and menstrual blood can create feelings of discomfort and increase the sense of vulnerability to being exposed to germs or disease and, as a result, alter their usual toileting behaviours. Toileting behaviours like delayed voiding, premature voiding, and straining to void are associated with urinary frequency. Delayed voiding is also related to the symptom of urinary urgency & urinary frequency.¹⁵

Physical and emotional stress plays a role in visceral dysfunctions; individuals with urinary problems may limit their social activities outside of the home and develop a restricted and isolated lifestyle.

Table 1: Features due to Mutravega Dharana

Charka Samhita ⁶	Sushruta Samhita ⁷	Ashtanga Samgraha & Ashtanga Hridaya ^{8,9}
<ul style="list-style-type: none"> • Pain in Basti & Mehana • Mutrakriccha • Shiraruja • Vinama • Anaha 	<ul style="list-style-type: none"> • Mutrakrcra (Dysuria) • Alpa-Alpa Mutra Scanty Micturition • Pain in Medhra, Guda, Vankshana, Basti, Muska, Nabhi. • Anaddha Basti (distended urinary bladder) 	<ul style="list-style-type: none"> • Angabhanga • Ashmari • Pain in Basti, Medhra & Vankshana

Table 2: Neural center of micturition

Neural center ¹⁰	Location	Function
Sacral micturition center (parasympathetic)	S3 & S4 segment of spinal cord	Receive a sense of filling, Control sphincter vesicae (relaxation) & sphincter urethrae.
Sympathetic system	T10 – L2	Increase bladder compliance
Pontine centre	Magnocellular nucleus -L(lateral) Medial nucleus -M center	For storage For voiding
Higher centre	Periaqueductal grey matter Ventroposterior nucleus Preoptic nucleus Anterior cingulate cortex Inferior frontal gyrus Paracentral lobule	Perception of urgency Complete the process of micturition by controlling the lower center.

CONCLUSION

Mutravega is the everyday activity of the body that eliminates urine; Suppression may affect some human body systems. Bladder disease and dysfunction are currently underreported, underdiagnosed and undertreated. Bladder health's importance on overall health contributes to this global public health issue. Environmental factors at home, school, or any workplace may influence the development of voiding delay or hold in children, women and adults. They identify specific protective factors and reduce risks to enhance protective behavioral strategies. Toileting behaviors cannot be viewed in isolation from physical and social environments. Further, there is a need to explore the relationship between toileting behaviors and bladder health.

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