

CLINICAL STUDY OF ASHWAGANDHADI COMPOUND IN MANAGEMENT OF SHAYYAMUTRA W.S.R. TO NOCTURNAL ENURESIS**Dr. Bhargav D. Mehta*¹, Dr. Sunil Changle² and Dr. Swapnil Rasker³**¹P.G Scholar, Department of Kaumarbhritya Parul Institute of Ayurved, Vadodara, Gujarat.²Professor and H.O.D. Department of Kaumarbhritya, Parul Institute of Ayurved, Vadodara, Gujarat.³Lecturer, Department of Kaumarbhritya, Parul Institute of Ayurved, Vadodara, Gujarat.***Corresponding Author: Dr. Bhargav D. Mehta**

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ABSTRACT

Behavioral problems like Bedwetting, Stammering, and Sleepwalking etc. in young children are quite common. Among these, Bedwetting is one of the obstinate problems. There is no exact description of the disease entity which matches the feature of *Shayyamutra* in Ayurveda classics. Bedwetting has been described in disorders of growth & development in modern science. The present clinical study was planned to evaluate the effect of *Asvagandhadi* Yoga along with counseling in the management of *Shayyamutra*. Total 35 selected cases were divided into three groups, i.e. 11 patients in two group each and 10 patients in third group. Group B of children were given the trial drug *Ashwagandhadi* Yoga with counseling and group A of children were given Brahmi tablet with counseling, while group C was given placebo tablet in the dose of 3-6 gmst twice a day with luke warm water. The observation of study showed that group B was found a highly significant.

KEYWORDS: *Shayyamutra, Balroga, Kshudra roga, Bedwetting.***INTRODUCTION**

Children in the modern era suffer at large due to physical problems; in addition to that they also suffer from psychological problems. Often this is because of their parents cannot afford much time to look after them usually from their busy schedule. As a result of that children lack love and quality time from their parents which make them unhappy.

Although they are too young to express it, they hold the negative impression inside, which affect their personalities. The events leave a lasting impression on the tender mind of children and later may become the cause of behavioral or psychosomatic diseases. The behavioral problems like Bedwetting, Stammering, and Sleepwalking etc in young children are quite common. Among these, Bedwetting is one of the obstinate problems. Due to this problem a lot of concealment and profound repercussions occur in family life, since a child's psychosomatic health and mothers pride are involved with this problem.

It affects all age group of children mainly but among them adolescents is found more sufferers; it affects all races and children from all geographical areas. Children are most among the sufferers of bedwetting may because of starting of development of personality and ego since the age of 3 years which culminates as negativism

against parents when they force them to control the bladder.

AIM AND OBJECTIVES

To study the efficacy of drug *Asvagandhadi* compound in comparison to *Brahmi Vati* in the management of *Shayyamutra*.

MATERIALS

Children with complaints of *Shayyamutra* fulfilling the inclusion criteria attending O.P.D. of *Kaumarbhritya* dept., Parul institute of Ayurveda, Limda.

Inclusion Criteria

- Age – 6 to 10 years.
- Sex : both male and female
- Cardinal features of *Shayyamutra* without daytime incontinence.
- Repeated voiding of urine in bed or clothes at least 2-3 times in a week at night

Exclusion Criteria

- Patients having systemic disorders like TB, DM, Urinary tract infection will be excluded from the study.
- Patients with any congenital anomalies or with anatomical defect of genitourinary system.

- Neurological disorders like Cerebral Palsy, Mental Retardation, Spina bifida.
- Age – Less than 6 years and more than 10 years.
- Children with daytime incontinence

Laboratory Investigation

Blood: Complete Haemogram

Urine and Stool: Routine and Microscopic.

Child who had normal urinalysis, negative stool report for Krimi and showed no abnormality on physical examination were included in the study.

Grouping and posology

Grouping of patients

- Group A - Brahmi tablet
- Group B - Ashwagandhadi compound (Yastimadhu, Guduchi, Ashwagandha, Krishna tila)(Anubhutyoga)
- In both groups besides medicines parental counseling, diet and exercise will be imparted throughout the treatment
- Group C – placebo (tab prepared from wheat flour) with medical counseling.

Dosage

According to Young's Formula: (In Two Divided Doses)

$$\text{Child dose} = \text{Adult dose} \times \frac{\text{Age}}{\text{Age}+12}$$

Age	Dose
6 years	3.5 gram
7 years	4 gram
8 years	5 gram
9 years	5.5 gram
10 years	6 gram

Duration: 60 days

Follow up: every 15 days

Assessment Criteria

The assessment of the efficacy of drugs were done on the basis of the improvement in chief complaints and associated complaints by adopting arbitrary scoring pattern. *Manasika bhavas* assessment was done on the basis of questionnaire given in DPCL for knowing temperament profile, and emotion disorders by giving an arbitrary scoring before and after the treatment. In the present study, total 35 patients were registered, out of which 32 patient completed the course of treatment while 03 patients left the treatment.

Analytical Study

Pharmacognostical Study

Powder of *Ashwagandhadi* compound has following properties.

Taste	Sweetish astringent
Odor	Faint
Color	Light brown
Touch	Coarse

Physiochemical Parameters

Sr. no	Parameters	Findings
1	Loss on drying	10% w/w
2	Total ash	15% w/w
3	Acid insoluble ash	5% w/w
4	Water soluble extract	20% w/w
5	Alcohol soluble extract	10% w/w
6	Hardness	1.975 kg/cm ²
7	Disintegration	12 min.
8	Tablet uniformity	490 mg

OBSERVATION AND RESULTS

- Primary [78%] Nocturnal enuresis with more than once per night wetting [65%] was found maximum.
- Middle childhood 6-10 years is more prone for enuresis due to starting of development of personality of child as ego and negativism.
- Parental education, joint family does not show any direct relation in the manifestation of disease, what matters, is parental attitude.
- Fluid intake was found 6-8 glass maximum which was normal and evening fluid restriction was not instructed in the present study as it does not play any role in prevention of disease.
- Sleep deep was found in 100% of patients' with 8-10 hours maximum in all the patients. Sleep duration was not found of much importance as it was reported to be happened in napping hours too.
- Age wise urine frequency in 24 hours was found almost equal to the given reference for enuretic child.
- Both type of presentation was found in nocturnal enuresis i.e. monosymptomatic nocturnal enuresis [47%] and nocturnal enuresis with increased day time frequency [53%].
- Socio economic status, middle [47%] and lower [40%] were found highest among others which support its role in manifestation of disease.
- *Sama-ashanahabit* [65%] and dominant rasa *Madhura* [50%] followed by *Amla* [43%] found maximum.
- Positive family history was present in 25% of the patients which reveals role of *Garbhotpadaka Bhava Dusti* in *Shayyamutra*.
- *Manasprakriti*, *Satvik* [47%] followed by *Rajasika* [31%] were found in maximum number of patients.
- *Sharirika Prakriti Vatapitta* followed by *Kaphapitta* was found in 62% and 38% of the patients respectively. *Vata pitta prakriti* child was found maximum with emotional instability which may be responsible to make them prone to the disease enuresis.
- *Vegavrodh* was found present in 56% of the patients.
- *Rasavaha srotas dusti* was found in 100%, followed by *Purishvaha* [87%] *Swedavaha* [80%] and *Mutravaha Srotas* [62%].

- Emotional outcomes of healthy peers were found more unstable than enuretic which reveals that only emotional conflicts are not responsible for enuresis.
- From above all observational findings it could be concluded that emotional conflicts alone are not sufficient in manifesting the disease *Shayyamutra*.
- Other factors like *Matruja*, *Pitruja*, *Atmaja* etc. *Garbhotpadaka Bhava* and specific *Sharirika* and *Manasika Prakrit*, aggravating diet and dietary habit are prerequisites for the manifestation of disease.
- Rasavaha Srotas* and *Swedvaha Srotas Dusti* reveals role of psychological factors, as psychological factors are also responsible for *Dusti* of these two *Srotas*.
- Involvement of *Rasavaha Srotas* 100% patients also indicates *Sadhaka Pitta Dusti* in enuretic as both resides in same place i.e. *Hridaya*. According to *Ashraya Ashrayi Bhava* principle.

DISCUSSION

Effect of Therapy on Cardinal and Associated Symptoms in Group A

The relief on cardinal symptom was observed 5.9% and the result was statistically non-significant [Table 1]. All associated symptoms showed relief but statistically insignificant [Table 2].

Table 1: Effect of Brahmi Vati on cardinal symptom in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	W	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Bed Wetting	3.09	2.73	0.36	5.91	1.44	1.10	0.43	0.33	9	27	18	0.25

Table 2: Effect of Brahmi Vati on associated symptom in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	W	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Lack of memory	0.91	0.73	0.18	13.64	0.83	0.46	0.25	0.14	2.5	7.5	5	0.3
Shamefulness	1.09	0.91	0.18	4.55	0.83	0.70	0.25	0.21	2.5	7.5	5	0.37
Irritability	1.64	1.36	0.27	9.85	1.20	0.92	0.36	0.27	0	6	6	0.25
Lack of concentration	1.36	1.00	0.36	21.21	0.92	0.77	0.27	0.23	0	10	10	0.12
Excess activity	2.00	1.73	0.27	9.85	1.09	0.90	0.33	0.27	0	6	6	0.25
Fear	1.45	1.27	0.18	7.58	0.82	0.64	0.24	0.19	0	3	3	0.5

Effect of Therapy on Cardinal and Associated Symptoms in Group B

The relief on cardinal symptom was observed 24% and the result was statistically significant. [Table 3].

On associated symptoms. Irritability and excess activity showed 28% and 22% relief with significant results, other symptoms also showed relief with insignificant results. [Table 4].

Table 3: Effect of Asvagandhadi compound on cardinal symptom in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	W	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Bed Wetting	3.18	2.27	0.91	24.70	1.25	0.78	0.37	0.23	0	28	28	0.01

Table 4: Effect of Asvagandhadi compound on associated symptoms in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	W	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Lack of memory	1.27	0.91	0.36	18.18	1.25	0.78	0.23	0.16	0	10	10	<0.12
Shamefulness	1.00	0.73	0.27	18.18	0.63	0.46	0.19	0.14	0	6	6	<0.25
Irritability	1.73	1.18	0.55	28.03	1.10	0.87	0.33	0.26	0	21	21	<0.03
Lack of concentration	1.55	1.55	0.00	0.00	1.82	1.82	0.24	0.24	0	0	0	<1
Excess activity	1.91	1.27	0.64	22.73	1.30	0.08	0.39	0.23	0	21	21	<0.03
Fear	1.36	1.18	0.18	7.58	0.92	0.75	0.27	0.22	0	3	3	<0.5

Effect of therapy on cardinal and associated symptoms in Group C

On cardinal symptom, 30 % improvement with insignificant result was observed [Table 5].

All associated symptoms showed improvement with insignificant results [Table 6].

Table 5: Effect of placebo on cardinal symptom in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	w	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Bed Wetting	2.00	2.60	0.60	30.83	1.15	1.43	0.36	0.45	21	20	21	<0.3

Table 6: Effect of placebo on associated symptoms in patients.

Symptom	MEAN SCORE		D	%	S.D.		S.E.		T+	T-	w	P
	B.T.	A.T.			B.T.	A.T.	B.T.	A.T.				
Lack of memory	1.1	1.0	0.1	5.0	0.73	0.66	0.23	0.21	0	1	1	<1
Shamefulness	1.70	1.50	0.20	8.33	0.94	0.85	0.30	0.26	0	3	3	<0.5
Irritability	1.60	1.50	0.10	2.50	1.26	1.08	0.40	0.34	0	1	1	<1
Lack of concentration	1.00	1.00	0.00	0.00	0.80	0.80	0.25	0.25	0	0	0	<1
Excess activity	1.80	1.60	0.20	5.83	1.30	1.07	0.41	0.34	0	3	3	<0.5
Fear	1.40	1.30	0.10	5.00	0.96	0.94	0.30	0.30	0	1	1	<1

Effect of Therapy on Routine Urine and Haematological Investigations

Routine investigations of urine, stool and blood samples were carried out before and after treatment in all the groups, but the variation observed were within normal limits. There is no significance in any of the results with reference to *Shayyamutra*. The present clinical study suggests that the textual references quoted by ancient *Acharyas* (which give psychological treatment and a formal recipe) are true; provided it is practiced in the exact manner it is told. A longer duration of the treatment may give better answer to the problem if given along with parent counseling. This shows that *Shayyamutra* is partial somatic and partially psychic in origin, which needs proper diagnosis and proper drug therapy along with parent counseling. In the concluding remarks the results clearly shows that Tablet *Asvagandhadi compound* along with parent counseling was highly effective in managing the disorder as compared to the *Brahmi* tablet along with parent counseling. The placebo group too suggests that even simple parent counseling it has a great role to play in the management of *Shayyamutra*.

CONCLUSION

In the concluding remarks the results clearly shows that Tablet *Asvagandhadi compound* along with parent counseling was highly effective in managing the disorder as compared to the *Brahmi* tablet along with parent counseling. The placebo group too suggests that even simple parent counseling. It has a great role to play in the management of *Shayyamutra*.

REFERENCES

- Sushruta, Sushruta Samhita nidanstha 13/47 English commentry, ed by P V Sharma, 14th ed, Varanasi: Chaukhambha Sanskrita Sansthan; P.85.
- Charaka, Charaka samhita chikitsa stahna 12/8, Hindi commentary, ed by Yadavji Trikamji Acharya, Varanasi: Choukhambha Bharti Academy; Reprint 2001; P 485.
- Sarangdhara, Sharangdharasamhita Adhamallacommetry Purvakhanda 7/187, 188, Ed by Pt. ParasuramaSashtriVidyasagar, 7th ed. Varanasi: chaukhambha orientalia, 2008; P.131.
- Charaka, Charaka samhita sutra sthana 30/26, Hindi commentary, ed by Yadunandana Upadhyaya, Varanasi: Choukhambha Bharti Academy; Reprint 2001; P 587.
- Sushruta, Sushruta Samhita uttarstha 1/25 Hindi commentry, ed by Kaviraj Ambika. Dutta Shastri, 14th ed, Varanasi : Chaukhambha SanskritaSansthan, P. 11
- Vagbhatta, AstangaHridayam sutra sthana 14, ed by K.R Shrikanta Murthy, 14th ed, Varanasi: Chaukhambha Surbharti Prakashana, 2003; P.194.
- Charaka, Charaka samhita chikitsa stahna 12/8, Hindi commentary, ed by Yadavji Trikamji Acharya, Varanasi: Choukhambha Bharti Academy; Reprint, 2001; P 122.
- Vagbhatta, AstangaHridayam sutra sthana 1/26, ed by Pt. Hari Sadsiva SastriParadakara, 14th ed, Varanasi: Chaukhambha Surbharti Prakashana, 2003; P.
- Charaka, Charaka samhita chikitsa stahna 12/8, Hindi commentary, ed by Yadavji Trikamji Acharya, Varanasi: Choukhambha Bharti Academy; Reprint, 2001; P 75.
- Charaka, Charaka samhita chikitsa stahna 12/8, Hindi commentary, ed by Yadavji Trikamji Acharya, Varanasi: Choukhambha Bharti Academy; Reprint, 2001; P 248.
- Charaka, Charaka samhita chikitsa stahna 12/8, Hindi commentary, ed by Yadavji Trikamji Acharya, Varanasi: Choukhambha Bharti Academy; Reprint, 2001; P 267.
- Kashyapa, Kashyapa samhitaKhil Sthana 3/ 21-22, English transl&commentary ed by P.V. Tiwari, reprint 2002, Varanasi: Chaukhambha Vishwabharti, 451.