

Study the efficacy of MadhurBimbi (*Coccinia indica* Wight & Arn) fruit swarasa and Krushna Maricha (*Piper nigrum* L.) Fruit powder in the management of ShayyaMutra (Nocturnal enuresis)

Yogini R. Kulkarni¹, Namrata M. Jain²

Abstract:

Introduction: Shayya Mutra being the psycho-social problem this has been selected for the study. Krushna Maricha and Sweet variety of Bimbifruits are the two drugs which were selected for the present study.

Method: Clinical study of standard samples of Maricha and Bimbi were carried out to evaluate their combined efficacy on ShayyaMutra. The patients with consistent symptom of shayyamutra with age 5-15 were included and randomly divided in 4 four groups, to assess the combined effect of Bimbi and Maricha with Pathapathya and separate effect of Bimbi and Maricha and Pathapathya

Results: The treatment 'A' provided better relief in Shayyamutra, Mutradaurgandhya, Alpamutradharan, Agnivaigunya, Trushna and Purishpravrutivaigunya. The treatment 'B' provided better relief in shayyamutra, Mutradaurgandhya, Trushna, whereas the treatment 'C' provided significant relief only in shayyamutra.

While comparing the cure rate of treatments, A is more effective than B and B is more effective than treatment C. This is because of its Agnivardhak property. The treatment D as the pathyapathya dose not show significant effect on Shayyamutra

Conclusion: The combined effect of the drugs with pathyapathya gives better relief in shayyamutra.

Key words: Shayya-Mutra, Bimbi, Maricha and Nocturnal Enuresis

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Introduction

Shayya-Mutra is common behavioural abnormality in paediatrics¹, and it is very adverse psychosocial influence. Even though the disease itself is not severe or fatal the psychosocial impact on patient and parent simply unnerving. It attaches social stigma because the parents cannot give full liberty to these children to enjoy normal, social togetherness, particularly the overnight picnics, and children's camps or send them their near relations for

staying during to vacations, festivals and so on. This adversely influences personality development; the child suffering from this disease starts leading lonely life and avoids the company of other friends for the fear of tease ridicule about the mishaps. This leads to certain amount of mental imbalance or atlas a lack of confidence. It has been empathetically mentioned in Ayurveda that rebuilding of mental strength by way of kind reassurances play a very significant role in recovery from the disease. So this disease was selected for the present research. Very few references are found in Ayurvedic literature regarding diagnosis and effective management of this disease. Other research scholars also corroborate this fact. A lot of scope for research still exists for the effective management of Shayya Mutra, so this topic was selected for research work. The effective remedy is mentioned in ChikitsaDarsh Sampurna³ for

¹Professor and Head,

²Lecturer, Department of Research Methodology and Medical Statistics

Corresponding author:

Yogini R. Kulkarni

Department of Research Methodology and Medical Statistics; College of Ayurveda and Research Centre, Sector 25, Nigdi Pradhikaran

Pune-411044; Mobile no. +91-9822419089;

E-mail- jain.namrata1008@gmail.com

shayyamutra the selected two drugs are mentioned in combination for the effective management of shayyamutra. Bimbi and Marich drugs are easily available, well known drugs with acceptable taste and also have the properties which can break the pathophysiology of Shayyamutra so these drugs were selected for the study.

Aims

To study the combined and individual efficacy of Bimbi and Marich on Shayyamutra

Objectives

1. To study the role of specific pathya on ShayyaMutra
2. To observe the side effects of the drugs if any

Materials and Methods

Materials – Bimbi unripe fresh fruits

KrushnaMaricha dry fruits

Patients of Shayyamutra

Consent form

Specially designed case record form

Patient's diary

Specially given Pathya chart

Methodology

Review of the literature was done after developing the keys for search as ShayyaMutra, Bimbi, Maricha and Nocturnal enuresis. The review was taken related to diagnosis and treatment of Shayyamutra as per Ayurved and modern review was taken related to the diagnosis and treatment of nocturnal enuresis. The drugs review was also taken regarding its properties as per Ayurved and modern

The both drugs were collected from field as KrushnaMarich was collected from Dapoli and Fresh fruits of Bimbi were collected from vegetable market. Both the drugs were authenticated from Agharkar Research Institute Pune

The patients attending OPD sections of Seth Tarachand Ramanth Hospital, Pune during the year 1996 and fulfilling the inclusion criteria were enrolled randomly by lottery method. Total 50 patients were enrolled in the study.

The included patients were divided in four groups (with Drug administration details) as mentioned in table number 1.

Inclusion criteria

The patients of Age group 5-15 years having consistent symptom of Shayya Mutra

Patients those who willing to give consent

Exclusion criteria

The patients with other major diseases with shayyamutra

Withdrawal criteria

If the patient missed two consecutive follow-ups then they were discontinued from the trial.

If the patient wants to discontinue from the treatment then they can discontinued from any day of the treatment

Fulfilling criteria - Those patients discontinued from trial were replaced by other patients as per inclusion criteria.

Patients observations were recorded as per specially designed case record form Dietary history also recorded as per mentioned in case record format

Investigations – The patients were undergone the routine urine & stool examination

Criteria for assessment

Symptoms were graded as follows-

Absent – 0

Severe with persistent symptom- 4

Severe- 3

Moderate 2

Mild -1

Follow up – Follow up of every patient was taken at every week. The duration of treatment was 21 days.

Withdrawal period- After 21 days the treatment was discontinued for 15 days. After 15 days of withdrawal period of medicines they were called for rechecking. In this withdrawal period they were instructed that only medicines should be discontinued and dietary and other restrictions should be strictly followed.

Pathyapathya - Dietary and other restrictions –

The patients were advised several dietary restrictions viz. To avoid curd, jiggery, citrus fruits, sugar cane juice, pickles, Banana or fruit salad made in milk, jams, jelly and cold water. The patients were advised not to take hot and cold drinks simultaneously. They were also advised to take dinner before 8 pm. They were advised to evacuate the bladder before going to bed. The patients

were instructed that they should maintained the diary showing the drug administration time and episodes of shayyamutra at day and night sleeping time

Statistical Analysis-The data was analysed to know the statistical significance by Wilcoxon Signed Rank test using SPSS Software for each symptom before and after the treatment readings.

Results

The clinical study deals with the study of 50 patients.

In group 'A', 29 patients were treated with Bimbi and Marich. The patients were advised to follow Pathapathya. This treatment shows better relief in Shayyamutra, Mutradaurgandhya, Alpamutradharan, Agnivaigunya, Trushna and Purishpravrutivaigunya as mentioned in Table number 3.

In group 'B', 7 patients were treated with Maricha Powder which provided better relief in shayyamutra, Mutradaurgandhya, Trushna as mentioned in table number 4.

In group 'C', 7 patients were treated with Bimbi swarasa which provided significant relief in shayyamutra as mentioned in table number 5

While comparing the cure rate of treatments A is more effective than B and B is more effective than treatment C. This is because of its Agnivardhak property.

In group 'D', 7 patients were restricted with Pathyapathya which shows insignificant effect on all symptoms of Shayyamutra as mentioned in table number 6.

Discussion

On the basis of comparison of the effects of all four groups on individual symptoms were classified earlier in the observation. Treatment A (Maricha&Bimbi) shows action on Kapha, Agni, Mutra, Vata and Kleda resulting in Kleda Nashana⁴, Ama Pachana Mutra Shoshan, Trushna Nashan which causes samprapti bhanga of ShayaMutra⁵.The treatment B (Maricha) Shows Agnivardhana⁵, Ama Pachana, KledaNashana and Mutra Shoshan action because of its Katu rasa², Laghu, Ruksha and Ushnaguna. The resulting effect is samprapti bhang leading the patients to cure. The treatment C (Bimbi) shows Mutrasansrahana and Trusnanigrahan⁶ action because of its madhur, Kashay rasa, Sheet veerya⁷. This drug not showing the effect on Agni and Mana so it is less effective than Maricha on Shayyamutra. The treatment D (Pathya) shows insignificant effect on Shayyamutra.

It is found that treatment 'A' provided better relief in Shayyamutra (p value < 0.05), Mutradaurgandhya (p-value=0.002), Alpamutradharan (p-value <0.05), Agnivaigunya (p-value =0.004), Trushna (p-value=0.001) and Purishpravrutivaigunya (p-value <0.05), treatment 'B' provided better relief in shayyamutra (p value <0.05), Mutradaurgandhya (p-value <0.05), Trushna (p-value <0.05), whereas the treatment 'C' provided in significant relief in shayyamutra only (p-value =0.017). While comparing the cure rate of treatment B is more effective than treatment C. This is because of its Agnivardhak property.

Conclusion

The study can be concluded that treatment A (Maricha and Bimbi) shows significant relief on Shayyamutra. Treatment B (Maricha) is more effective than treatment C (Bimbi). But for effective management of Shayyamutra only pharmacological treatment is not sufficient psychological treatment is also essential.

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Table 1: Details of the Drug administration as per group

Group	Treatment Given	Time and duration	Number of patients
A	Dry powder of Krushnamarich powder 260mg+ Swarasa of Fresh Bimbi fruits 20ml	Twice in a day at Apana Kala (before meal) for 21 days	29
B	Dry powder of Krushnamarich powder 260mg	Twice in a day at Apana Kala (before meal) for 21 days	7
C	Swarasa of Fresh Bimbi fruits 20ml	Twice in a day at Apana Kala (before meal) for 21 days	7
D	On specific recommended Pathya	For 21 days	7

The drug administration time and duration was given group wise as mentioned in above table no 1

Table 2: Symptom wise distribution of patients in percentage

Symptom	Percentage
Shayyamutra (bed wetting)	100
Mutradaurgandhya (foul smell)	41.18
Alpamutrasthan (incontinence)	23.53
Agni vaigunya (loss of appetite)	70.59
Trushna (excessive thirst)	54.9
Purishvaishmya (irregular defecation)	70.59
Manovaigunya (physiological disturbance)	49.02
Swedovaigunya (more or less perspiration)	11.76
Mutradaha (burning maturation)	3.92

Table no 2 shows the all patients have persistent symptom shayyamutra where as the less number of patients with Mutradaha symptom

Table 3: Effects of the treatment "A" (Bimbi and Maricha) on 29 cases of Shayyamutra

Symptoms	% Relief	Test statistic (W)	P value	Result
Shayyamutra	70	-4.549	<0.05	Significant
Alpamutrasthan	34.78	-3.685	<0.05	Significant
Agni vaigunya	56.67	-2.887	0.004	Significant
Purishvaishmya	53.53	-3.7	<0.05	Significant
Manovaigunya	0.000	-1.000	0.317	Insignificant
Trushna	55.55	-3.247	0.001	Significant
Mutradaurgandhya	85.29	-3.115	0.002	Significant
Mutradaha	75	-1.342	0.18	Insignificant
Swedovaigunya	27.27	-1.633	0.102	Insignificant

The treatment A is effective in all symptoms of shayya mutra except Manovaigunya, Mutradaha and Swedovaigunya

Table 4: Effects of the treatment “B” (Maricha) on 07 cases of Shayyamutra

Symptoms	% Relief	Test statistic (W)	P value	Result
Shayyamutra	71.43	-2.232	0.026	Significant
Alpamutradharan	50	-1	0.317	Insignificant
Agni vaigunya	44.44	-1.633	0.102	Insignificant
Purishvaishymya	50	-1.414	0.157	Insignificant
Manovaigunya	0.000	0.000	1.000	Insignificant
Trushna	37.5	-2.449	0.014	Significant
Mutradaurgandhya	53.33	-2.06	0.039	Significant
Mutradaha	0.000	0.000	1.000	Insignificant
Swedovaigunya	0.000	0.000	1.000	Insignificant

The treatment B is effective only on the symptoms Shayyamutra, Trushna and Mutradaurgandhya

Table 5: Effects of the treatment “C”(Bimbi) on 07 cases of Shayyamutra

Symptoms	% Relief	Test statistic (W)	P value	Result
Shayyamutra	75	-2.392	0.017	Significant
Alpamutradharan	50	-1.414	0.157	Insignificant
Agni vaigunya	0.000	0.000	1.000	Insignificant
Purishvaishymya	0.000	0.000	1.000	Insignificant
Manovaigunya	0.000	0.000	1.000	Insignificant
Trushna	50	-1.414	0.157	Insignificant
Mutradaurgandhya	0	-1	0.317	Insignificant
Mutradaha	0.000	0.000	1.000	Insignificant
Swedovaigunya	0.000	0.000	1.000	Insignificant

The treatment C is effective only on the symptom Shayyamutra

Table 6: Effect of treatment “D”(Pathya) on 07 cases of Shayyamutra

Symptoms	% Relief	Test statistic (W)	P value	Result
Shayyamutra	0.000	0.000	1.000	Insignificant
Alpamutradharan	0.000	0.000	1.000	Insignificant
Agni vaigunya	0.000	0.000	1.000	Insignificant
Purishvaishymya	0.000	0.000	1.000	Insignificant
Manovaigunya	0.000	0.000	1.000	Insignificant
Trushna	0.000	0.000	1.000	Insignificant
Mutradaurgandhya	0.000	0.000	1.000	Insignificant
Mutradaha	0.000	0.000	1.000	Insignificant
Swedovaigunya	0.000	0.000	1.000	Insignificant

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