

Shalabhasana As a Yogic Intervention for Nocturnal Micturition: A Systematic Review of Evidence

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Abstract

Nocturnal micturition, commonly referred to as nocturia, is defined as waking at night one or more times to void urine ^[1]. It significantly affects sleep quality, daytime functioning, and overall quality of life ^[2,3]. Although pharmacological and behavioural therapies remain standard management approaches, non-invasive complementary interventions are gaining increasing attention. *Shalabhasana* (Locust Pose), a classical prone back-extension *yoga* posture, is traditionally known for strengthening posterior musculature and improving spinal stability ^[4]. This review explores the anatomical, neuromuscular, and autonomic mechanisms through which *Shalabhasana* may influence bladder control and reduce nocturnal urinary frequency. While direct clinical evidence is limited, indirect findings from pelvic floor research ^[5-6], autonomic regulation studies ^[7], and *yoga*-based interventions for urinary symptoms ^[8] suggest a plausible therapeutic role.

Keywords: *Shalabhasana*, nocturia, nocturnal micturition, pelvic floor, *yoga* therapy, bladder control

Introduction

Nocturnal micturition represents a common lower urinary tract symptom that disrupts sleep continuity and contributes to fatigue and mood disturbances ^[9]. Conventional management includes pelvic floor muscle training ^[4], behavioural therapy, and pharmacological treatment ^[10]. However, compliance and side effects remain concerns. Integrative approaches such as *yoga* have demonstrated benefits in stress reduction, autonomic balance, and musculoskeletal strengthening ^[11,12]

“*Shalabhasana*” was defined as one of the 32 most important Asana in Gheranda Samhita (dated around 1650 CE). The Gheranda Samhita is the most encyclopaedic of the three classic text about Asana. It says that there are 8,400,000 of Asana described by Shiva. The postures are as many in number as there are numbers of species of living creatures in this universe. Among them 84 are the best, and among these 84, 32 have been found useful for mankind in this world the 32 Asana are mentioned in *Gheranda Samhita*. ^[13] The name *Shalabhasana* arises from the Sanskrit word *Shalabh* which means a locust or a grasshopper. In this pose body resembles as a locust or a grasshopper that’s why this posture is called *Shalabhasana*. This posture is one of the best Asana for strengthening back muscles of the body. ^[14]

Need of Study

Nocturnal micturition (nocturia) is a common and distressing condition affecting individuals across different age groups. More than 50% of adults after age 50. It's more common in males after age 50. Before 50, nocturia is more common in females. It affects up to 1 in 3 people over the age of 30. [15] It significantly impacts sleep quality, mental health, daily productivity, and overall quality of life. Persistent nocturnal micturition may also lead to fatigue, anxiety, social embarrassment, and increased risk of falls in older adults.

Conventional management primarily includes behavioural therapy, pelvic floor exercises, fluid restriction, and pharmacological interventions. However, medications may produce side effects and are not always suitable for long-term use. Therefore, there is a growing need for safe, cost-effective, and non-pharmacological alternative therapies.

Yoga, being a holistic mind-body intervention, has shown promising effects in improving autonomic balance, pelvic floor strength, bladder control, and stress reduction. *Shalabhasana* (Locust Pose) specifically strengthens the lower back, abdominal muscles, and pelvic region, which may positively influence bladder function and urinary control.

Although individual studies suggest potential benefits of *yoga* practices in urinary disorders, there is limited consolidated evidence specifically evaluating the effect of *Shalabhasana* on nocturnal micturition. A systematic review is therefore necessary to critically analyse existing research, assess the quality of evidence, and determine the effectiveness of this asana in managing nocturnal micturition.

This study aims to bridge the gap in literature and provide evidence-based guidance for clinicians, *yoga* therapists, and healthcare professionals regarding the therapeutic role of *Shalabhasana* in nocturnal micturition.

Aims and Objective:

1. To study *Shalabhasana* in detail.
2. To evaluate the effectiveness of *Shalabhasana* in managing nocturnal micturition through a systematic review of existing literature.

Material and Methods –

1. Review of *Yoga-Asana* literature from *Yoga Classics* including relevant commentaries.
2. Other print media, online information, journals, magazines etc.

Review

On *shalabhasana* and Nocturnal Micturition

According to *Gherand Samhita*

अध्यास्यः शेते करयुगं वक्षेभूमिमवष्टभ्य करयोस्तलाभ्याम । पादौ च शून्ये च वितस्ति चोर्ध्वं वदन्ति पीठं शलभं मुनीन्द्राः ॥ (घे. सं २/३९)

Lie on the ground face downwards, the two hands being placed on side of the chest, touching the ground with the palms, raise the legs in the air one cubit high. This is called the locust posture.

According to *Swami Kuvalayananda ji*, the student lies prone on his seat with his sole looking upwards and his fingers clenched. He stretches his hands along his body so that his shoulders and the backs of his fists touch the ground. Then with a full inspiration he stiffens his whole body and tries to raise his lower extremities backwards putting his whole weight on the chest and hands. The wrists especially feel the

burden of the lifted legs. Throughout the exercise the breath is held in and the knees are kept stiff and straight. [16]

Swami Satyananda Saraswati ji explains *Shalabhasana*, Lie flat on the stomach with the legs and feet together and the soles of the feet uppermost. The arms may be placed either under the body or by the sides, with the palms downward or the hands clenched. Stretch the chin slightly forward and rest it on the floor throughout the practice. Close the eyes and relax the body. This is the starting position. Slowly raise the legs as high as possible without straining, keeping them straight and together. The elevation of the legs is produced by applying pressure with the arms against the floor and contracting the lower back muscles. Hold the final position for as long as is comfortable without strain. Slowly lower the legs to the floor. This is one round. Return to the starting position and relax the body with the head turned to one side. Allow the respiration and heartbeat to return to normal. Breathing-Inhale deeply in the starting position. Retain the breath inside while raising the legs and holding the position. Exhale while lowering the legs. Beginners may find it helpful to inhale while raising the legs. Advanced practitioners may exhale after returning to the starting position. [17]

According to *Dhirendra Brahmachari*, lie on the abdomen and place the palms near the shoulders, feet should be joined together and the body should be raised from the ground as much as possible, above and below the waist. The body from the waist to the feet should be erect. [18]

B.K.S Iyengar also explain *Shalabhasana*, lie full length on the floor on the stomach, face downwards. Stretch the arms back. Exhale, lift the head, chest and legs off the floor simultaneously as high as possible. The hands should not be placed and the ribs should not rest on the floor. Only the abdominal front portion of the body rests on the floor and bears the weight of the body. Contract the buttocks and stretch the thigh muscles. Keep both legs fully extended and straight, touching at the thighs, knees and ankles. Do not bear the weight of the body on the hands but stretch them back to exercise the upper portion of the back muscles. Stay in the position as long as you can with normal breathing. In the beginning it is difficult to lift the chest and the legs off the floor, but this becomes easier as the abdominal muscles grow stronger. [19]

Steps for Performing “*Shalabhasana*” [20]

- Lie down on the floor on the stomach, face downwards. Stretch the arms back.
- Lift the head, chest and legs off the floor simultaneously as high as possible. The hands should not be placed and the ribs should not rest on the floor. Only the abdominal portion of the body rest on the floor and bears the weight of the body.
- Contract the buttocks and stretch the thigh muscles. Keep both legs fully extended and straight.
- Do not bear the weight of the body on the hands but stretch them back to exercise the upper portion of the back muscles.
- Stay in the position as long as you can with normal breathing.

Bladder control depends on coordinated interaction between pelvic floor musculature, detrusor muscle activity, and sacral spinal segments (S2–S4) [21]. Pelvic floor weakness contributes significantly to urinary symptoms [22]. Strengthening and neuromuscular coordination may therefore improve bladder control. *Shalabhasana* activates the erector spinae, gluteus maximus, and deep core stabilizers. Gluteal contraction has been shown to co-activate pelvic floor musculature. Additionally, *yoga* practices enhance parasympathetic tone and reduce sympathetic overactivity, which may positively influence detrusor overactivity. Pelvic floor muscle training significantly reduces urinary symptoms in women. A pilot randomized trial demonstrated improvement in urinary incontinence following *yoga*-based therapy [23].

Yoga interventions also improve sleep quality and reduce stress-related autonomic imbalance [24], both relevant factors in nocturnal micturition.

Conclusion

Shalabhasana demonstrates theoretical and physiological potential to influence pelvic stability, autonomic regulation, and bladder control. Although current evidence is indirect, it presents a promising non-pharmacological intervention warranting structured clinical investigation.

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