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YONIBHRANSHA-WEAK PELVIC FLOOR MUSCLES STRENGTH MEASURED BY PERINEOMETER –A CASE STUDY

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INTRODUCTION

Term **Yoni** as **Tryavarta yoni**, a genital tract which includes uterus, cervix, vagina & **Bhransh** means Prolapse. Yonibhransha is a common condition in which uterus slips down into or protrudes out of vagina. Under the broad spectrum of Yoni bhransha based on its severity, **Prasamsini** SU: U 38/13, **Phalini**Su. U38/18, **Andini** Bha; Pra. Chi 70/14, and **Mahayoni** yonivyapada Cha. chi 30/32 are the different clinical presentation described in twenty yonivyapada by different acharyas in vrihattrai and Laghutrai of ayurvedic Literature, where **Vata (body humor) i**s said to be most prominent contributing factor. In ayurveda general causes of yonivyapada are **Mithyachar, Pradustartava, Beeja dosha** and **Daiva**. Specific cause of Yonibhransha is **Dukha Prasava** (Dystocia) excessive straining during second stage of labour and **Vegadharana.** Anatomically it happens due to weakness of pelvic floor muscles (PFM) and uterine ligaments which provide support for the uterus to maintain its normal position. Common symptoms are feeling of something coming out of vagina, backache, pelvic pressure, difficulty in passing urine, incomplete evacuation, urgency and frequency of micturation, tention of urine, difficulty in passing stool. In uterine prolapse, depending on descent uterine parts, three degrees are described. In which these four yonivyapada Prasamsini shows 1st and 2nd degree prolapse, vatala shows uterosele, Mahayoni shows 3rd degree prolapse, Phalini shows cystocoele situation. Its prevelence is more than 50%f all gynecological condition. According to recent reports 40% of women between 45 and 85 years age have pelvic organ prolapse(POP) on examination but only 12% are symptomatic. The prevalence of symptomatic and anatomical uterine prolapse is 6. 6% (28) and 5. 9% (25), respectively.[1,2] For the management of Yonibhransha ayurvedic classical text advice sthanika chikitsa (local treatment) in support of oral medication. Which posses both local

effect and general effect to improvement in patient condition. which can be observed as increased pelvic floor muscles strength. So in this study by measuring P. F. M strength with perineometer will help the clinician to know the relationship between degree of uterine prolapse and strength of pelvic floor muscles before and after the ayurvedic treatment and under follow up of three months.

MATERIAL AND METHOD

A Female Patient have been selected randomly from O. P. D of State Ayurvedic College and Hospital Lucknow with the given criteria of the detailed profarma. A detailed history, physical examination and necessary investigations have been done. After this Pelvic floor muscle strength have been measured in the lethotomy position by perineometer before and after a general gynecological treatment and corelate it with the oxford method of bimanual examination. So it will help the clinicians to access the actual weakness and strength of P. F. M before and after the given treatment.

Patient information- A 40 year-old married woman came to the OPD of the Departmet Of Stri Roga and Prasuti Tantra, State Ayurvedic College in July 2023. She complained of heavyness in lower abdomen, lower abdominal pain on sitting, urinary incontinence since last one year. Her first delivery was normal and without any complication, her perpurium period was 8 days, her second delivery was a still birth, perpurium period was 5 days, in her 3rd delivery she had prolonged labour because of big baby and she was in labour for more then 14 hours. This time her post partom period was also complicated because of constipation and coughing. Her perpurium period was 10 days after that she started her work as a housemaid at several homes. Because of which she has to sit in squating position, carry heavy buckets and stuff . Since then she is suffering from constipation, she became a patient of obesity. In 2020 she was diagnosed with hypertention, and was on allopathic medication of tab Amlokind. . 50 mg B. D since 3 years. Timeline of history is given in table 1.

Table 1.

Timeline of the history.

TIME	EVENT
13 Years	Menarche
22 Years	First Delivery
27 Years	Second Delivery
32 Years	Third Delivery
33 Years	Constipation Started

35 years	Obesity started
37 years	Hypertention developed

2. 1 Clinical Findings

Patient is known case of Hypertention and Obesity and was on allopathic medication for hypertention. Her blood pressure was130/90, pulse rate was 74/min and BMI was 31. 5kg/m^2. She was of vata kapha prakruti(body constitution) with avara satva(weak mental power) and Krura Koshtha(Constipated Bowel). On examination of genitourinary system external skin, labia and urethra appeared nornmal. The peripheral smear study showed presence of 2 degree cystocoele. The cervix was redish with a whitish discharge present near it. Per veginal examination shows atrophied uterus with two degree uterine prolapse. . PFS WAS GRADE 2 on the Oxford grading system of vaginal digital palpatation.

Year	Type of delivery Home /institutional	Mode of delivery Veginal/C-section	Vaginal (assested/non assested)	Episiotomy done or Not	Puerperium (45 days) events Squating /UTI/RTI/ heavy weight lifting	Labour Uneventful/Eventful (Prolonged/ any other complication)

Table 2.

Timeline of the case

EVENTS	TIMELINE
Menifestation of the first symptom	5 march 2023
Treatment started	2 july 2023
First follow up	8 july 2023
Local Treatment	8 july2023
First assessment	1 august 2023
Second assessment	1 september 2023
Follow up	1 october 2023

3) Diagnostic Assessment

Patient had a vaginal squeeze pressure of 15mmhg(weak PFM strength on a perineometer). Her vaginal digital palpation was grade 2 on oxford grading scale. Her routine urine examination shows 5- HPF puss cells. Uterine mass bulges upto the level just inside the opening of vagina on coughing on per speculum examination.

METHOD- PFM strength have been assessed by vaginal pressure taking by perineometerin Lithotomy position.

Firstly inserting the conical vaginal probe of perineometer into the vagina wit the help of lubrication(jelly) and PFM strength then evaluated by the resting pressure inside and then by maximum voluntary contraction. Then vaginal sqeeze pressure was also measured and Endurance (maximum time for which the patient can sustain a PEM contraction) was also measured.

Conical vaginal probe of perineometer was inserted into the vagina and PFM strength was then evaluated to assess post therapeutic interventions and pre therapeutic accessments.

4) Therapeutic Intervention-The therapeutic intervention on the first visit was chandraprabha vati two tab BD administered (ayurvedic formulation) orally, for sthanika chikitsa balaa tail (oil prepared with bala, jatamansi, yashtimadhu, vacha etc) administered externally for abhyanga over the vagina and urethral orifice and after one week of medication for yonigadhikaran a pichudharan of (lodhra churn, palash churn, manjufal churn, madhu+jatyadi tail) have been started for atleast 2 hours or upto the urge of urination(aamutra kaal) in a day. Detailed medication are given in Table3.

Table 3: Detail of therapeutic intervention.

Timeperiod of intervention	Medication	Dose	Treatment duration
2 july 2023	Tab. Chandraprabhavati	2 BD	
	Bala tail yoni abhyanga	10 -15 ml	
8 july2023	Ashwagandha churn	3gm BD	
	Yonigadhikaran pichu Dharan	Upto 2 hrs	
	Ashokaristh	5ml B. D after meals	
	Tab chandraprabhavati	2BD	
1 august 2023	Ashwagandha churn	3gm BD	
	Yonigadhikaran pichu dharan	Upto 2hrs	
	Ashokaristh	5ml BD	
	Tab chandraprabhavati	2BD	
. 1 sept 2023	Tab. Chandraprabhavati	2BD	
	Bala tail abhyanga	10-15 ml	
	Ashwagandha churn	3gm BD	

5 Follow-up and outcomes

After 15 days of treatment, the patient was symptomatically better and feeling tightness and comfort in vagina. PFS assessment values are given in table below.

Parameter		**Before T/t**	**On 15th day of T/t**	**On the 3rd month of Followup**
Perineometric value	Vaginal resting pressure	15mmhg	20mmhg	22mmhg
	Pressure on pelvic floor contraction	15mmhg	22mmhg	24mmhg
Vaginal digital palpation	Oxford Grading	2	4	4
PFM Endurance		4 sec	20 sec	16 sec

6. DISCUSSION

Urinary incontinence is one of the complications of hypertension. In the present case, the hypertension is under control by allopathic medication for initial two years and now she shifted to ayurvedic medicine. A prediabeted stage was diagnosed since one month, which is five months after the emergence of urinary symptoms. These two co-morbidities were not chronic enough for the onset of a complication like urinary incontinence. The main clinical symptom mentioned by the patient was stress urinary incontinence and which occurs mainly due to pelvic muscle weakness . Improper activities and pathologies related to difficult labour are mentioned as the main causes in classical texts for Yonivyapad(gynecological disorders) Su. U38/1-2. The present case had an history of difficult labour and lack of proper care during the postpartom period, which might also favoured the porogress of pathology. While explaining the management of difficult labor, acharya kashyapa added some conditions like bhrastayoni (prolapse) and purishamutrasamrodha(difficulty in urination and defecation) as complication of difficult labour, which can be corelated PFD. Yoni gadhikaranakriya(treatments for tightening the yoni)the perineal care are mentioned in ayurvedic sutika paricharya(postpartom care)showing the importance of tightening pelvic musculature during postpartum. While analizing the pathogenesis of presentt case, vata prakopa(vitiation of vata) due to primary causative factors dukhaprasava(difficult labour)was precipitated by risk factors like vegodirana(straining due to chronic constipation)and weight lifting. Even if the samprapti(pathogenesis) of PFD had begun at some point in life, the patient now is of menopausal age, which is a parihani(declining) stage of life, that accelerates the natural aging process. All vata prakopak etiologies lead to apana vata vaigunya(vitiation of apana type of vata) and finally lead to the sithilata(laxity)of yoni. Without the vitiation of

vata, yoni roga will not occur. Prasamsini yonivyapad is the diagnosis here and presented with kshobha in yoni, pitta lapha lakshan(symptoms of increased pitta) and associated with dukhaprasava. Here the patient is moving from madhyama vaya to to vardhakya avastha, transition between pitta dosha predominince to vatika predominence. During this time, the transition rom the reproductive phase to the menopausal period occurs. Thus, the perimenopausal period can be considered as parihani stage with the association of more vata dosha along with pitta dosha. The intregrity and compactness of the organs is lost by the vitiated vata which further causes pelvic organ prolapse.

Sthanikchikitsa (Local treatment) given in the form of yoni pichu is mentioned in the treatment of Prasamsini yonivyapad. Abhyang is jara vatahar(pacifying aging process and vata dosha) and dhatu poshan janaktva(nourishing tissue elementwhich rejuvinates the vaginal wall and associated musculature by dhatu pushti. (A. h. Su2/8) The drug chosen was Bala tail(A. H Sh2/47) to its brimhana (nourishing) and vatahara karma which is needed for a vatika predomint displaced stagE of yoni, particularly in menopausal age. Sukshma (minute), vikaasi (rapid acting) and vyavai (spreading) guna of taila help the entry of formulation into deeper tissue. Intra-vaginal drug absorbtion and improvenent of skeletal muscle performance after the massage is also proven by many studied.

Degenerative changes during the perimenopausal phase is inevitable. Early diagnosis and management of these changes will help to improve the quality of life of women. The result obtained in the present case are objectively assessed and the patient shows good muscle strength during the follow-up after three months. The ayurvedic therapy Yoni Pichu and abhyanga can be effectively used as a preventive and curative management of uterine prolapse.

7) Patient perspective

The patient was symptomatically better from the second day of the procedure and had a felling of tightness in the vagina.

8) Informed concent

Informed concent was taken from patient.

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