



**VOLUME 10 ISSUE 1 2019**

*e ISSN 2350-0204*

**ijapc**

*www.ijapc.com*

**Greentree Group  
Publishers**



## Management of *Klaibya* (Erectile Dysfunction) with *Basti* Variants and *Abhyanga*

S. Bharath Narendra<sup>1\*</sup> and Anita Patel<sup>2</sup>

<sup>1</sup>Dept. of RogaNidana, SJSAC&H, Nazarethpet, Chennai, TN, India

<sup>2</sup>Dept. of RachanaSareera, SJSAC&H, Nazarethpet, Chennai, TN, India

### ABSTRACT

Klaibya is one of the diseases described by Caraka acharya under the sexual disorders in his samhita. Its signs and symptoms are similar to erectile dysfunction (ED) in modern bio-medicine such as, reduced erection, intercourse and ejaculation time (DOER, DOIC and DOEJ). While searching for a remedy it was understood that Bala aswagandhadi taila (BA oil) proves to be quite useful in neurological (vata vyadhi) and muscular problems which may be helpful in making a man get erection. Total of 100 patients were selected randomly and divided in 4 groups. Each group consisted of 25 patients. BA oil was used in all the 4 groups. The patients were validated with 3 subjective parameters DOER, DOIC and DOEJ. And, an internationally renowned scoring termed as Quality of Erection Questionnaire (QE) which is an objective parameter. APMB (Ascension Protocol Matra Basti) is a new type of Arohana Matra Basti devised in this study. APMB and Matra basti were administered separately without sthanika abhyanga in group 1 and 2 respectively. And, in groups 3 and 4 they were administered along with Sthanika Abhyanga. The results showed that APMB yielded better results than traditional Matra Basti. And, in groups 3 & 4, the results of Matra Basti and APMB were improved exponentially when given in conjunction with Sthanika Abhyanga.

### KEYWORDS

*KLAI BYA*, *ED* (Erectile Dysfunction), *MATRA BASTI* and *APMB* (Ascension Protocol Matra Basti), *DOIC* (Duration of Intercourse), *DOER* (Duration of Erection), *DOEJ* (Duration of Ejaculation)



**Greentree Group Publishers**

[Received 26/10/18](#) [Accepted 15/11/18](#) [Published 10/01/19](#)



## INTRODUCTION

Klaibya is found in Ayurvedic texts as ancient as the Caraka, Susruta and Vagbhata samhitas. A information of etiology, pathogenesis, symptoms, complications & treatment of Klaibya are mentioned under Yoni Vyapad<sup>3</sup>. Caraka Acharya in detail talks about all the 4 types of Klaibya, its Nidana Panchaka and chikitsa which even the modern bio-medicine doesn't offer. One of the main causes of Klaibya or Infertility is Dwaja Bhangha or Erectile Dysfunction (ED). This condition is also called as impotence. Yearly, more than 10 million ED cases are reported all over India. Atherosclerosis is also a main cause for Erectile dysfunction<sup>1</sup>. Research results by a Chinese NGO showed that mankind faces a "chemical induced reproductive crisis" due to endocrine-disrupting chemicals in things we use every day like furniture & plastics. Almost 40% of the male population in the world suffers from ED. It is found that about 40% of men suffer from ED at the age of 40 and about 70 % of men have ED at the age of 70. There is also a 5 – 15% of chance for complete ED between 40 and 70 years of age<sup>[2]</sup>. Modern biomedicine drugs only temporarily give an erection. Due to the side effects associated with these medicines and due to sperm anomalies combined with

ED, techniques like IUI, IVF ICSI too fail. Hence, donor sperms remain the sole option. A Chinese NGO's study shows only 18% donors qualified for sperm donating in 2015 which was 56% in 2001. As donors too are becoming scarce, the world needs a new direction to restore sperm quality. Hence, a remedy for this disorder which creates such mental stress and stigma is the need of the hour. As a traditional ayurvedic family has been using BA oil for ED since ages, an attempt was made to carry out its clinical trial and observe the results.

## OBJECTIVES

1. To study the efficacy of Bala Ashwagandhadi taila (BA oil) in Dwaja Bhangaja Klaibya/ED.
2. To study the role of Matra Basti, APMB, and Sthanika Abhyanga in Klaibya.

### The Analytical report of BA oil procured:

**Table 1** Analytical report of Bala Ashwagandhaditaila

S. No.	Attribute	Result
1.	Colour	red yellow
2.	Consistency	Liquid oily
3.	Clarity	Clear
4.	Odour	Characteristic
5.	Specific gravity	0.9158-0.9178
6.	Refractive index	1.45-1.46
7.	Moisture content	NMT 1%
8.	Iodine value	85-89
9.	Saponification value	155-157
10.	Acid value	4-5.5
11.	Peroxide value	4-5
12.	Unsaponifiable matter	1.7-2.1



Chromatographic Study revealed major spots at  $R_f$  0.16,  $R_f$  0.30,  $R_f$  0.66,  $R_f$  0.72,  $R_f$  0.78 under short UV and at  $R_f$  0.30 (yellow brown),  $R_f$  0.5 (purple),  $R_f$  0.66 (red), 0.72 (brown-lack) in day light after derivatization. Internationally accepted constants like the specific gravity, iodine value, refractive index, acid value, saponification value etc. are the parameters which help us to ascertain the quality of the liquid medicine. In this case, it is Bala Ashwagandhadi taila. The above report proves that the procedure used to prepare the oil has yielded an oil of good quality.

Bala Ashwagandhadi taila is a proven nervine tonic and efficacious in muscle repair. It is being used for Klaibya by a traditional ayurvedic vaidya family hailing from a place called Mayavaram, in Tamilnadu. Hence, it was selected as the drug of choice for Klaibya.

**Plan of Study – Ethical clearance – Institutional Ethics Committee Approval and Regulatory Compliance (IEC number: IEC/SCSVMV/4)**

As per research guidelines, the study protocol and related documents were

**Inclusion and Exclusion criteria:**

**Table 2** Inclusion and Exclusion criteria

Inclusion Criteria	Exclusion Criteria
Patients who fail the Potency test.	Patients who pass the potency test.
Patients of age between 20 and 65 years suffering from ED for at least 1 month's duration and with his written consent shall be included for the study.	Reproductive organs - congenital anomalies, DM, Hepatic/renal insufficiency, Cardiovascular diseases, cerebrovascular accidents, uncontrolled hypertension, endocrine diseases, psychiatric disorders , dementia.

verified and scrutinised and approved by the institutional Ethics Committee at Sri Jayendra Saraswathi Ayurveda College and Hospital, Chennai. The study conducted is based on the clinical observations, patient's narration, the 3 subjective parameters taken for study and 1 objective parameter of scoring in total. The diagnosis of patients was done on the basis of the signs and symptoms mentioned in Ayurvedic texts for Klaibya and the 3 subjective parameters derived from these symptoms. The study was conducted in accordance with Schedule Y of Drugs and Cosmetics act, India, amended in 2005 and ICMR ethical guidelines for biomedical research on human participants 2006.

**METHODOLOGY**

Ethical Committee Approval No. IEC/SCSVMV/4

**Selection Criteria for Patients-**

Total of 100 patients were diagnosed, selected randomly and placed in 4 homogeneous groups. Each group consists of 25 patients.



	Pelvic fractures, prostratotomy, surgery/injury of the penis, Piles, Anal Fissures and fistula-in-ano. STDs.
Each patient will be informed about the study details in written and oral form before the beginning of the drug administration.	Patients using PDE-5 inhibitors & Basti Anarhas according to Ashtanga Hrudaya <sup>5</sup>

The table no. 2 shows the inclusion and exclusion criteria selected for the study.

## Study Design

**Table 3** Study Design

GROUP	No. OF PATIENTS	PROCEDURE	DRUG & DURATION
<b>GROUP 1</b>	25	APMB (Ascension Protocol Matra Basti)	Bala Ashwagandhadi taila – 8 Days
<b>GROUP 2</b>	25	MATRA BASTI	Bala Ashwagandhadi taila – 8 Days
<b>GROUP 3</b>	25	Ascension Protocol Matra Basti + Sthanika Abhyanga	Bala Ashwagandhadi taila – 8 Days
<b>GROUP 4</b>	25	MATRA BASTI + Sthanika Abhyanga	Bala Ashwagandhadi taila – 8 Days

Table no. 3 shows the design of the whole study as mentioned in detail below:

Duration: Patients were given treatments appropriate to their groups for 8 days.

Evaluation and follow-ups: Patients were evaluated according to the parameters on 1<sup>st</sup> day (before treatment) and 9<sup>th</sup> day, 30<sup>th</sup> day and 60<sup>th</sup> day.

The subjective gradations of symptoms were done.

Intensity of each symptom was calculated as given below and compared with that of other group.

APMB (Ascension Protocol Matra Basti) is a novel way of increasing the dose of the Sneha Basti based on a specific formula. It doesn't follow the traditional matra basti rules or the Arohana Matra Basti vividly explained in Ayurvedic treatises<sup>4</sup>. This research paper exclusively deals only with

the statistical comparison and results of all the 4 groups mentioned above.

Sthanika abhyanga was done in the lumbo sacral area, part of the abdomen below the umbilicus, penis, scrotum, groins and the perineal suture as all the blood supply and nerve supply pertaining to the male reproductive organ are found here. And, most of the primary and associated symptoms of Klaihya enlisted in our samhitas are found in these places.

### Symptoms gradation

All the three Subjective parameters DOER (Duration of Erection), DOIC (Duration of Intercourse) and DOEJ (Duration of Ejaculation) were graded in 5 grades based on number of seconds as follows

**Table 4** The Grading system adopted for DOER, DOIC and DOEJ

<b>Above 120 seconds</b>	<b>Grade 1</b>
--------------------------	----------------



90 seconds	–	120 seconds	Grade 2
75 seconds	–	90 seconds	Grade 3
60 seconds	–	75 seconds	Grade 4
<60 seconds			Grade 5

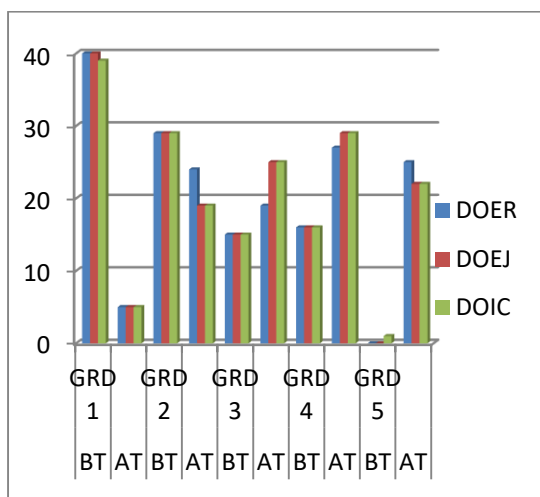
The Quality of Erection Questionnaire was graded based on the 6 items in it. Each item has 1-5 grades and they were added as guided in the QEQ. The following formula was used to get the result: (unstandardised score – 6) x 100 / 24.

## RESULTS

### Results and statistical data

**Table 5** Degrees of Assessment Criteria before & after Treatment Subjective criteria

ASSESSMENT CRITERIA	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
	GRD 1	GRD 1	GRD 2	GRD 2	GRD 3	GRD 3	GRD 4	GRD 4	GRD 5	GRD 5
DOER	40	5	29	24	15	19	16	27	0	25
DOEJ	40	5	29	19	15	25	16	29	0	22
DOIC	39	5	29	19	15	25	16	29	1	22



**Graph 1** Degrees of Assessment Criteria before & after Treatment - All Groups

Asignificant improvement in all the 3 subjective parameters were seen in all the groups

**Table 6** DOIC on 60<sup>th</sup> Day – All Groups Results

GROUP	GROUP 1	GROUP 2	GROUP 3	GROUP 4
VALUE				
t	3.934	2.064	13.300	5.283
p	0.001(<0.05)	0.050(<0.05)	0(<0.05)	0(<0.05)

From table no. 6 a significant improvement was found in DOIC in all the 4 groups at the end of 60<sup>th</sup> day of the study.

**Table 7** Comparison between Groups 1,2,3 and 4 for DOIC

GRO UP	GRP 1& 2	GRP 1& 3	GRP 1& 4	GRP 2& 3	GRP 2& 4	GRP 3& 4
T	1.873	8.64	2.00	10.6	4.05	8.02
P	0.0671 (>0.05)	0.0001	0.0501	0.0001	0.0002	0.0001
Result	NS	HS	MS	HS	HS	HS

Its noted that from table no. 7, for DOIC, the Comparison between groups 1 & 2 showed similar results, group 3 showed highly significant results than group 1, group 4 showed moderately better results than group 1, Group 3 showed highly significant results than group 2, group 4 showed highly significant results than group 2, group 3 showed highly significant results than group 4.

**Table 8** DOER on 60<sup>th</sup> Day – All Groups Results

GROUP	GROUP 1	GROUP 2	GROUP 3	GROUP 4
VALUE				
t	9.560	1.549	12.348	4.308
p	.000(<0.05)	.134(>0.05)	.000(<0.05)	.000(<0.05)

The table no. 8 shows that significant improvement was found in DOER in all



groups at the end of 60<sup>th</sup> day other than group 2.

**Table 9** Comparison between Groups 1,2,3 and 4 for DOER

GRO UP	GRP 1& 2	GRP 1& 3	GRP 1& 4	GRP 2& 3	GRP 2& 4	GRP 3& 4
t	3.142	6.709	0.572	11.42	2.827	8.633
p	0.002	0.000	0.569	0.000	0.006	0.000
Result	ES	ES	NS	ES	VS	ES

The table no. 9 illustrates the Comparison between groups for DOER. it showed the following results: group 1 showed extremely significant results than group 2, group 3 showed extremely significant results than group 1, groups 4 & 1 did not show very different results, Group 3 showed extremely significant results than group 2, group 4 showed very significant results than group 2, group 3 showed extremely significant results than group 4.

**Table 10** DOEJ on 60<sup>th</sup> Day – All Groups Results

GROUP	GROUP 1	GROUP 2	GROUP 3	GROUP 4
VALUE				
t	7.071	2.064	13.300	5.283
p	.000(< 0.05)	.050(< 0.05)	.000(< 0.05)	.000(< 0.05)

Table no. 10 shows that significant improvement was found in DOEJ in all the 4 groups on the 60<sup>th</sup> day of the study.

**Table 11** Comparison between Groups 1,2,3 and 4 for DOEJ

GRO UP	GRP 1& 2	GRP 1& 3	GRP 1& 4	GRP 2& 3	GRP 2& 4	GRP 3& 4
t	1.873	8.647	2.009	10.69	4.056	8.023
p	0.067	0.000	0.050	0.000	0.000	0.000
Result	QS	ES	QS	ES	ES	ES

The comparison between the 4 groups assigned in the study for DOEJ found in table no. 11 showed that: group 1 showed quite significant results than group 2, group 3 showed extremely significant results than group 1, group 4 showed quite significant

results than group 1, Group 3 showed extremely significant results than group 2, group 4 showed very significant results than group 2, group 3 showed extremely significant results than group 4.

**Table 12** QEQ on 60<sup>th</sup> Day – All Groups Results

GROUP	GROUP 1	GROUP 2	GROUP 3	GROUP 4
VALUE				
t	28.503	28.583	28.503	28.253
p	.000(< 0.05)	.000(< 0.05)	.000(< 0.05)	.000(< 0.05)

The table no. 12 marks the significant improvement that was found in all the 4 groups at the end of 60<sup>th</sup> day of the study.

**Table 13** Comparison between Groups 1,2,3 and 4 for QEQ

GRO UP	GRP 1& 2	GRP 1& 3	GRP 1& 4	GRP 2& 3	GRP 2& 4	GRP 3& 4
t	1.564	14.34	3.315	17.03	5.240	11.75
p	0.124	0.000	0.001	0.000	0.000	0.000
Result	NS	ES	VS	ES	ES	ES

Shown in table no. 13 is the Comparison between groups for QEQ. It showed that: groups 1 & 2 showed similar results, group 3 showed extremely significant results than group 1, groups 4 showed very significant results than group 1, Group 3 showed extremely significant results than group 2, group 4 showed extremely significant results than group 2, group 3 showed extremely significant results than group 4.

## DISCUSSION

There were a total of 100 patients out of which 6 patients were in between 21-30 years, 5 patients in between 31-40 years, 79 patients in between 41-50 years and 10



patients in between 51-60 years age groups. This shows that Klaibya or Erectile Dysfunction is seen more in the age group of 41-50 years. WHO statistics show that ED incidence increases with age. The reason for getting lesser number of patients in the last age group ( 51-60 years ) may be due to the stigma of approaching the doctor for ED after the age of 50 or, the local population may not be sexually very active after 50 years of age.

#### *Duration of intercourse*

It was seen that, in reference to table no. 6 and table no. 7, the 't' value was 13.300 and the 'p' value was .000(< 0.05). This shows that, the patients treated with APMB and Sthanika Abhyanga showed the best results when compared to all the other groups in the study. APMB with Sthanika abhyanga (Group 3) was found to be better than giving APMB alone (Group 1). This shows the importance of abhyanga in ED. APMB and Matra Basti in different groups showed similar but, significant results. Matra Basti with Sthanika Abhyanga (Group 4) showed highly significant results than APMB alone (Group 1) or Matra Basti alone (Group 2) was used to treat the patients.

#### *Duration of Erection*

In this parameter, with reference to table no. 8 and 9 APMB with Sthanika abhyanga showed the best results when compared to all the other groups. APMB when used

alone showed better results than Matra Basti. But, APMB showed similar results to the group in which Matra Basti was used along with Sthanika Abhyanga. And, Matra Basti when used with Sthanika Abhyanga showed better results than when Matra Basti was used alone. Hence, Sthanika Abhyanga has enhanced the efficacy of both APMB and Matra Basti.

#### *Duration of Ejaculation*

In reference to the table no. 10 and 11, similar to the above 2 parameters discussed, in this parameter too APMB with Sthanika abhyanga showed the best results when compared to all the other groups. APMB when used alone showed quite significant results than Matra Basti used separately. But, when Matra Basti was used with Sthanika Abhyanga it showed quite significant results than APMB used separately. It was also found that Sthanika Abhyanga increased the efficacy of Matra Basti & APMB.

#### *QEQ Scoring*

Similar results to the above 3 subjective parameters discussed were obtained in table no. 12 and 13. In this objective parameter too APMB with Sthanika abhyanga showed the best results when compared to all the other groups. APMB showed very similar results to that of Matra Basti when QEQ was concerned. But, Matra Basti when used with Sthanika Abhyanga showed better





results than APMB used separately. And, Matra Basti showed extremely significant results when used with Sthanika Abhyanga than when used separately.

#### *Recurrence*

It was found that Group 3 with APMB & Sthanika Abhyanga had least recurrence on the 60<sup>th</sup> day while, the recurrence was higher in a succeeding manner in the following groups namely, group 4 (Matra Basti & Sthanika Abhyanga), group 1 (APMB) and lastly, group 2 (Matra Basti).

#### *Probable Mode of Action of APMB with Sthanika Abhyanga:*

Traditional Matra Basti in present day's practice has a fixed dose for the total treatment period. And, an Arohana Matra Basti increases the dose daily by roughly 15%. But, in APMB the dose is increased only if the person holds the basti for the minimum prescribed time. This minimum prescribed time is 3 hrs or 1 yama as told in our classics. The holding time (dhaaranakala) of basti plays a major role in absorption of the drug. More the dhaarana kala, better the absorption of the drug from the intestines. Hence, the bio-availability of the medicine will become higher only if its held for long hours. On the other hand, if the dose is increased without paying heed to the basti's retention time, then the basti dravya comes out very soon. This in turn makes APMB a better option than

traditional Matra Basti and also the traditional Arohana Matra Basti. The medicine introduced into the rectal canal is carried by internal iliac vein to bypass the liver and the first pass metabolism. Sthanika abhyanga must have increased the blood supply to the local area and must have made more blood supply available to the Penis through the Internal Pudendal artery which in-turn increases the blood supply to the Penile artery, dorsal penile artery, deep penile artery and artery of urethral bulb.

In Klaibya, these medicines must have had a Vata Hara, Brumhana, Vajikarana, Rasayana & Mamsa Dhatu Poshana properties which are necessary for Erection.

## **CONCLUSIONS**

1. In this study, Bala Ashwagandhadi Taila which is used for the first time in Klaibya, was found to be effective in the treatment of Dwaja Bhangaja Klaibya or Erectile Dysfunction.
2. Out of all the treatments administered in this study, Ascension Protocol Matra Basti when used along with Sthanika Abhyanga was found to have yielded the best results.
3. Sthanika Abhyanga in specific areas as stated in this paper, enhances the results of traditional Matra Basti and Ascension Protocol Matra Basti.



4. Ascension protocol Matra Basti yielded better results than traditional Matra Basti in duration of erection and duration of ejaculation but, similar results to that of traditional matra basti was seen in duration of intercourse and in QEQ scoring.

#### **ABBREVIATIONS**

APMB - Ascension Protocol Matra Basti

DOIC - Duration of Intercourse

DOER - Duration of Erection

DOEJ - Duration of Ejaculation

QEQ - Quality of Erection Questionnaire

ED - Erectile Dysfunction

#### **REFERENCES**

1. Dr. Anita Patel, Dr. D. Aravind (2014 Mar-Apr); Managing Chronic Arterial Occlusion with Ayurvedic Treatment: A Case Study; 'PunarnaV' ayurved journal; Vol 2, Issue 2; pg 1 to7.

2. <http://www.clevelandclinicmeded.com>, Cleveland, Cleaveland clinic centre of continuing education, November 2012. Available from <http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/endocrinology/erectile-dysfunction/>

3. Dr. Sharma.R.K. & Vaidya Bhagwan Dash (2005), Agnivesa's Caraka Samhita (Vol 5), Chowkhamba Sanskrit Series Office, Varanasi -1.

4. Dr.P. Himasagara Chandra Murthy (2010), Sarangadhara Samhita,

Chowkhamba Sanskrit Series Office, Varanasi.Pg 334.

5. Dr. K.R. Srikantha Murthy (1996), AstangaHridayam (vol 1), krishnadas Academy, pg 238.