Evaluate the Combined Efficacy of Virechanottara, Murchita Tilatailayuktha Uttarabasti Followed by Kokilakshadi Churna in the Management of Klaibya W.S.R to Erectile Dysfunction - A Single Case Study

Dr. Uday Kumar V K¹, Dr. Rajesh Sugur², Dr. Doddabasayya³, Dr. Shilpashree. K⁴

¹Final Year PG Scholar, Department of PG Studies in Panchakarma,

²Professor and Head, Department of PG Studies in Panchakarma,

³Professor, Department of PG Studies in Panchakarma,

⁴Assistant Professor, Department of PG Studies in Panchakarma,

^{1,2,3,4}Taranath Govt Ayurvedic Medical College and Hospital, Ballari, Karnataka, India

ABSTRACT

Background: Klaibya is one among the shukrapradoshaja vikara¹ occurs due to vitiation of shukra dhatu, results into unable to perform sexual act and unable to produce progeny. Charakacharya mentioned samanya klaibya lakshanas *as Sankalpapravano nityam priyaam vashyamapi streeyam, lingasaithilya, svasarta, swinnagatrata, moghasankalpachesta, mlanashishnata and nirbeeja². Erectile dysfunction (ED) is inability to achieve or maintain an erection long enough to engage in sexual intercourse. It has connection with psychological problems. Incidence might project significantly to over 320 million by the year 2025³. Contemporary Medicine had limited role in the management.*

Objectives: To evaluate the combined efficacy of *Virechanottara*, *Murchita Tilatailayukta uttarabasti* & *Kokilakshadi churna* in the management of *Klaibya*.

Methods: The present study subject was given with Shunti churna for amapachana followed by snehapana with murchita Tilataila in arohana krama until samyak snigdha lakshanas were attained, sarvanga abhyanga with Murchita Tila Taila & bashpa sweda was carried out for 3days then Mridu Virechana is administered with Murchita erandataila, after samsarjana karma Uttara Basti is administered for 9 days alternatively (3 sitting) followed by kokilakshadi churna is used as shamanaoushadi for 15 days.

Results: Moderate improvement in mlana shishnata and linga shaitilya, orgasm. Testosterone, FSH, LH, IIEF shown moderate improvement.

Conclusion: Thus, it can be stated that virechanottara, murchita tilatailayuktha uttarabasti is effective in managing dhatukshyajanya Klaibya.

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KEYWORDS: Klaibya, Erectile Dysfunction, Snehapana, Virechana, Uttara Basti, Muchita tila tailam, Muchita Eranda tailam, Kokilakshadi Churna

INTRODUCTION

Kama is one among the *Purushartha*. Among the Trayopastambha Abrahmcharya is considered as one. In Ayurveda it can be correlated to Klaibya. It is included under upadrava of shatra chikithsa in Astanga sangraha, Acharya Indu told medrasya astabdatha means lack of penile rigidity⁴. Acharya

Susrutha, Yogaratnakara, Bhavaprakasha mentioned about the manasika klaibya, but Acharya Charaka did not mentioned about manasika klaibya. Stable and happy mind is prime factor for restore and maintain adequate erection.

Erectile dysfunction, is the inability to achieve or maintain an erection long enough to engage in sexual intercourse. ED can affect any stage of sex. Its incidence increases drastically from about 6% in the age group 20-29 years, to 50-70% in the age group 40- 79 years. Its incidence has been projected to increase significantly to over 320 million. But due unhealthy life style, food and habits ED now can be seen in below 50 years also. Contemporary science has its own limitations in the management of ED. Sildenafil and PDE type 5 inhibitors are choice of pharmacotherapy has plenty of adverse effect like nausea, headache, dyspepsia, dizziness and there is no satisfactory result even after long time usage. Surgical treatments are associated with complications, change in the shape of the penis and they are unaffordable by the common people, So Ayurveda has wide scope in the management Klaibya. It is corrected by nidana parivarjana and shodhana by timely elimination of Dosha by using Vrishya drugs as mentioned in Ayurveda texts having Kinchit Madhura, snigdha, Jeevaniya, Brimhaniva and Mano harshana drugs in Vajikarana Prakarana⁸.

Klaibya is Vata Pradhana tridoshaja vyadhi. In vatasyopakrama mridu samshodhana⁹ as Mridu virechana incorporated with Murchita Eranda Taila due to its Anulomana karma, Adhobhaga doshara action¹⁰,Uttarabasti is a variant of Panchakarma with its shresta guna. Medicated aoushadhi is administered into urinary bladder of male. In our classics Uttar basti can also be considered as the prime line of treatment in the case of Klaibya; it deliberates to overcome the dhatu kshaya, shukra kshaya and jara-avastha. With the use of Uttar basti seems to be more effects on erectile dysfunction that may help in process of erection. As in all most all our classics it is mentioned that, Tila tailam is a Snigdha, ushna, Sresta VataKapha hara, Vrushya,

hence Muchita tila tailam selected for uttara basti karma. Samshodhana; prior to Vajikarna therapies for better action of Vajikarna dravya. Kokilaksha have Madura rasa, Sheeta virya, Madhura Vipaka & guru, snigdha, picchila guna. Acts as vatahara, Vrishya. As explained in Ananga Ranga, a person after intake of Kokilakshadi Churna gets intense penile erection.

Mlana sisnata(Penile Erection):

Erection whenever desired - 0
Erection in 75% of the encounters - 1
Erection in 50% of the encounters - 2
Erection in 25% of the encounters - 3
Only slight erection after severe manipulation - 4
No erection at all - 5

Linga Saithilya (Penile Rigidity):

Proper stiffness to maintain erection and to continue the sexual intercourse till last - 0

Hence an attempt is made to manage single case study. So to overcome these I have selected Virechanottara Murchita Tila Taila yuktha Uttara Basti. followed by Kokilakshadi Churna Shaman Aushadi in Klaibya w.r.s to Erectile Dysfunction. Klaibya is Vatapradhan tridoshaja vyadi, so Virechana karma is selected as it is mentioned under one of the vatasyaupakrama as mridu shodhana, it is having tridoshara, srotosuddi, anulomana and Indriyaprasada property. Uttara Basti with Murchita Tila taila prime line of treatment in the case of *Klaibya*; it deliberates to overcome the dhatu kshaya, shukra kshaya and jara-avastha. Tila tailam is having Snigdha, ushna, Sresta VataKapha hara, Vrushya action. Kokilaksha have Madura rasa, Sheeta virya, Madhura Vipaka & guru, snigdha, picchila guna. As because of its of madhura rasa and Madura vipaka, it also acts as vatahara and Vrishya action. Considering these factors this study is intended to compile, study and analyse literature regarding Klaibya and to evaluate the efficacy of Murchita Tila Taila yuktha Uttara Basti followed by Kokilakshadi Churna shaman aushadi in the Management of Klaibya (Erectile Dysfunction).

MATERIALS AND METHODOLOGY:

Case- A 49year old male patient came to TGAMC Panchakarma OPD with complaints of Linga saithilya, Mlana shishnuta, mogasankalpa chestata since 5 year, Shwasarthata since 1 year. With known case of type 2 diabetes mellites, Treated with one sitting of virechana, 3 sittings of uttarabasti followed by kokilakshadi churna has shown significant result.

Inclusion criteria: Diagnosed subjects of Erectile dysfunction.

Exclusion criteria: Subject with disorders in sexual organs e.g. Hypospadias, Epispadias, Reproductive Tract Infections and Gonorrhoea, Genital Herpes, Syphilis and other Sexually Transmitted Diseases.

Study design: Observational single case study with pre-test and post-test design.

Total Study Duration - 54days

Subjective criteria : Criteria for assessment of Erectile Dysfunction.

Some loss of stiffness but can maintain the erection and continue the act till last - 1 Some loss of stiffness, able to maintain erection, but unable to continue act till last - 2 Loss of stiffness, can initiate sexual act but unable to maintain erection till last - 3 Total loss of stiffness and unable to initiate the sexual intercourse - 4

Criteria for assessment of other sexual parameters Nirbija (Ejaculation):

Ejaculation during sexual intercourse > 60 sec with at least 10 or > 10 pelvic thrusts - 0

Ejaculation during sexual intercourse < 60 sec with at least 5-10 pelvic thrusts - 1

Ejaculation during sexual intercourse <30 sec with at least 1-5 pelvic thrusts - 2

Ejaculation before penetration - 3

Ejaculation during foreplay - 4

Ejaculation on mere thoughts / sight - 5

Orgasm:

Enjoyment in every sexual intercourse by ejaculating inside the Vagina - 0

Enjoyment in 75% of the encounters by ejaculating inside the Vagina - 1

Enjoyment in 50% of the encounters by ejaculating inside the vagina - 2

Enjoyment in 25% of the encounters by ejaculating inside the vagina - 3

Lack of enjoyment in most of the occasions - 4

No enjoyment at all - 5

Criteria for assessment for associated symptoms

Moghasamkalpaceshta (Ejaculatory control and satisfaction)

Able to delay ejaculation during sexual act up to satisfaction of both the partners - 0 almost every time

Able to delay ejaculation during sexual act up to satisfaction of both the partners - 1 about half the time

Ejaculation just on penetration without partner's satisfaction - 2

Ejaculation during foreplay - 3

Svasartha(Tachypnoea)

No tachypnoea - 0

Mild tachypnoea which does not disturb the act - 1 2456-647

Moderate tachypnoea sometimes disturb the act - 2

Severe tachypnoea most of times disturb the act - 3

Severe tachypnoea which hamper every act - 4

MLANASHISHNATA- LINGASHAITILAYATA [Penile Erection-Rigidity]

SPECIFIC EXAMINATION (International index of Erectile Function-IIEF-5) SCORE								
Over the past 6 months:	1	2	3	4	5			
How do you rate your confidence that you could get & keep an erection?	Very low	Low	Moderate	High	Very high			
When you had erection with sexual stimulation, how often were your erection hard enough for penetration?	Almost never or never	Much less than half the time	Almost half the time	Much more than half the time	Almost always or always			
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			
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			
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			

Objective parameters- Penile Doppler, Sr. FSH, Sr. LH, Sr. Prolactin, Sr. Testosteron (Total), Sr. Testosteron (Free) was assessed before and after treatment.

INTERVENTION

	Treatments	Duration		
Poorva karma	Deepana Pachana with Shunti churna ⁵ , 2.5gms, TID BF 3 days			
Sneha Pana with <i>Murchita Tilatail</i> ⁶ on the basis of koshta and agni. 5 day				
Sarvanga Abhyanga	Sarvanga Abhyanga with <i>Murchita tilataila</i> and Baspa sweda . 3 days			
Pradhana karma	Virechana Murchita Eranda taila ⁷ Dose- 60 to 80ml(on the basis of koshta) Anupana -Ushna jala	1 day		
Paschat karma	Samsarjana Karma Vishrama Kala	5 days 7 days		
UTTARABASTI PURVA NIRUHA BASTI				
Purva karma	Sthanika abhyanga with murchita tilataila and patrapinda sweda			
Pradhana karma Niruha basti				
Paschata karma	Paschata karma Hasta, padamardhana, ushna jala snana followed by laghu bhojana			

Basti mishrand prama			Basti dravya				Quantity				
Makshika	m		-				80ml				
Lavanan	1		Saindhava Lavana			a	10gm				
Sneha			Murchita Tilataila		160ml						
Kalka			Sha	natapushpa Choorna			Ciett(l)	50gm			
Kwatha	Kwatha			Kokkilaksha Kwatha			280 ml				
Total				8	•		580ml				
Purva karma		Niruha Basti, Sthanika abhyanga to lower abdomen with <i>murchita tila taila</i> and <i>nadi sweda</i> .									
Uttara basti Pradhana karma Pashchata karma		Uttarabasti with Murchita tila taila (45ml) administered under aseptic measures.									
		P	Pashchata karma		Subject was instructed to lie down for half an hour.						
1	2	3	4- 6	70	8	9	24:10-12 0	13	14		15
MORNING	N	N	N	Vishrama Kala	N	N	N	Vishrama Kala	N	N	N
AFTERNOON	U	U		U Y	U	U		U	U		U
SHAMANA YOGA -Kokilakshadi churna ⁸ 15 days Dose –12gms at night AF (After 1st,2nd and 3rd course of <i>Uttara Basti</i>) Anupana – <i>Madhu</i>											

Uttarabasti

Purvakarma-Atura Siddhata- Obtained consent, shave pubic part, Empty the patients bladder. Sthanika abhyanga with Murchita tila taila & Patra sweda is given to lower abdomen, thighs & groins

Ensure that IF Tube should be in bladder, note the length then slowly inject medicine into the bladder. Remove it slowly from the bladder. Wipe the IF Tube to Cotton pad to ensure any blood stain, followed by Sthanika Abhyanga and hasta sweda given to lower abdomen in anti-clock wise direction. Assessment of BP, pulse and saturation.

Pradhana karma- Position- Supine, Clean the site including prepuce & glans penis with betadine. Spread the surgical towel with exposing penis. Initiation of procedure with sterile precaution. Medicine is filled into the syringe. Fix the IF Tube to the nozzle of the syringe, push the oil to the tip of the catheter. Gently introduce the IF Tube in to the urethra slowly up to the bladder.

Paschat Karma- Advised to take rest 15-30mins in supine position with head low position. Re-assess the parameters like BP, pulse and saturation. Retention: 2 – 6 hrs in some cases up to 6 hrs. Precautions: Patient should not hold the urge of micturition and other natural urges after the administration of Uttarabasti, willfully abstaining from the sexual life. Diet: Avoid Katu Rasa Ahara it excessive intake increases ushna guna along with ushna guna of tila taila may leads into burning mictuartion and excessive intake of water till micturition as it reduces time retention of taila in bladder hamper the absorption rate.

OBSERVATIONS AND RESULTS

Assessment of Subjective and Objective Parameters before treatment and after treatment. Subjective Parameters	Before Treatment	After Treatment
Mlana sisnata (Penile Erection)	2	1
Linga Saithilya (Penile Rigidity)	1	0
Nirbija (Ejaculation)	1	1
Orgasm	2	1
Moghasamkalpaceshta (Ejaculatory control and satisfaction)	2	2
Svasartha(Tachypnoea)	1	1

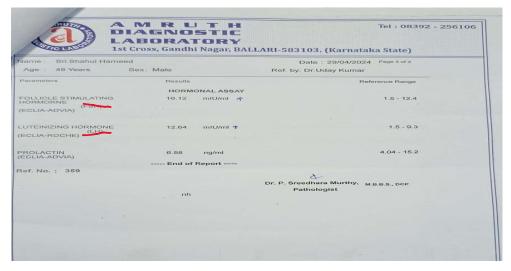
Objective parameters	Before treatment	After Treatment
Penile Doppler	Normal	Normal
Sr.FSH	14.29 mIU/ml	16.12 mIU/ml
Sr.LH	4.04 mIU/ml	12.64 mIU/ml
Sr.Prolactin	12.55 ng/ml	6.58 ng/ml
Sr.Testosteron(Total)	369 ng/ dl	570 ng/dl
Sr.Testosteron(Free)	6.85 ng/ dl	9.04 ng/dl
IIEF-5 score	10	15

PENILE DOPLER



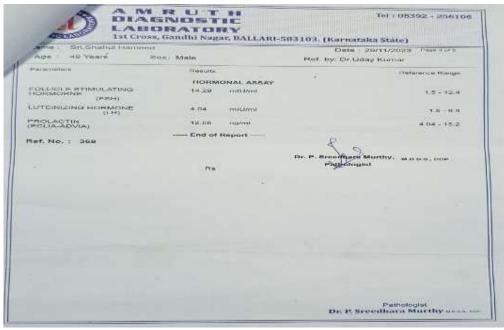
BEFORE TREATMENT





AFTER TREATMENT





DISCUSSION

Deepana and Pachana- It is essential before snehapana, as samshodhana Sneha will be snigdha, guru and bahu matra which needs deeptagni for digestion. Shunti churna acts as ama pachaka, agnideepaka and separation of doshas from dhatus (deepanaih dhaatubhyam pruthaktvam). Actively involved in fat metabolism, which inhibits the free radical activity.

Snehana- As a Purvakarma for Shodhana therapy Sneha is corporated both internally & externally. Here Murchita tilataila is used. Snehapana is utkleshana of doshas (snehair utklesatawam),in order to reach the Sneha (processed up to the cellular level, breakdown the pathological processes and to facilitate to remove from koshta through virechana.

Snehana swedana- performs action by Aggravation (Vriddhi), increases fluidity (Vishyandana), suppuration (Pakata), removal of the obstruction at the level of srotas. (Srotomukha Vishodhanat). Swedair kostagatatwam.

Sarvanga and sthanika bhyanga-As per Dalhana Abhyanga can reaches up to the different Dhatus, If it is applied for sufficient time. Veerya of Abhyanga dravya gets Paka by Tvachashrita Brajaka Agni and gets absorbed through Tiryak gamana siras. Cell membrane is made up of Phospholipids. lipid and lipid soluble substance are permeable through the cell membrane. Sneha dravya is a Lipid substance can directly incorporated into cell membrane. Fomentation causes the generation of temperature gradient across membrane facilitating the diffusion of lipid substances across. Blood transports Fat soluble endotoxins to specific areas like liver. from where it processed and eliminated as a bile.

Virechana: Adhobhaga doshaharana(Gudachakrapani). It is tridoshahara. Kaya Shodhana is essential before vajikarana chikitsa. dhatupradoshaja Vikaras it is better choice, adopted for proper absorption, circulation, neural stimulation, which is essential for proper erection. Local evacuant: due to ushna, tikshna, sukshma, vyavayi, vikashi reach to heart by virtue of their potency and pervades entire body leads to softening and loosening of the badha doshas (Dhatu sithilya karma) by vikasi guna. Then they liquefy the morbid elements by virtue of agneya guna and crumble them by virtue of tikshna guna. Them this liquefies and crumbled mass of loses contact with the wall and channels in the unctuous body. This morbid mass now passes through the minute capillaries and moves towards kosta by the virtue of Anu, pravana bhava of the drugs and ultimately reaches the amashaya.

Systemic- By Sroto-vishudhi help in better absorption uttara basti dravya i.e Murchita Tila Taila, Indriya Prasadana, which is responsible for erection and Agni vardhana(Dhatwagni)which controls male sex hormone and act on dhatus responsible for proper erection of Penis. There by deliberates to overcome kliabya by rectifying the Shukra kshaya.

Uttara Basti: It is more effective in terms of its superior qualities. In Klaibya, Uttarbasti overcomes the local circulation, improper absorption and neural stimulation, which are essential for proper erection. Niruhabasti is poorvakarma does Kosta Shodhana, Vatanulomana and Rookshana. It increases the bioavailability of the drugs.

Pradhana karma uttarabasti on **Systemic**: Murchita tilataila administer through mutramarga, Basti is the site for Apanavata. The veerya of the medicine may pacify the vitiated doshas, there by starts absorption through bladder epithelium by the virtue of virya of bastigatha dravya. As the Murchita tila taila is ushna & snigdha guna, does Dosha Shaman, vatanulomana and vajikarana. Thereby it rectifies the Male sexual hormones like FSH, LH and testosterone which is responsible for erection of penis.

Local Evacuant: Bladder anatomy allows relatively easy and direct delivery of drugs through a catheter, allowing the drug to reach the target site with minimal side effects while avoiding first-pass metabolism.

First pass metabolism: Here drugs pass through the general systemic circulation, Loss can be avoided from first pass metabolism, by administering Interavesical drugs delivery (IDD), bladder tissue is linearly depends on the concentration of drug in urine. Since passive diffusion is the sole driving force available for intravesical drug absorption. Urinary bladder is consists of mucosal cell (composed of transitional epithelium and lamina propria), submucosal cell, detrusor muscle and adventitia. Drugs absorbed in the epithelium cell with the help of capillary.

Bladder permeability barrier-The Bladder permeability barrier (BPB) for indexing Interavesical drugs delivery. Urothelium makes barrier between blood and urine represents through barrier in comparison to others. Has two pathway; Transcellular pathway (through the cells), and the Paracellular pathway (through the tight junctions and lateral intercellular spaces). The barriers properties of the urothelium are changed by the modifications of either cellular or tight junction permeability.

Passive permeability: It is the marker for measurement of the ion permeability of an

epithelium. Bladder epithelium is considered a tight epithelium, already mentioned.

Neurological stimulation: S2-S4 somatic neural pathway regulates the external urethral sphincters; same continuation for penile erection, so Uttarbasti may inhibits para-sympathytic stimulation from hypothalamus. As it may increases the local circulation & facilitating for proper absorption, which are essential for proper erection. So here murchita tila taila which is administered through Uttara basti is acting as vrishya and kliabyahara.

Shunti churna: Used for agni deepana and amapachana. because of ushna virya and madhuravipaka it is vatahara. Kapahara beacause of ushna virya and katu rasa.

Murchita Erandataila: It is vatahara, madhura, snigdha, tikshna. Normalises vitiated dosha which is involve in general underlying pathology of klaibya. Sneha enters into the srotas and remove the Sroto avarodha by virtue of its Madhura(sweet) rasa and sukshma (fine), Vikasi guna. Lekhana of Avarana (Kapha) by virtue of its Tikahna (sharp), Ushna (hot), Sukshma (fine), Sara (unstable) and Vyavayi Gunas and thus allow normal movement of apana vayu. It is said to be Vataprastuumaka, Vata-kaphahara, Srotovishodhaka, Yoni vishodhaka, Adhobhaga doshaharam, Shula-anilapaham

Murchita Tilataila: Murchita Tilataila is mentioned [4] Vriddha in jwaradhyaya Bhaishajya Ratnavali which is Sangraha.S amadosha and vatahara.

In Uttara Basti **tilataila** is Vatahara and sthairyakara. Acharya chakrapani in his is commentary specifies anga sthairyakara which is responsible for strengthening of penile organ (indu mentioned the word drudata) and having Vrishya.

Kokkilakshadi Churna: Kokkilaksha is Vatahara because of Madhura vipaka and madhura rasa. It also had properties like vrishya and Balya, which is responsible for increases. It increases sexual behaviour, testosterone levels along with it increases reproductive organ weights. Shaktika shali is tridoshagna, it is having property like sthiratmaka, by which impart stira guna to sexual organ and mind, help in increasing penile erection and rigidity.

CONCLUSION

Conclusions is the core of whole study. In ancient research methodology described as "Nigamana". Which is drawn through Proper conceptual gathering, critical evaluation. Klaibya is one among the shukrapradoshaja vikara caused due to vitiation of shukra dhatu. Erectile dysfunction(ED)is the inability to achieve or maintain an erection long enough to

engage in sexual intercourse. Due to vata pradhana tridosha dushti affects apana sthana. Proper counselling and sex education are part of treatment. Combination of Mridu shodhana, bahya upakramas, Uttara Basti and shamana oushadi, Exercises, diet & counselling together can yield best result in disorder like Klaibya. Hence proved ayurveda shown better efficacy in order to remove social stigma. Further large multicentric evidence based research are required to make standerdisation.

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