



ISSN 2456-3110

Vol 7 · Issue 8

September 2022

Journal of  
**Ayurveda and Integrated  
Medical Sciences**

*www.jaims.in*

**JAIMS**

An International Journal for Researches in Ayurveda and Allied Sciences



**Maharshi Charaka**  
Ayurveda

**Indexed**

## A case report on the management of *Klaibya* with special reference to Arterial Insufficiency Erectile Dysfunction

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### ABSTRACT

*Klaibya* is a *Vikara* of *Karmendriya*, with the involvement of *Mana* and *Jnanendriya*. Aggravated *Vata Dosh*, *Shukrakshaya*, *Shukravaha Srotodusti* and *Mano Dosh* are the prime factors involved in the pathogenesis. And it very well co-relates with that of Erectile Dysfunction. It is a multifactorial condition commonly observed in society. According to the survey conducted by "India Today," the prevalence of the disease is "one in every ten is Impotent in India" Master and Johnson also reported a fear of impotence in all men above 40 years of age. Considering the grave nature of the disease with its higher incidence, it has been selected for the present study to find out a better cure. In the context of *Klaibya*, treatment with *Basti* and *Vrishya Yoga* has been very much highlighted, and it is stated as the best. So, in the present study, *Basti* is selected in the form of *Nirhua Basti*, *Uttar Basti* and *Vrishya Yoga* with *Sishna Lepa*. Also, it is easy for the patient to undergo treatment and carry out their daily routine and offers very limited restrictions to follow.

**Key words:** *Klaibya*, *Uttar Basti*, *Vrishya Yoga*, *Arterial insufficiency dysfunction*, *Case Report*

### INTRODUCTION

Sex is a basic instinct, but sexual behavior is learning ability. *Dharma*, *Artha*, *Kama* and *Moksha* are four objectives (*Purusharthas*) of life mentioned in Ayurveda. The concept of *Kama* reveals that the recreational aspects like pleasure are equally important to its procreation aspects. Healthy sexual

behavior plays an essential role in maintaining the harmony and happiness of marital life. It provides a media to express love, which is the base for all sorts of creative activities.

Erectile dysfunction<sup>[1]</sup> represents a major quality of life-related health problem. WHO defined Erectile Dysfunction as the various ways in which an individual is unable to participate in a sexual relationship as he would wish and include all sorts of disturbances. It can be defined as a man's inability to attain or maintain an erection of sufficient strength to perform the act of intercourse. The basic etiology behind Erectile dysfunction includes psychological, neurological, vascular insufficiency, and diseases like diabetes mellitus and Hypertension etc.

Erectile dysfunction is more prevalent in diabetes mellitus and hypertension patients. Available data indicates that DM and hypertension is a major risk factor for *Klaibya* in men. Several factors affect the sexual function of the patients such as severity and

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Submission Date: 08/07/2022 Accepted Date: 16/08/2022

#### Access this article online

Quick Response Code



Website: [www.jaims.in](http://www.jaims.in)

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duration of disease, age, and medicaments. Several mechanisms have been implicated in the pathogenesis of sexual dysfunction. The pathophysiology of Erectile dysfunction is multifactorial with endothelial, vascular, autonomic, endocrine, and neurogenic factors involves loss of unmyelinated C fibers in the early in the last stage.<sup>[2]</sup> The vascular factors are implicated are atherosclerosis and microangiopathy. Small penis vessels show changes like endothelial proliferation, subintimal fibrosis, hypercholesterolemia. There is impaired relaxation of corpous-cavernosal smooth muscle in response to neural and endothelial derived nitric oxide.

Though both, nonsurgical and surgical treatments are in practice for the management of ED, but each of them is having its own limitations and demerits. The nonsurgical treatment is having poor efficacy with systemic and local side effects. The surgical treatments are associated with complications, change in the shape of the penis and they are unaffordable by the common people. Hence both are having poor acceptance in the society. After knowing the burning nature with higher incidence of the problem and the limitations of the available medications, it is the need of time to find out an effective, safe, and affordable therapy to manage this troublesome problem.

In *Ayurveda*, we may find a ray of light as it is having unique approach to understand the disease. Further in case of management also it is having unique way to treat the suffering not only by means of palliative treatments, but also by means of purification procedures to treat and check the root cause of the disease and minimize the recurrence of the same. Considering the grave nature of the disease though it does not reduce the life expectancy, it has been selected for the present study to find out a better cure. As *Basti*, *Uttar Basti*<sup>[3]</sup> is very much highlighted and praised in the context of *Klaibya* to overcome the aggravated *Vata*, in the present study *Basti*, *Uttar Basti* is selected in the form of *Niruha Basti*, *Uttar Basti* and *Vajeekarana Yoga* with *Sishna Lepa*. *Vajikarana* has been described specially to improve the sexual health to enhance the status of *Sukra* and to please the mind.

## CASE REPORT

A 50-year-old male patient visited to Pandith Taranth Government Ayurvedic Medical College and Hospital, Bellary on 22/02/2022 with a complaint of *Dhwajanuccharya* (Lack of erection), *Lingashaitilya* (Flaccid state of penis), *Mlanasishnata* (Constriction of penis), *Moghasnkalpa Chesta* (Futile sexual act), *Suratashakta* (Incapability to perform sexual act), *Svinna Gatrata* (Excess perspiration), Lack of sexual desire and absence of morning erection since 6 months. Reg no-C.OPD no:2375, Dept. OP NO: 705

### Past history

H/o Type2 Diabetes mellitus since 2 years on Modern medicine.

No H/o of Hypertension/Thyroid dysfunction/surgical history.

### Personal history

H/o of smoking since 20 years

### General Examination

Built: Moderate, Height: 5'10", Weight: 75kg, Nourishment: Moderate, Pulse: 78/min, Blood Pressure: 130/80, Temperature: 98.6F, Respiratory rate: 16/min, Tongue: Clear.

### Systemic Examination

- CNS: Well oriented, conscious.
- CVS: S1 S2 Normal, No added sounds.
- RS: Vesicular breathing, Mild wheezing sounds.
- P/A: Umbilicus centrally placed, Soft, non-tenderness, no organomegaly.
- Uro-genital:
  - Penis: Soft, Non-tender, Glans: Dark pinkish, no ulcer, Urethral meatus: Center, non-discharge, Scrotum: Rugae present, no scar mark, Testis: Bilateral soft, non-tender, Spermatic cord: Soft, movable, non-tender, Femoral region: No swelling, non-tender, Inguinal Region: No swelling, non-tender, and Cremasteric reflex: Present.

### Astha Vidha Pareeksha

- Nadi: Vata Kaphaja, Mutra: 8-10 times a day, 2-3 times/night, Mala: 2/day, Jiwaha: Alipta, Shabda: Prakruta, Sparsha: Anushana Sheeta, Druk: Prakruta, Akriti: Madhyama

### Dashavidha Pareeksha

- Prakriti- Vata Kaphaja, Vikriti- Kapha, Sara- Meda, Samhana- Madhyama, Satmya- Vyamishra, Satwa- Avara, Pramana- Madhyama, Ahara Shakti- Madhyama, Vyayama Shakti- Madhyama, Vaya- Madhyama

### Investigations

Routine investigation such as CBC, ESR, PT-APTT, RBS, HIV, HBsAg along with this Serum testosterone, Serum FSH, Serum LH, Serum prolactin, TSH and Semen analysis. Sonography investigations are Scrotal doppler and Penile doppler are done.

## MATERIALS AND METHODS

### Intervention

- a) *Deepana Pachana* and *Kosthashodhana* with *Hareetakyadi Yoga*<sup>[4]</sup> 4 gm before food thrice a day with *Sukhooshnodaka*, for 5 days.

**Table 1: Observations of *Deepana Pachana* and *Kosthashodhana***

| Day | Date       | Observations  |
|-----|------------|---|
| 01  | 01/03/2022 | Vata, Mutra, Pursiha Visarga, Diptaagni                                     |
| 02  | 02/03/2022 | Vata, Mutra, Pursiha Visarga, Diptaagn, Ruchi                               |
| 03  | 03/03/2022 | Vata, Mutra, Pursiha Visarga, Diptaagn, Ruchi, Angalagavata.                |
| 04  | 04/03/2022 | Vata, Mutra, Pursiha Visarga, Diptaagn, Ruchi, Angalagavata, Udgara Shuddi, |
| 05  | 05/03/2022 | Vata, Mutra, Pursiha Visarga Diptaagn, Ruchi, Angalagavata, Udgara Shuddi,  |

### b) Niruha Basti

**Table 2: Niruha Basti ingredients and their quantity.**

| Ingredients of Niruha Basti  | Pramana |
|--|---------|
| Saindhava Lavana   | 15gm    |
| Madhu  | 80ml    |
| Sneha - Ashwagandha Taila <sup>[6]</sup>   | 80ml    |
| Kalka - Shatapushpa Churna (15gm) + Madanaphala Churna(3gm)                                | 18gm    |
| Kvatha Dravya - Ashwagandhadi kashyam (Ashwagandha, Shatavari, Kustha, Jatamansi, Brihati) | 480ml   |

| Date                   | 06/03/2022              | 07/03/2022                                | 08/03/2022                               |
|------------------------|-------------------------|---|--|
| Basti Pranidana Kala   | 9:00 am                 | 9:10 am                                   | 9:50 am                                  |
| Basti Pratygamana Kala | 9:10 am                 | 9:15 am                                   | 10:00 am                                 |
| Retention time         | 10 min                  | 05 min                                    | 10 min                                   |
| Observations           | Angalaghwam, Deeptiagni | Anghalagwam, Deeptiagni, Indriya Prasada. | Anghalagwam, Deeptiagni, Indriya Prasada |

### c) Uttar Basti

*Uttar Basti* given with *Murchita Tila Taila*<sup>[7]</sup> 40ml fixed dose for 3 consecutive days.

And repeated the same after the interval of 3 days.

**Table 3: 1<sup>st</sup> Sitting Uttar Basti**

| Date                       | 09/03/2022       | 10/03/2022       | 11/03/2022       |
|----------------------------|------------------|------------------|------------------|
| Uttar Basti Pranidana Kala | 2:32 pm          | 2:35 pm          | 2:50 pm          |
| Time taken for Uttar       | 2 min 10 seconds | 1 min 10 seconds | 1 min 20 seconds |

|   |  |                  |   |             |  |             |
|---|--|------------------|---|-------------|--|-------------|
| Basti Netra insertion                           |  |                  |   |             |  |             |
| Time taken for injecting Uttar Basti Dravya     | 2 min 30 seconds   | 2 min 10 seconds | 2 min   |             |  |             |
| Time taken for Uttar Basti Netra removal        | 1 min 10 seconds   | 1 min            | 1 min 10 seconds  |             |  |             |
| Length of Uttar Basti Catheter inserted (in cm) | 23 cm  | 28 cm            | 28 cm   |             |  |             |
| Basti Pratyagama na Kala                        | 5:10 pm  | 7:10 pm          | 5:30 pm   |             |  |             |
| Retention Time                                  | 2 hours 38 mins  | 4 hours 35 mins  | 2 hours 40 mins   |             |  |             |
| Observations                                    | Manoprasada, Indriya Prasada, Smyak Nidra, Mild Erection + |                  | Manoprasada, Indriya Prasada, Smyak Nidra, Mild erection+, Sexual desire+ |             | Manoprasada, Indriya Prasada, Smyak Nidra, Morning erection+, Sexual desire+ |             |
|   | Bef<br>ore<br>UB   | After<br>UB      | Befor<br>e UB   | After<br>UB | Befor<br>e UB  | After<br>UB |
| Pulse/min                                       | 74   | 76               | 72  | 76          | 72   | 72          |
| Blood pressure (mmhg)                           | 120/80   | 120/80           | 110/70  | 120/80      | 125/78   | 125/76      |
| Measurement of Penis in cm (In Flaccid state)   | 1 <sup>st</sup> Day  |                  | 2 <sup>nd</sup> Day   |             | 3 <sup>rd</sup> Day  |             |
| Length  | 9 cm   |                  | 10 cm   |             | 10 cm  |             |

|               |       |         |         |
|---------------|-------|---------|---------|
| Circumference | 10 cm | 10.2 cm | 10.2 cm |
|---------------|-------|---------|---------|

Table 4: 2<sup>nd</sup> Sitting Uttar Basti

| Date  | 15/03/2022   | 16/03/2022  | 17/03/2022   |             |               |             |
|---|--|---|--|-------------|---------------|-------------|
| Uttar Basti Pranidana kala                      | 2:59 pm  | 2:42 pm   | 2:39 pm  |             |               |             |
| Time taken for Uttar Basti Netra insertion      | 2 min  | 1 min 30 seconds  | 1 min 20 seconds   |             |               |             |
| Time taken for injecting Uttar Basti Dravya     | 4 min seconds  | 2 min 10 seconds  | 2 min 20 seconds   |             |               |             |
| Time taken for UB Netra removal                 | 1 min 10 seconds   | 1 min   | 1 min  |             |               |             |
| Length of Uttar Basti Catheter inserted (in cm) | 25 cm  | 25 cm   | 24.2 cm  |             |               |             |
| Basti Pratyagama na Kala                        | 8:10 pm  | 7:10 pm   | 9 pm   |             |               |             |
| Retention Time                                  | 5 hours 11 mins  | 4 hours 28 mins   | 6 hours 21 mins  |             |               |             |
| Observations                                    | Manoprasada, Indriya Prasada, Smyak Nidra, Morning erection +, Penile hardness+. | Manoprasada, Indriya Prasada, Smyak Nidra, Morning erection+, Sexual desire+ Penile hardness+ | Manoprasada, Indriya Prasada, Smyak Nidra, Morning erection+, Sexual desire+, Penile hardness+ |             |               |             |
|   | Befor<br>e UB  | After<br>UB   | Befor<br>e UB  | After<br>UB | Befor<br>e UB | After<br>UB |

|   |                     |        |                     |        |                     |        |
|---|---------------------|--------|---------------------|--------|---------------------|--------|
| Pulse/min                                     | 90                  | 88     | 74                  | 76     | 72                  | 74     |
| Blood pressure mmhg                           | 120/80              | 130/80 | 123/75              | 126/83 | 126/79              | 137/88 |
| Measurement of Penis in cm (In Flaccid state) | 1 <sup>st</sup> Day |        | 2 <sup>nd</sup> Day |        | 3 <sup>rd</sup> Day |        |
| Length  | 10.5 cm             |        | 10.5 cm             |        | 10.8 cm             |        |
| Circumference                                 | 10.2 cm             |        | 10.5 cm             |        | 10.5 cm             |        |

Table 5: 3<sup>rd</sup> Sitting *Uttar Basti*

| Date   | 21/03/2022  | 22/03/2022  | 23/03/2022  |
|--|---|---|---|
| <i>Uttar Basti Pranidana kala</i>                      | 3:31 pm   | 3:18 pm   | 3:15 pm   |
| Time taken for <i>Uttar Basti Netra</i> insertion      | 1 min 55 sec  | 1 min 6 seconds   | 1 min 10 seconds  |
| Time taken for injecting <i>UB Dravya</i>              | 4 min seconds   | 2 min 10 seconds  | 2 min 30 seconds  |
| Time taken for <i>Uttar Basti Netra</i> removal        | 55 seconds  | 50 seconds  | 1 min 10 seconds  |
| Length of <i>Uttar Basti</i> Catheter inserted (in cm) | 28.5 cm   | 30.5 cm   | 26 cm   |
| <i>Basti Pratyagana Kala</i>                           | 8:00 pm   | 8:00 pm   | 9 pm  |
| Retention Time   | 4 hours 29 mins   | 4 hours 42 mins   | 5 hours 45 mins   |
| Observations   | <i>Manoprasada, Indriya Prasada, Smyak Nidra, Morning</i> | <i>Manoprasada, Indriya Prasada, Smyak Nidra, Morning</i> | <i>Manoprasada, Indriya Prasada, Smyak Nidra, Morning</i> |

|   |  |          |  |          |   |          |
|---|--|----------|--|----------|---|----------|
|   | erection +, Penile hardness+. Sexual desire+ |          | erection+, Sexual desire+ Penile hardness+ |          | erection+, Sexual desire+, Penile hardness+ |          |
|   | Before UB                                    | After UB | Before UB                                  | After UB | Before UB                                   | After UB |
| Pulse/min                                     | 100  | 88       | 90   | 84       | 80  | 79       |
| Blood pressure mmhg                           | 130/84                                       | 137/88   | 118/73                                     | 120/78   | 130/80                                      | 117/78   |
| Measurement of Penis in cm (In Flaccid state) | 1 <sup>st</sup> Day                          |          | 2 <sup>nd</sup> Day                        |          | 3 <sup>rd</sup> Day                         |          |
| Length  | 10.5 cm                                      |          | 10.5 cm                                    |          | 11 cm                                       |          |
| Circumference                                 | 10.5 cm                                      |          | 10.5 cm                                    |          | 10.5 cm                                     |          |

**Vrishya Yoga:** After completion of *Uttar Basti* procedure oral *Vrishya Yoga* is started.

The *Vrishya Yoga - Kapikacchu Ghana Vati*<sup>[8]</sup> 500mg with *Sukoshna Dugda* morning and night before food is administered for 25 days. Along with this *Sishna Lepa - Aruskhara Lepa*<sup>[9]</sup> (external application) is advised to apply on penis for 7 days.

Image 1: Pictorial presentation of preparation of *Niruha Basti* and *Uttar Basti* instruments.





Image 2: Pictorial presentation of procedure of *Uttar Basti*



**Assessment**

**Subjective Parameter**

| 1. | <i>Lingashaitilya</i>  | Grading | BT | DT | AT |
|----|--|---------|----|----|----|
|    | No <i>Lingashaitila</i> at all, Normal sexual act                      | CS0     |    |    | √  |
|    | Mild, rare <i>Lingashaitila</i> without disturbance to sexual act      | CD1     |    | √  |    |
|    | Moderate and often <i>Lingashaitila</i> Moderate problem to sexual act | CD2     |    |    |    |

|           |  |     |   |   |   |
|-----------|--|-----|---|---|---|
|           | Severe <i>Lingashaitila</i> always interference with sexual act              | CD3 | √ |   |   |
| <b>2.</b> | <b><i>Mlanasishnata</i></b>  |     |   |   |   |
|           | No <i>Mlanasishnata</i> at all, Normal sexual act                            | CS0 |   |   | √ |
|           | Mild and rare <i>Mlanasishnata</i> without disturbance to sexual act         | CD1 |   | √ |   |
|           | Moderate and often <i>Mlanasishnata</i> Mild problem to sexual act           | CD2 |   |   |   |
|           | Severe and always <i>Mlanasishnata</i> , always interference with sexual act | CD3 | √ |   |   |
| <b>3.</b> | <b><i>Moghasankalpachesta</i></b>  |     |   |   |   |
|           | No <i>Moghasankalpachesta</i> at all, Normal sexual act                      | CS0 |   | √ | √ |
|           | Mild <i>Moghasankalpachesta</i> , mild disturbance to sexual act             | CD1 |   |   |   |
|           | Moderate <i>Moghasankalpachesta</i> Moderate disturbance to sexual act       | CD2 |   |   |   |
|           | Severe <i>Moghasankalpachesta</i> Always disturbance sexual act              | CD3 | √ |   |   |
| <b>4.</b> | <b><i>Dhwajanuccharya</i></b>  |     |   |   |   |
|           | No <i>Dhwajanuccharya</i> at all, Normal sexual act                          | CS0 |   | √ | √ |
|           | Mild, rare <i>Dhwajanuccharya</i> without disturbance to sexual act          | CD1 |   |   |   |
|           | Moderate and often <i>Dhwajanuccharya</i> Moderate problem to sexual act     | CD2 |   |   |   |
|           | Severe <i>Dhwajanuccharya</i> always interference with sexual act            | CD3 | √ |   |   |

|  |     |   |   |   |
|--|-----|---|---|---|
| <b>5. Svinnagatarata</b>   |     |   |   |   |
| No <i>Svinnagatarata</i> at all, Normal sexual act                   | CS0 |   |   | √ |
| Mild, rare <i>Svinnagatarata</i> , after sexual act                  | CD1 |   | √ |   |
| Moderate and often <i>Svinnagatarata</i> During and after sexual act | CD2 |   |   |   |
| Severe <i>Svinnagatarata</i> always interference with sexual act     | CD3 | √ |   |   |
| <b>6. Mukhashosha</b>  |     |   |   |   |
| No <i>Mukhashosha</i> at all, Normal sexual act                      | CS0 |   |   | √ |
| Mild, rare <i>Mukhashosha</i> , after sexual act                     | CD1 |   | √ |   |
| Moderate and often <i>Mukhashosha</i> During and after sexual act    | CD2 |   |   |   |
| Severe <i>Mukhashosha</i> always interference with sexual act        | CD3 | √ |   |   |

| 1. Sexual Desire  | Grading | BT | DT1 (27 <sup>th</sup> day) | AT |
|---|---------|----|----------------------------|----|
| No sexual desire at all                                     | 0       | √  |                            |    |
| Lack of Sexual desire                                       | 1       |    |                            |    |
| Sexual Desire but no activity                               | 2       |    |                            |    |
| Sexual Desire only on demand of partner                     | 3       |    |                            |    |
| Normal Sexual desire  | 4       |    | √                          | √  |
| <b>2. Erection</b>  |         |    |                            |    |
| No Erection by any method, always interfere with sexual act | 0       | √  |                            |    |
| Erection only after manipulation, but unable to penetrate,  | 1       |    |                            |    |

|   |   |   |   |   |
|---|---|---|---|---|
| Severe disturbance in sexual act  |   |   |   |   |
| Erection but unable to penetrate, Moderate disturbance in sexual act                        | 2 |   |   |   |
| Erection with occasional failure, Mild disturbance in sexual act                            | 3 |   |   |   |
| Erection whenever desired, Normal sexual act  | 4 |   | √ | √ |
| <b>3. Rigidity</b>  |   |   |   |   |
| Total loss of rigidity unable to maintain erection and initiate the act                     | 0 | √ |   |   |
| Loss of rigidity, unable to maintain erection but can initiate the sexual act               | 1 |   |   |   |
| Loss of rigidity, able to maintain the erection but unable to continue sexual act till last | 2 |   |   |   |
| Some loss of rigidity but can maintain erection and continue sexual act till last           | 3 |   |   |   |
| Proper rigidity to maintain erection and continue the act till last                         | 4 |   | √ | √ |
| <b>4. Ejaculation</b>   |   |   |   |   |
| Anejaculation   | 0 | √ |   |   |
| Ejaculation during foreplay   | 1 |   |   |   |
| Ejaculation just before penetration   | 2 |   |   |   |
| Ejaculation with own satisfaction   | 3 |   |   |   |



|           |  |   |   |   |   |
|-----------|--|---|---|---|---|
|           | Ejaculation with own and partner satisfaction                        | 4 |   | √ | √ |
| <b>5.</b> | <b>Performance Activity</b>  |   |   |   |   |
|           | No anxiety, Normal performance activity in sexual act                | 0 |   | √ | √ |
|           | Anxiety that hampers the Mild performance activity in sexual act     | 1 |   |   |   |
|           | Anxiety that hampers the Moderate performance activity in sexual act | 2 |   |   |   |
|           | Anxiety that hampers the Severe performance activity in sexual act   | 3 |   |   |   |
|           | Anxiety that hampers the Severe performance activity in sexual act   | 4 | √ |   |   |

**Objective Parameter**

| Hormone test                      | BT (03/03/2022) | DT (24/03/2022) | AT (21/04/2022) |
|-----------------------------------|-----------------|-----------------|-----------------|
| Serum Testosterone                | 276.70 ng/dl    | 390.0 ng/dl     | 435.92 ng/dl    |
| i. Testosterone Chemiluminescence |                 |                 |                 |
| ii. Sex Hormone Binding Globulin  | 20.30 Nmol/L    | 25.43 Nmol/L    | 28.74 Nmol/L    |
| iii. Free Testosterone            | 7.81 ng/dl      | 8.26 ng/dl      | 9.83 ng/dl      |
| iv. Bioavailable Testosterone     | 151.0 ng/dl     | 207.0 ng/dl     | 251.0 ng/dl     |
| v. Serum Prolactin                | 1.97 ng/ml      | 3.46 ng/ml      | 6.0 ng/ml       |

| Semen Analysis | BT               | DT (24/03/2022) | AT (21/04/2022) |
|----------------|------------------|-----------------|-----------------|
| Semen Volume   | Absence of Semen | 2.5 ml          | 1.5 ml          |

|                    |  |   |   |
|--------------------|--|---|---|
| Fructose           |  | Present                                     | Present                                     |
| Reaction           |  | Alkaline                                    | Alkaline                                    |
| Liquification time |  | 20 minutes                                  | 20 minutes                                  |
| Count              |  | 65 millions/ml                              | 60 millions/ml                              |
| Motility           |  | 50 % Actively Motile<br>10% Sluggish Motile | 50 % Actively Motile<br>10% Sluggish Motile |
| Morphology         |  | Abnormal Forms 30%                          | Abnormal Forms 30%                          |

**Self-Assessment done through as per International Index of Erectile Dysfunction Questionnaire Before and After Treatment**

|  | Score                 |                              |                      |                              |                         | B<br>T | A<br>T |
|--|-----------------------|------------------------------|----------------------|------------------------------|-------------------------|--------|--------|
|  | 1                     | 2                            | 3                    | 4                            | 5                       |        |        |
| Over the past 6 months:  |                       |                              |                      |                              |                         |        |        |
| How do you rate your confidence that you could get & keep an erection ?                    | Very low              | Low                          | Moderate             | High                         | Very high               | 0<br>1 | 0<br>5 |
| When you had erection with sexual stimulation, how often was your erection hard enough for | Almost never or never | Much less than half the time | Almost half the time | Much more than half the time | Almost always or always | 0<br>1 | 0<br>5 |

|  |                       |                              |                      |                              |                         |                |                |
|--|-----------------------|------------------------------|----------------------|------------------------------|-------------------------|----------------|----------------|
| penetration?   |                       |                              |                      |                              |                         |                |                |
| During sexual intercourse how often able to maintain to erection after you had penetrated your partner?    | Almost never or never | Much less than half the time | About half the time  | Much more than half the time | Almost always or always | 0<br>1         | 0<br>4         |
| During sexual intercourse how difficult was it to maintain your erection to the completion of intercourse? | Extremely difficult   | Very difficult               | Difficult            | Slightly difficult           | Not difficult           | 0<br>1         | 0<br>5         |
| When you attempted sexual intercourse how often was it satisfactory for you?                               | Almost never or never | Much less than half the time | Almost half the time | Much more than half the time | Almost always or always | 0<br>1         | 0<br>4         |
| <b>Total Score</b>   |                       |                              |                      |                              |                         | <b>0<br/>5</b> | <b>2<br/>3</b> |

IIEF-5, Score is the sum of questions 1 to 5.  
 Before treatment, the score is 5 and the score after treatment is 23.

Image 3: Penile Doppler report showing before treatment- Erectile dysfunction due to Arterial insufficiency

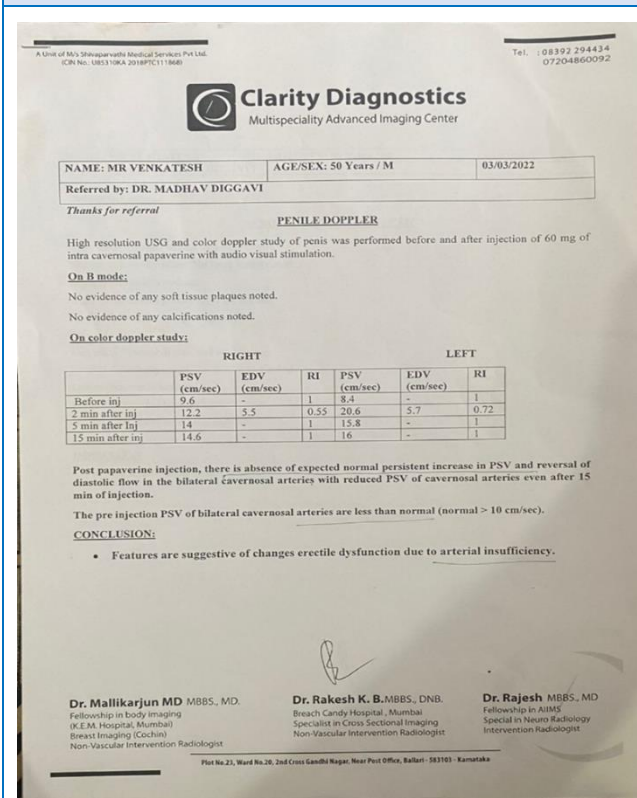


Image 4: Penile doppler report showing After treatment - Normal doppler study.

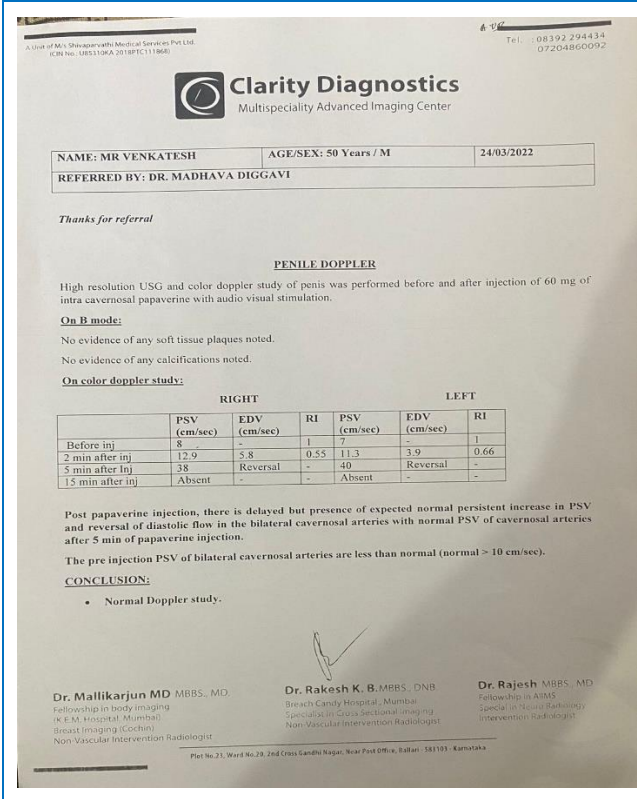


Image 5: During treatment - After *Deepana Pachana, Niruha Basti* and *Uttar Basti*.

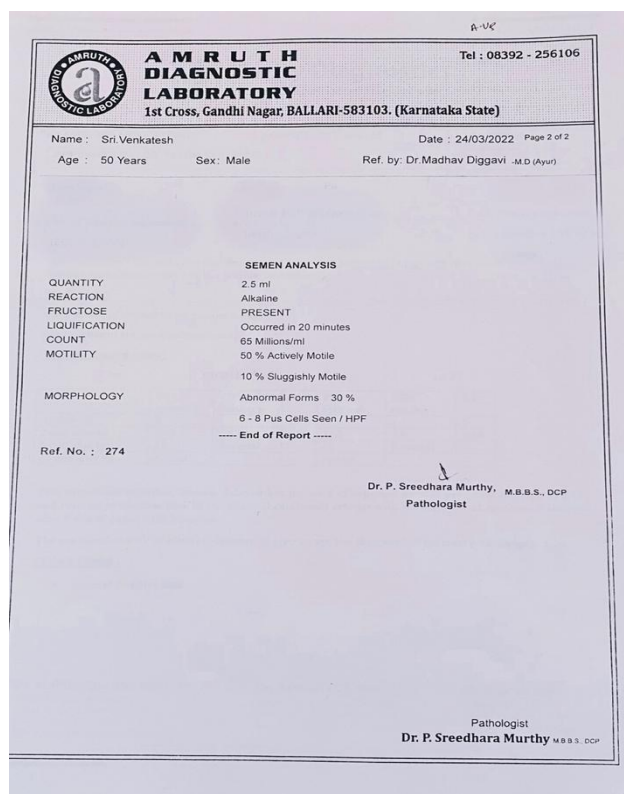
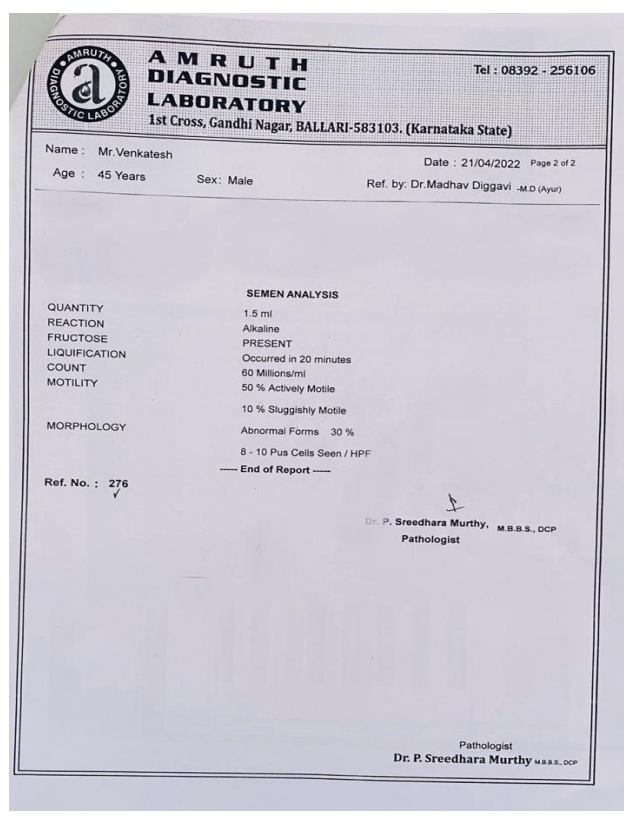


Image 6: After *Vrishya Yoga - Kapikacchu Ghana Vati*



## RESULT

Significant results were found in *Dhwajanuccharya, Mlanasishnata, Moghasankalpachesta, Svinnagatrata,* and *Mukashosa*. And observed improvement in sexual desire, Erection, Increased penile rigidity and reduced performance anxiety. In objective parameter Serum Testosterone and Serum prolactin were increased after the *Uttar Basti* and *Vrishya Yoga*. Before treatment, the penile doppler report showed absence of expected normal persistent increase in PSV and reversal of diastolic flow in the bilateral cavernosal arteries with reduced PSV of cavernosal arteries even after 15 min of injection which suggest Erectile dysfunction due to Arterial insufficiency. After intervention significant change in Penile doppler is observed. That is presence of expected normal persistent increase in PSV and reversal of diastolic flow in the bilateral cavernosal arteries with normal PSV of cavernosal arteries after 5 min of injection which means normal doppler study. And observed a significantly increased in Length of the Penis in a flaccid state from 9cm to 11cm, and in circumference from 10cm to 10.5cm.

## DISCUSSION

*Kayachikitsa* is the potential applied practical up to date branch of *Ashtanga Ayurveda* that deals with the management of complex diseases along with genetic disorders, internal medicine, endocrinology, eugenesis, geriatrics, sexology, and psychiatry. When man started his livelihood concurrently his sexual behaviour and sexual dysfunctions started. *Klaibya* is an umbrella term classical and explain in detail in *Ayurveda* literature. The literal meaning of the term *Klaibya* includes impotence, eunuch, unmanliness, weakness, etc. It is a *Karmendriya Vikara* along with the involvement of *Ubhaya-Indriya Manas*. *Klaibya* is told due to *Reto Dusti*.

Erectile dysfunction includes all sorts of disturbances during the coital performance. It refers to problems during any phase of the sexual response cycle that prevents the man from experiencing satisfaction from the activity. Erectile dysfunction denoting the inability of a man to achieve an erection or problem with emission, ejaculatory dysfunction. These wide range of

disorder pertaining to the male sexual response ultimately converts into male sterility also. In Arterial insufficiency erectile dysfunction is due to Atherosclerosis, the condition in which a penile artery wall thickness as the result of a build-up fatty materials such as cholesterol affecting the penile arterial blood vessel, a chronic inflammatory response in the walls of arteries. Even with the advent of modern treatment, the success rate for Erectile dysfunction is very low. Atherosclerosis can be taken as *Sroto Marga Nirrodhana*, With *Vrushya Yogas, Basti, Uttar Basti* etc. are added and can be given in Seminal Disorders like *Klaibya*. In *Klaibya* there is a definite derangement of *Apana Vayu*. The *Sroto Dusti* is *Atipravrutti* and *Sanga*. This *Apana Vriddhi* in its own *Sthana* needs a strong treatment to cure it as, *Dosha* aggravated in its own *Sthana* is naturally difficult to cure. Hence, *Kosthashodhana, Basti, and Uttar Basti* is the best way ahead to cure *Klaibya*.

*Hareetakyadi Yoga, Ashwagandhadhi Niruha Basti, Murchita Tila Taila Uttar Basti* and *Kapikacchu Ghana Vati* with *Arsuhkara Lepa* are used. Intervention has been found to be effective in breaking the chain reaction and proved to have hydroxyl radical scavenging activity. Thus, helpful in cleansing the vessels and the elimination of doshas corrects the derangement of *Apana Vayu*. Owing the properties removes the blocks in the penile blood vessels and making the circulation of blood and mitigates the *Amadosha* which is seen in arterial insufficiency acts as anti-atherosclerotic property. Presence of tannin, phenols, flavonoids and terpenoid helps in the breakdown of the glucose and facilitate the absorption of free glucose by the cells due to its cleansing properties which does *Srotoshodhana* and *Avarnahara*. The L-dopa and its metabolite dopamine stimulate the hypothalamus and forebrain to secrete GnRH. Upregulates the anterior pituitary gland to secrete FSH and LH causing increased synthesis of testosterone by the Leydig cells of the testis. Increased level of dopamine in the brain increase in sexual drive, performance activity and accomplishes reduction of psychological stress that is reducing anxiety. Dopamine stimulates the Nitric oxide which does the relaxation of

penile smooth muscle and increase the penile blood flow. The *Arushkara Lepa* owing properties like *Tikhsna, Sukshma* and *Ushna Virya* pacify *Vata Dosha* and acts as *Swedana* which does the *Srotomukha Vishodhana* and relaxes the cavernosal muscles and dilation of the penile vessel which increases the blood capacity. Thus, it increases the rigidity. *Lepa* is a *Vrishya, Ggrahi*, that increases sex drive, performance activity and improves erection.

## CONCLUSION

Arteriogenic erectile dysfunction caused by the insufficient arterial blood supply to the cavernous bodies regardless of the arterial disease or abnormality responsible for the insufficiency. The subject shows the erectile dysfunction due to arterial insufficiency in penile doppler report. In Contemporary science penile revascularization and penis arterial-venous surgery is done in vascular erectile dysfunction. But in classics there are many treatment modalities which can be practised for *Klaibya*, but *Shodhana, Niruha Basti, and Uttar Basti* followed by *Vrishya Yoga* is proposed in vasculogenic erectile dysfunction. The selected intervention counteracts the aggravated *Vata* in erectile dysfunction, clears the *Shukravaha Sroto Dusti* and improves the sexual arousal, thus can be used as good intervention in treating the erectile dysfunction due to Arterial insufficiency. Showed a highly significant increase in erectile function, Penile rigidity, Ejaculatory function, and sexual desire. It has also shown a significant increase in total Sperm count, Serum Testosterone, Serum Prolactin, and IIEF score in the patient. And showed the significant result in penile doppler.

## DECLARATION OF PATIENT CONSENT

The author certifies that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images, reports, and other clinical information to be reported in the journal.

## REFERENCES

1. Peter E Lipsky Harrison's Principles of internal medicine, vol.1, 16th Edition, Editor Jean D. Wilson et al., Health Professions Division, Mc.Graw Hill, inc 2002, pp272.
2. Peter E Lipsky Harrison's Principles of internal medicine, vol.1, 16th Edition, Editor Jean D. Wilson et al., Health Professions Division, Mc.Graw Hill, inc 2002, pp273.
3. Acharya Agnivesha. Caraka Samhita. Ayurveda Dipika Commentary by Cakrapanidatta, Edited by Siddhi Nandan Mishra Acharya, Varanasi: Chaukamba Orientalia; First Edition 2009, Reprint Edition 2018, Siddhi Sthana, 9th Chapter, Verses 50-57, pp1078.
4. Acharya Agnivesha. Caraka Samhita. Ayurveda Dipika Commentary by Cakrapanidatta, Edited by Siddhi Nandan Mishra Acharya, Varanasi: Chaukamba Orientalia; First Edition 2009, Reprint Edition 2018, Chikitsa Sthana, 1st Chapter, Verses 25-25, pp5.
5. Acharya Agnivesha. Caraka Samhita. Ayurveda Dipika Commentary by Cakrapanidatta, Edited by Siddhi Nandan Mishra Acharya, Varanasi: Chaukamba Orientalia; First Edition 2009, Reprint Edition 2018, Siddhi Sthana, 3<sup>rd</sup> Chapter, Verses 16-19, pp981.
6. Acharya Govind Dasji Bhisagratna Bhisajya Ratnavali, Commented upon by Vidya shri ambika datta shastri by Dr. Kanjiv Loachan First Edition 2006, Volume 3rd verses 355-356, pp558.
7. Acharya Govind Dasji Bhisagratna Bhisajya Ratnavali, Commented upon by Vidya shri ambika datta shastri by Dr. Acharya Kaviraj 10<sup>th</sup> Edition 2010, 5/1286-1287, pp-1312.
8. Acharya Sarngadhara, Sarngadhara-Smhita, Madhyama Khanda, English Translation, Edited by Prof. K.R.Srikantha Murthy, Chaukhambha Orientalia, Varanasi: Reprint 2009, 7th Chapter, Verses 1-3, pp101.
9. Acharya Kalyanmalla, Ananga-Ranga, By A.F.F & B.F.R. Reprint MDCCCLXXXV, Chapter 6th, 4th prayoga pp47.

**How to cite this article:** Pramod, Madhava Diggavi, Rakesh K.B. A case report on the management of Klaibya with special reference to Arterial Insufficiency Erectile Dysfunction. J Ayurveda Integr Med Sci 2022;8:131-142.

**Source of Support:** Nil, **Conflict of Interest:** None declared.

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