

Integrating Agni Karma and Viddha Karma for the Management of Shayyamutra W.S.R to Nocturnal Enuresis in Children: A Case Report

Dr. Komal Dhiman¹, Dr. Anand Prakash², Prof. (Dr.) Keerti Verma³,
Prof. (Dr.) Reena Dixit⁴

^{1,2}Final year, Department of Kaumarbhritya, Rishikul Campus (UAU)

³H.O.D, Department of Kaumarbhritya, Rishikul Campus (UAU)

⁴Associate Professor, Department of Kaumarbhritya, Rishikul Campus (UAU)

Abstract

Shayyamutra is one of the quite common obstinate problems, which are behavioral and urological. Yet the causes are unknown. It was one of the most disabling problems during development. This is also called night wetting or bed wetting. The word meaning of *Shayyamutra* is urination (*Mutra*)- during the night while lying in bed (*Shayya* means to sleep or lying down). The cause of enuresis or *Shayyamutra* is genetic, physiological, functional, and psychological. Very limited references about this disease are available in various *Ayurvedic* texts. A nine-year-old female child visited the outdoor patient department of Kaumarbhritya, Rishikul Campus, Haridwar (Uttarakhand) with the complaint of bed wetting, she had never achieved a consistent period of nighttime dryness as per her developmental age. After getting various modern and ayurvedic medicines she got no relief. Therefore, *Agnikarma* and *Viddha Karma* were the primary interventions selected for the present case study to resolve the nocturnal enuresis of the child. *Ayurveda* is a system of medicine that has been practiced for thousands of years. In *Bruhatrayee*, a direct reference to the *Shayyamutra* is fully detailed, but there are few references available. As a result, attempt to assemble all available information on this condition and its treatment by using *Swarna Shalaka* for *Agnikarma* and *Viddha Karma* so that one can gain a better management of the disease.

Keywords- *Shayyamutra, Ayurvedic, Agnikarma, Viddha Karma, Swarna Shalaka, Bruhatrayee.*

Introduction

Enuresis or *Shayyamutra* is a repeated inability to control urination¹. It is derived from the Greek word "enourein" meaning "to void urine", and it can be defined as the voluntary or involuntary repeated discharge of urine into clothes or beds after a developmental age when bladder control should be established. Even while it is not a cause of death or illness, it might create humiliation in a child who has not developed psychologically. The prevalence of enuresis is about 15-25% of children at 5 years of age, 8% of 12 years of age in male children, and 4% of 12 years old female children. Boys suffer more often than girls because girls typically achieve each milestone before boys². Currently, it is believed that the condition is multifactorial. The cause of enuresis or *Shayyamutra* is genetic, physiological, functional, and psychological.

| Parameters | Findings |
|-----------------------------|------------------------------|
| Weight | 32.6 kg (Expected Wt. :29kg) |
| Height | 145cm (Expected Ht. :131 cm) |
| Head Circumference | 57 cm |
| Chest Circumference | 65cms |
| Mid upper arm circumference | 22 cm (Rt.), 22 cm (Lt.) |

After the fifth year of life, urine voiding is voluntary and not caused by a physical condition. It involves a complete evacuation of the bladder at an inappropriate location and time at least twice a month. Some people believe that incorrect toilet training might promote bedwetting. Aside from all of these aspects, physiologic and psychological factors are likely to play a role.

There isn't much description of *Shayyamutra* in *Ayurveda*, however, *Acharya Aadhmala* gives the first definition. In which he cites "*Kshin purvam*" and "*Dosha prabhavam*" as the etiology. *Acharya Vangsena* was the one who first recognized the *Shayyamutra* issue and addressed it in his writing.

Shrotoavrodha and vitiation of *Sadhaka pita*, *Pachana pita*, *Avalambaka Kapha*, *Manovaha shrotas*, *Atinidra*, and suppression of *Pranavayu*, which interrupts the normal function of *Samana*, *Udana*, and *Apana Vayu*, are some of the possible reasons of *Shayyamutra*.

Acharya Sharangadhara has also listed *Shayyamutra* as *Balaroga prakarna*, but there is no detailed description³. *Acharya 'Govinddas'* has described *Shayyamutra* in the context of *Kshudra Roga Chikitsa* in *Bhaishajyaratnavali*, although he did not give a thorough description of the ailment. *Shri Kalidas* has only described the *Shayyamutra chikitsa* in his *Vaidya Manorama*. In his commentary on the *Gudharthadipika*, *Acharya Aadhmala* writes, "When a child, especially when fatigued and sleeping at night, voids urine due to *doshas*." Theoretically, a profound slumber is generated in the *Shayyamutra* by an increase in *Tamoguna* and *Kapha*, or by fatigue.

Case report

A nine-year-old female child with chronic episodes of nocturnal enuresis (involuntary passage of urine once at night during sleep since childhood) has been presented in the outdoor patient department of Kaumarbhritya, Rishikul Campus (Haridwar). She had never achieved a consistent period of nighttime dryness according to her developmental age. She has no daytime wetting, and she denies any dysuria or urgency. The patient didn't have any history of UTI, Constipation, any kind of abuse, Developmental delay, Stress or a family history of enuresis. She took some allopathic treatment for the same condition six months back but was not taking any type of medication for nocturnal enuresis at the time of consultation in the Ayurveda outpatient department.

Clinical findings

On general examination, the patient was fit and well oriented. Periods of sleep and appetite are regular. All the vitals of the patient are within the normal range and anthropometry measure are as follows- The growth and development is proper as per her age except nocturnal bladder control. On examining the abdomen and genitalia of the child there it was observed that there were no signs of enlarged bladder or kidneys, stool impaction, signs of sexual abuse and neither any physical abnormalities like labial adhesions were found. During the neurological examination of the patient the gait of the child, muscle tone and

reflexes were found normal as her developmental age suggestive of normal neurological behavior and the lumbosacral spine didn't showed any abnormal findings either.

Several related investigations (Urine analysis and abdominal USG) were also carried out in order to rule out UTI and other disorders but they could not detect any organic disease.

History of mental state -

Her appearance is proper for her age. Self-care is sufficient. Her mood is dysphoric. The patient is quiet, calm, and anxious. She is inadequate in presenting her anger and any other feelings. The level of consciousness, orientation, memory, and language functions is expected. Attention and concentration could be better.

Academic history- Average

On examining the patient with the help of *Ashtvidha pariksha*, the findings are-

| | |
|---|--|
| <i>Nadi: Vata pradhana Kaphanubandhi</i> | <i>Shabda: Spastha</i> |
| <i>Mala: Nirama</i> | <i>Sparsha: Ruksha, Samsheetoshana</i> |
| <i>Mutra: Samanya pravrti, peetabh varn</i> | <i>Drikka: Samanya</i> |
| <i>Jivha: Lipta</i> | <i>Aakriti: Samanya</i> |

Diagnostic focus and assessment-

According to *Ayurveda*, it is diagnosed as *Shyayamutra*. Theoretically, a profound slumber is generated in the *shayyamutra* by an increase in *tamoguna* and *kapha*. The sleep produced by an excessive increase in *tamoguna* happens near the end of the sleep cycle, when *tamoguna* and an increase in *kapha dosha* are both present. When the *kapha dosha* obstructs the sensory channels, terminal sleep occurs. So, we can see that sleep is based on *kapha*, *tamoguna*, and *manas bhava* since the mental aspect is more prominent in sleep because it is the mind that begins sleep.

Samprapti ghataka of Shyayamutra-

| | |
|---------------------|--|
| <i>Dosha</i> | <i>Vata (Anubandhya), Kapha (Anubandha)</i> |
| <i>Dushya</i> | <i>Rasa</i> |
| <i>Agni</i> | <i>Vishamagni</i> |
| <i>Shrotasa</i> | <i>Mutravaha, Manovaha, Annavaha, Rasavaha</i> |
| <i>Shrotodushti</i> | <i>Atipravritti</i> |
| <i>Samutthana</i> | <i>Pakwashya</i> |
| <i>Adhishthana</i> | <i>Basti</i> |

Treatment plan: By keeping the *Dosha- dushya samurrechana* in mind, the patient was advised to use *Agnikarma* and *Viddhkarma* along with the adjuvant ayurvedic medicines to pacify her anxiety.

Intervention: The patient was treated with 10 sittings of *Agnikarma* with *Swarna shalaka* and *Viddha karma* regularly for 10 days. *Agnikarma* was performed in three stages, i.e., *Purvakarma*, *Pradhanakarma*, and *Paschatkarma*.

1. **Purvakarma**—The patient was advised to follow the *Snigdha* diet while undergoing the procedure. The patient gave informed written consent, and all the equipment required for *Agni karma* and *Viddha karma* was kept ready.



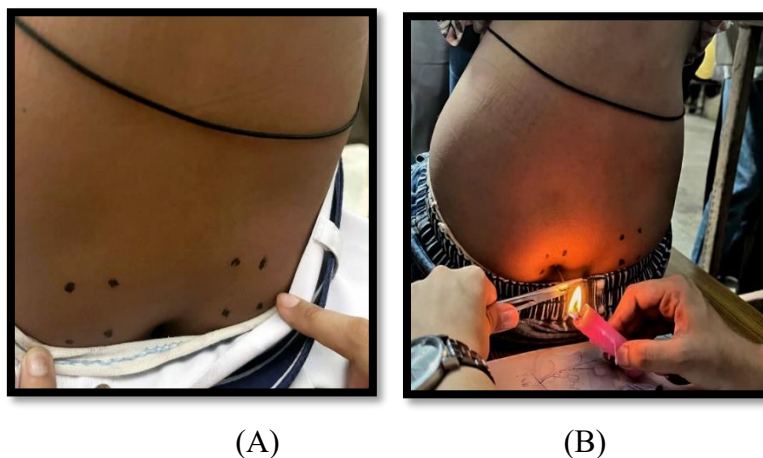
Fig. Instruments required for *Agnikarma* (Swarna Shalaka, Holder, Candle, Matchbox)



Fig. Equipment required for *Viddha Karma* (26 no. needle, Cotton, Surgical spirit)

2. **Pradhanakarma** –

The patient was advised to sit in a comfortable position and 4 points were marked on the lower back of the child for *Agnikarma* and simultaneously at the toe of both lower limbs for the *Viddha karma* with the help of a pen by locating the appropriate site for the procedure.



(A)

(B)

Fig. (A)- Markings for the procedure of *Agnikarma* (B) Procedure of *Agnikarma* with the help of *Swarna shalaka*



A

B

Fig. (A)- Markings for the procedure of *Viddha karma* (B) Procedure of *Viddha karma*

3. *Pashachaat karma* – *Pathya* and *Apathya* were advised to the patient as per the disease and *Dosha pradhanata* along with patient’s counselling was done.

Results

After undergoing both *Agnikarma* and *Viddha Karma* for 10 days the assessment of the patient was drawn and it was found that in the course of 10 days of therapy, the patient had only 4 days of wet nights or had episodes of bed-wetting while other six days were normal and had mentioned no new complaints.

| Days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------------------------|---------|---------|---------|---------|------|------|------|------|------|------|
| Episodes of <i>Shayyamutra</i> | Present | Present | Present | Present | None | None | None | None | None | None |

Discussion

When the nervous system is fully developed, the micturition reflex is stimulated but sensory impulses also pass upwards to the brain and there is awareness of the need to pass urine. By learned and conscious effort, contraction of the external urethral sphincter and the muscle of the pelvic floor can inhibit micturition until it is convenient to empty the bladder.

The control of urinary bladder control is established and the mechanism is correlated to the function of *Apana vayu* meanwhile, *Vata-Nadi* is correlated with nerves of the urinary bladder. *Apana vayu* controls all movements that go downward and out from the body from the umbilicus to the pelvic region. In the urinary bladder when 300-400 ml of urine accumulates, the afferent autonomic nerve fibers in the bladder wall get activated which in the case of infants initiates the spinal reflex and micturition to occur due to the response of parasympathetic stimulation of the bladder, causing contraction of detrusor muscle and relaxation of the internal urethral sphincter which results in the expulsion of urine from the bladder.

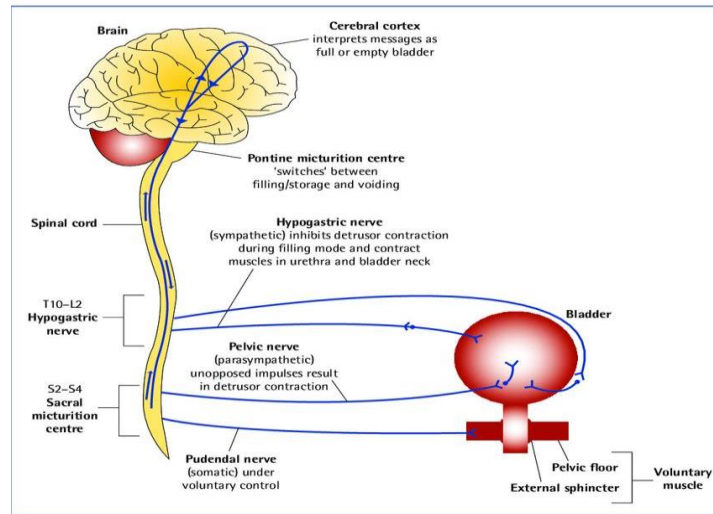


Fig. Anatomical Relations of the Urinary Bladder

When the nervous system is fully developed, the micturition reflex is stimulated but the sensory impulses also pass upwards to the brain and there is awareness of the need to pass the urine. By learned and conscious effort, contraction of the external urethral sphincter and the pelvic floor muscle can inhibit micturition until it is convenient to empty the bladder. In adults, urine is passed when the detrusor muscle contracts and there is reflex relaxation of the internal sphincter and voluntary relaxation of the external sphincter.

So we can conclude that the control of micturition after urinary bladder control is established is controlled by the *Apana vayu* and the *Vata-Nadi*. In this mechanism, parasympathetic nerves, sympathetic nerves to the external sphincter are involved, which helps in the relaxation and contraction of the sphincter. If they do not function properly then many urine-related diseases are developed.

Probable mode of action of *Agnikarma* and *Viddha Karma* – It is very difficult to interpret the exact mode of action of *Agnikarma* or *Viddha Karma*, but in this study both these modalities were selected as the main line of treatment.

Agnikarma- The application of *Agnikarma* increases the local temperature which enhances the perfusion and does efficient delivery of oxygen to the tissues. Because of the better blood perfusion ischemia and degeneration-related tissue injury get healed. To stimulate the normal physiology of micturition it is necessary to maintain the *Prakrit karma* of *Vyana vayu* for which we had administered *Agnikarma* along with *Viddha karma* in the treatment module. When direct heat through *Swarna shalaka* is transferred it helps to achieve muscle relaxation and relieve muscle spasms with inflammation. *Agnikarma* may stimulate the sensory receptor lying in the muscle facilitating the bladder to regulate the micturition normally.

Viddha karma- *Viddha Karma* is among the *Shashtra Karma* as explained in *Brihatrayee*, *Laghutrayee*, and other classics. It is the treatment of puncturing or piercing certain points. It removes the obstruction of the blood vessels by establishing circulation by clearing *Shrotasa* and stimulation to sensory fibers from peripheral receptors reduces the transmission of irritating signals from the affected area, which is the main mechanism of action of *Viddha Karma*.

Viddha Karma points are taken about *Marma* points⁴ and according to the vitiation of *Doshas*, it should be done by *Suchi* (needle)⁵. For *Viddha Karma* different points are selected based on disorders and according to the site, and the part where the needle is to be pricked there first has to be cleaned with spirit

then the needle is inserted on the selected points for 15 to 30 seconds and after which it has to be removed slowly. Due to *Viddha Karma* large sensory fibers from peripheral tactile receptors including the nerve endings become clear which helps to reduce the transmission of pain signals from a local area or sometimes even a diffuse area located in many segments ensuring the normal physiology of the urinary bladder by pacifying the *Shrotodushti* of *Apana vayu*. Thus *Viddha Karma* therapy helps to maintain balance between *Vatta*, *Pitta*, and *Kapha* in the body.

Conclusion

Child health has assumed great significance all over the world. Enuresis or *Shayyamutra* is a repeated inability to control urination. The present study described the resolution of nocturnal enuresis in a nine-year-old child receiving *Agnikarma* and *Viddha karma* therapy for 10 consecutive days. We support more research to evaluate the cause and effect of these both therapy and restoration of healthy physiology in children, including amelioration of nocturnal enuresis.

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