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URINARY INCONTINENCE: A HOLISTIC OUTLOOK

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ABSTRACT

Incontinence is a prevalent health condition that is rarely discussed as people living with the condition are often embarrassed to discuss it with their healthcare providers. There is no clarity regarding the *Ayurvedic* aspect of urinary incontinence. This creates a major diagnostic and management dilemma while approaching a case of urinary incontinence. Some authors have interpreted the condition of incontinence of urine as "*Mutrateeta*" which is one of the type of *Mutraghata* according to Ayurveda. Women are more vulnerable to urinary incontinence due to several reasons and they suffer silently due to lack of knowledge of preventive and therapeutic strategies directed toward the problem. One complementary behavioural intervention that may offer therapeutic benefits for urinary incontinence is Yoga.

KEYWORDS: Urinary incontinence, *Mutrateeta,* Yoga.

INTRODUCTION

Incontinence is a prevalent health condition that is rarely discussed as people living with the condition are often embarrassed to discuss it with their healthcare providers. In fact, the World Health Organization calls incontinence "one of the last medical taboos".[1] Urinary incontinence (UI) affects individuals' independence and ability to function in daily life. Incontinence comes under the heading of pelvic floor dysfunction and always associated with weakness of pelvic muscles as well as failure of supporting connective tissue structures leading to urinary incontinence.[2]

Women are more vulnerable to urinary incontinence due to several reasons, and they suffer silently due to lack of knowledge of preventive and therapeutic strategies directed toward the problem. "Incontinence occurs in more than half of community-dwelling women 45 years old and older. Almost one of five women in the community reported UI that affected normal activities."[3]

The human toll of this condition is significant as it impacts negatively on one's physical, psychological, sexual, social and overall quality of life. Women living with incontinence are much more likely to suffer from depression than their continent peers.[4] In fact; in one study, urinary incontinence, Alzheimer's disease, and stroke are the 3 chronic health conditions that most adversely affect an individual's health-related quality of life.[5]

Unfortunately, there is no clarity regarding the *Ayurvedic* aspect of urinary incontinence. This creates a major diagnostic and management dilemma while approaching a case of urinary incontinence. *Acharya Vagbhata* has classically divided the *Rogas* of *Mutra* in to two categories viz. *Mutra Atipravrittija* and *Mutra Apravrittija Rogas*.[6] The disease *Prameha* comes under the first group where as *Ashmari, Mutrakricchra* and *Mutraghata* fall under the second group. Some authors have interpreted the condition of incontinence of urine as "*Mutrateeta*" which is one of the type of *Mutraghata* according to Ayurveda.[7]

AIM AND OBJECTIVES

1. To emphasize the source of urinary incontinence.
2. To study holistic aspect of urinary incontinence.

MATERIAL AND METHOD

Normal Urination

The urinary system helps to maintain proper water and salt balance throughout the body. The process of urination begins in the two kidneys, which process fluids and eliminate water and waste products to produce urine. Urine flows out of the kidneys into the bladder through two long tubes called ureters. The bladder is a sac that acts as a reservoir for urine. It is lined with a tissue membrane and enclosed in a powerful muscle called the detrusor. The bladder rests on top of the pelvic floor. This is a muscular structure similar to a sling running between the pubic bone in front to the base of the spine. The bladder stores the urine until it is eliminated from the body via a tube called the urethra, which is the lowest part of the urinary tract. (In men it is enclosed in the penis. In women it leads directly out.) The connection between the

bladder and the urethra is called the bladder neck. Strong muscles called sphincter muscles encircle the bladder neck (the smooth internal sphincter muscles) and urethra (the fibrous external sphincter muscle).

Types of Urinary Incontinence

Urinary incontinence is generally categorized into the following types:

***Stress incontinence**. "Stress urinary incontinence is the most common form of urinary incontinence in women and is associated with high financial, social and emotional costs. Stress urinary incontinence as most recently defined by the International Continence Society is the complaint of involuntary leakage of urine during effort or exertion or during sneezing or coughing. Initial treatment includes behavioural changes and pelvic floor muscle training.[8]

Stress urinary incontinence is highly prevalent, affecting millions of women worldwide. It is difficult to pinpoint the number of women affected by stress urinary incontinence, because often they do not report it. However, studies show that 20.8% of women over the age of 15 have experienced stress urinary incontinence worldwide.[9] The reported prevalence of stress urinary incontinence in India is about 12%. Most of the women who are suffering from stress urinary incontinence withdraw from social life and try to hide the problem from families, friends and even from their doctors.[10]

It can also affect men who have had surgical procedures for prostate disease, especially cancer.

In women, stress incontinence is nearly always due to one or more of the following:

Increasing age, menopause, increasing parity and complicated vaginal deliveries were common amongst the women having incontinence.[11] In multipara, pregnancy and childbirth strain weaken the muscles of the pelvic floor causing a condition called urethral hyper mobility. In urethral hyper mobility the urethra does not close properly. It is one of the main cause of stress incontinence. Prolapsed uterus, in which the uterus protrudes into the vagina, occurs in about half of all women who have given birth vaginally. This condition can often cause incontinence. Estrogens deficiencies after menopause can cause the tissue lining the urethra to thin out so that the urethra may not close properly. Injury from surgery or radiation can cause stress incontinence.

Causes of Stress Incontinence in Men

Prostate treatments like Surgery for benign prostatic hyperplasia or radiation for prostate cancer can impair the sphincter muscles and are major causes of stress incontinence in men. Incontinence after prostate procedures is often a combination of urge and stress.

*__Urge incontinence__: also called overactive bladder, Urge Incontinence (UI) is leaking of urine associated with the sudden uncontrollable urge to empty the bladder. The urge to empty the bladder cannot be delayed and leakage occurs. UI is a key symptom of the overactive bladder syndrome. People with overactive bladder may go to the bathroom more than 8 times over 24 hours, including two or more times a night and have subsequent leakage. In some cases, urge incontinence occurs only at night. This is called nocturnal enuresis. All cases of urge incontinence involve an overactive bladder. This occurs when the detrusor muscle, which surrounds the bladder, contracts inappropriately during the filling stage. When this happens, the urge to urinate cannot be voluntarily suppressed.

Conditions that can cause urge incontinence include:

*Benign prostate hypertrophy (BPH).

*Prostate surgical procedures including radical prostatectomy for prostate cancer and, less commonly, transurethral resection of the prostate (TURP) for BPH.

* Hysterectomy.

*Radiation to the pelvis that involves the bladder.

*Damage to the central nervous system, which can occur from neurological conditions such as stroke, multiple sclerosis, Parkinson's disease, or spinal cord or disk injury.

*Infections

*The aging process

* Emotional disorders such as anxiety Medications, including some sleeping pills Genetic factors may play a role in some cases rarely.

***Overflow Incontinence**

Overflow incontinence (OI) is constant leaking or dribbling from a full bladder. OI implies that normal urination is impossible. Overflow incontinence happens when the normal flow of urine is blocked and the bladder cannot empty completely. Overflow incontinence can be due to a number of conditions:

***A partial obstruction**. In this case the urine cannot flow completely out of the bladder, so it never fully empties.

***An inactive bladder muscle**. In contrast to urge incontinence, in overflow incontinence the bladder is less active than normal. It cannot empty properly and so becomes distended, or swollen. Eventually this distension stretches the internal sphincter until it opens partially and leakage occurs.

Causes of overflow incontinence include

*Tumors, Constipation

*Certain medications (such as anticholinergics, antidepressants, antipsychotics, sedatives, narcotics and alpha-adrenergic blockers)

*Benign prostatic hyperplasia (enlarged prostate)

*Scar tissue

* Nerve damage.

* Diabetes, multiple sclerosis, and shingles also can cause this problem.

Functional Incontinence

Functional incontinence is incontinence due to physical or mental disabilities that impair a person's ability to use or get to the toilet, despite a healthy urinary system.

Conditions that can lead to functional incontinence include:

*Parkinson's disease, Alzheimer's disease and other forms of dementia.

*Mental confusion may prevent both recognition of the need to void and locating a bathroom.

*Severe depression.

***Mixed incontinence**. Many people have more than one type of urinary incontinence.

Risk factors

Some of the main risk factors for urinary incontinence include:

1] Female sex

2] Older age

3] Having given birth or having prostate problems or prostate surgery

4] Being overweight

5] Neurological disorders

Treatments for Urinary Incontinence

Treatment depends on the severity of the condition and type of urinary incontinence. Treatments include:

***Lifestyle Changes**. Significant weight gain can weaken pelvic floor muscle tone, leading to urinary incontinence. Losing weight, healthy diet, exercise and avoiding alcohol and caffeine are helpful.

*** Pelvic floor exercises (Kegel exercises)** can help strengthen the muscles of the pelvic floor that support the bladder and close the sphincter. Bladder training can help patients learn to delay urination. The Kegel exercise is a well-known pelvic floor exercise (PFE) as described by Arthur Kegel, Professor of Obstetrics and Gynaecology in the USA. There are various researches showing the significance of Pelvic floor exercise on incontinence.

***Medications.** Drugs, such as oxybutynin (Ditropan, generic) and tolterodine (Detrol), are mainly used to treat urge incontinence.

***Surgery.** Many types of surgical procedures are used to correct anatomical problems that contribute to severe urinary incontinence.

***Yoga.** Urinary incontinence is associated with depression, social isolation; physical inactivity. Above treatments have limitations that decrease their efficacy, safety and accessibility, particularly for older women who are at greatest risk. One complementary behavioural intervention that may offer therapeutic benefits for urinary incontinence is Yoga. As urinary incontinence is associated with anxiety, depression, mental stress Yoga is the therapy which not only overcome these symptoms but also can treat incontinence. A healthy relationship between core muscles and PF muscles is very important to the overall health of the pelvis. Ancient Indian texts report similar exercises as the *"Mudra"* and *"Bandha"* practiced by the yogis and some *Asanas* are given for strengthening the pelvic floor. In Yoga texts, *Moola bandha* is usually defined as the activation of the perineum, i.e. the soft tissue area between the anus and the genitals.[12]

The last few years have seen a growing interest in the field of yoga, as well as, in the practice of pelvic floor yogic exercise (PFYE) as a very effective method for restoring urinary incontinence. In PFYE, the simple Kegel exercises practiced are associated with breathing

exercises. The proper work of strengthening and stabilizing the PF with PFYE helps to create the correct foundation of each movement of the pelvis.[13]

A pilot trial done on urinary incontinence in women patients at "University of California San Francisco Department of Urology" suggest that *Tadasana* (mountain pose), *Utkatasana* (chair pose), *Trikonasana* (triangle pose), *Malasana* (squat pose), *Viparita Karani* Variation (legs up the wall pose), *Salamba* Set *Bandhasana* (supported bridge pose), *Supta Baddha Konasana* (reclined cobbler's pose), and *Savasana (*corpse pose) are very useful in urinary incontinence in women.[14]

PFYE helps in three ways

a) The yoga posture isolates and strengthens the PF muscles, as well as stretches and lengthens them;

b) Breathing can release tension and direct healthy, oxygenated blood to the pelvis;

c) The yogic posture helps in strengthening the core postural muscles which are directly linked to the PF muscles.

DISCUSSION

There is enough scope to explore the role of Yoga in the management of Urinary incontinence by analyzing and comparing various concepts mentioned in ancient texts with current information available in various modern texts with the aim of giving patients relief from urinary incontinence as it impacts negatively on one's physical, psychological, sexual, social and overall quality of life. Yoga may offer a useful alternative treatment strategy for women who do not have access to incontinence specialists or pelvic floor physical therapists, elect not to use standard behavioural, pharmacologic or surgical therapies for incontinence, or cannot tolerate these therapies. Yoga may also provide a way for women to supplement or enhance clinical treatment through group classes and home practice sessions based outside of the clinical setting. Since yoga can be taught and practiced at many locations without continuous or ongoing supervision by healthcare providers, it offers a potentially cost-effective, community-based management strategy for incontinence, provided that it can be taught in a standardized way and with appropriate attention to patients' clinical and safety needs.

With its focus on deep breathing and mindful meditation, yoga can also be useful in reducing anxiety, perceived stress and associated autonomic nervous system imbalance which is proved causes of urinary incontinence.

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