

Case Report

Management of Prolapsed Uterus-Grade I with Siddha External Therapy Aloe Vera and Tripala Bandage: A Case Study

Esaiyani S^{1*}, Susila R², Kavitha T¹, Usha A¹, Sathiyarajeswaran P³

¹Research Officer Siddha, Reproductive and Child Health division, Department of Clinical Research, Siddha Central Research Institute, Chennai, Tamil Nadu, India

²Research Officer Siddha, Basics and Fundamental division, Department of Clinical Research, Siddha Central Research Institute, Chennai, Tamil Nadu, India

³Director, Sci-III, Siddha Central Research Institute, Chennai, Tamil Nadu, India

***Corresponding Author:** Dr. Esaiyani S, Research Officer Siddha, Reproductive and Child Health division, Department of clinical research, Siddha Central Research Institute, Chennai, Tamil Nadu, India, Tel: +91-9597322218; E-mail: esaiyani08@gmail.com

Received: 03 March 2020; **Accepted:** 20 March 2020; **Published:** 27 March 2020

Abstract

Pelvic organ prolapse is a common problem among aging women. About 50% of parous women have Pelvic organ prolapse. Hysterectomy is one of the most preferred treatments for prolapsed Uterus. The Risk of post hysterectomy prolapse is 5.5 times higher if hysterectomy was performed because of prolapsed uterus. There is a need for proper management of prolapsed uterus without any complications. Siddha, a traditional system of medicine found to provide better management for Prolapsed Uterus. A 36 year old female patient with the complaints of constipation, stress urinary incontinence, urgency of urine, feeling mass in vagina while washing genitalia, uncomfortable while sitting since 1 year was reported to Siddha Reproductive and child health Outpatient Department. It was diagnosed as Prolapsed Uterus Grade I based on symptoms, Physical examination and Ultra sonogram Pelvis. She was treated with Aloe Vera and Tripala Bandage, a Siddha external therapy along with internal medicines. Pelvic floor disability Index score was used to assess the symptoms severity before and after the treatment. After treatment with External therapy and Internal medicines for one month clinical symptoms were subsided and patient feels good and the Quality of life improved. This case report highlights that Prolapsed uterus Grade I can be managed with Aloe Vera and Tripala bandage effectively and it was cost effective.

Keywords: External therapy; Siddha; Prolapsed uterus; Aloe Vera; Annabedhi chendooram; Tripala; Bandage

1. Introduction

Uterine prolapse is the herniation of the uterus through the vagina due to weakness in the tissues of uterine ligaments and fascial supports. In Siddha literature Uterine prolapse is mentioned as Pengalukku vuruppu thallal and Adithallal [1, 2]. Globally up to half of all parous women have some degree of clinical prolapse and 10-20% are symptomatic [3]. Possible risk factors include pregnancy, childbirth, congenital or acquired connective tissue abnormalities, denervation or weakness of the pelvic floor, ageing, menopause and factors associated with chronically raised intra-abdominal pressure [4]. Vaginal child birth thought to be the primary factor for pelvic organ prolapse. In conventional system the primary non-surgical method involves placing a pessary in the vagina to support the pelvic organs and the surgical treatment includes hysterectomy. The life-time risk of a woman for Pelvic organ prolapse surgery is estimated to be 19% and the reoperation risk even with an appropriate surgery is about 30% [5]. It has been suggested that hysterectomy may cause nerve supply damage and disrupt supportive structures of the pelvic floor. Therefore, women may be at increased risk for bladder dysfunction and new onset of stress incontinence after vaginal hysterectomy [6]. In Siddha Literature Aloe vera and Tripala bandage is one among the 32 types of External therapy which is indicated for Prolapses [7]. This External therapy has been practiced by many Siddha Physicians for prolapsed Uterus. Herein we report a 36 year old female patient with grade I uterine prolapse treated with Aloe vera tripala bandage for 1 month effectively and the symptoms were reduced. The case study was prepared by adopting CARE guidelines.

2. Case Report

A 36 year female patient attended reproductive and child health out-patient department of Siddha central research institute Chennai on 4th November 2017. She presented with complaints of feeling a muscle mass in vaginal orifice while washing genitalia, mass descent while coughing, uncomfortable feeling while sitting on a plain surface, urine leakage while coughing, urgency of urine, constipation, heaviness in the pelvis for the past 1 year. Her natal history revealed that she had two male children by vaginal delivery with episiotomy. No history of Dilatation and Curettage. No relevant family history. Tubectomy was done after her second delivery. She worked in a provision store where she lifted heavy milk trays. She didn't undergo any other treatment for this issue.

2.1 Diagnosis assessment

The patient was thoroughly interrogated about her symptoms. On examination there was a visual perception of prolapsed uterus which descended more while coughing. She went through Ultra sonogram pelvis on 7th November 2017 which showed the result as Prolapsed uterus grade I. Her diagnosis was confirmed as Prolapsed uterus grade I based on symptoms, Physical Examination and Ultra sonogram Pelvis.

2.2 Selection of interventions

According to Siddha, for being healthy three humours namely Vali, Azhal, and Aiyam has to be balanced in our body. Weakness of ligaments and fascia in prolapsed uterus is due to decreased Vali humour and increased Aiyam humour [8]. Astringent and Bitter taste will elevate Vali humour and pacify the elevated Aiyam humour. Annabedi chendooram and drugs in tripala are rich Astringent brings the deranged Vali and Aiyam humour to normal.

Humors	Pacifying tastes	Promoting tastes
Vali	Sweet, Sour, Salt	Pungent, Bitter, Astringent
Azhal	Sweet, Bitter, Astringent	Sour, Salt, Pungent
Aiyam	Pungent, Bitter, Astringent	Sweet, Sour, Salt

Table 1: The Relationship of Suvai and Three Humors [9].

2.3 Internal medicines

Amukkara choornam 1gram with Annabedi chendooram 100 mg two times a day after food mixed with honey was given to the patient. Along with that Thiripala decoction 30 ml two times a day before food was given.

2.4 External medicines

Aloe vera and tripala bandage was used only at night and changed every day.

2.5 Preparation of Aloe vera bandage

Cut a fresh Aloe vera leaf from the plant and slice both the edges carefully that are hard and peel off the green skin on any one side as close as possible. Scrape over the gel slowly to remove the liquid slippery texture place it on a strip of cloth. Sprinkle 3 gms of thiripala choornam on skin peeled side of Aloe vera and place it over vagina externally like sanitary napkin.

Do's	Don'ts
1. Drink more water	1. Avoid straining defecation
2. Eat more greens and fibre rich foods (to avoid constipation)	2. Avoid brisk walk and heavy weight lift
3. Take oil bath twice a week and take good rest	3. Avoid spicy foods, bakery foods and junk foods

Table 2: Instructions during the treatment for prolapsed uterus Grade I.

2.6 Duration of treatment: one month

2.6.1 Follow up and Outcome: After Diagnosis the patient was treated with both Internal and External medicines from 11th November 2017 to 9th December 2017. The patient was instructed to visit Reproductive and Child Health OPD on every Saturday. Clinical Assessment was made on the basis of symptoms by using Pelvic floor disability Index Questionnaire before and after the treatment. After one month treatment there is no stress urinary incontinence, urgency of urine and protrusion of uterus through vagina while coughing, Feeling heaviness in the pelvis reduced. Constipation relieved. Pelvic floor disability Index score reduced from 149.75 to 22.75.

3. Discussion

Uterine prolapse is one of the inconsiderable diseases by females unless it affects the Quality of life severely. Uterine prolapse is not only an important health problem and extra burden to the health expenditures [6]. The

endopelvic connective tissue has a major role in supporting and suspending the pelvic organs. The protein collagen is responsible for the strength of the pelvic connective tissue. Increasing evidence suggests that women with Pelvic organ prolapse have collagen deficiency [10-12]. The modern approach to uterine prolapse is vaginal hysterectomy. However, this does not address the underlying deficiency in connective tissue of pelvic floor and prolapse recurrence is common. In this case study vaginal births and increased intra-abdominal pressure due to heavy weight lift played a major role in pelvic floor dysfunction [13]. Prolonged 2nd stage of labour may cause significant damage to pelvic floor and pudendal nerve. Reproductive age may be a factor for better and earlier prognosis as estrogen has been shown to increase the skin collagen content [14].

S.no	Medicines	Pharmacological actions
1	Internal medicine Annabedi chendooram (Ferric sulphate)	Astringent, Haematinic, Antiulcer property. It is therapeutically used both externally and internally, for the treatment Prolapse of rectum and uterus [15, 16].
2	External medicine and Internal medicine - Thiripala Choornam	
	a. Terminalia chebula	Terminalia chebula and Terminalia bellerica stimulate Fibroblast function which is a biological cell that synthesizes extracellular matrix and collagen [17]. Terminalia chebula extract facilitate collagen stabilization through collagenase inhibition [18]. Terminalia chebula control the risk of infection as it has Antimicrobial Activity [19].
	b. Phyllanthus emblicus	Triphala contains ascorbic acid, which acts as a cofactor for the synthesis of collagen as well as elastin fibres [20]. Promotes synthesis of type I collagen and anti-collagenase effects on primary mouse fibroblast cells [21].
	c. Terminalia bellerica	Terminalia chebula and Terminalia bellerica stimulate Fibroblast function which is a biological cell that synthesizes extracellular matrix and collagen [17]. Tannins stimulate oestrogen and androgen levels which is rich in Terminalia chebula and Terminalia bellerica [22].
	External Medicine	
	d. Aloe vera Leaf	Aloe vera gel increases the collagen content and extent of collagen cross linking of the wound by orally as well as by topical application [23]. Aloe Vera hydro-alcohol extract cause an increase in estrogen hormone in female rats [24, 25].

Table 3: Pharmacological actions of Internal and External medicines in the management of Prolapsed uterus Grade I.

Thripala stimulates fibroblast function which is a biological cell that synthesizes extracellular matrix and collagen and thereby increase the synthesis of extra cellular matrix and collagen. Terminalia chebula facilitates collagen stabilization through collagenase inhibition and control the risk of infection as it has Antimicrobial Activity. Terminalia chebula contains ascorbic acid, which acts as a cofactor for the synthesis of collagen as well as elastin fibers. Phyllanthus emblica promotes synthesis of type I collagen and has anti-collagenase effects. Aloe vera increases the collagen content and the extent of collagen cross linking by topical application. Aloe vera also increases oestrogen level which in turn increases the pelvic floor muscle contraction. Tannins stimulate oestrogen and androgen levels which is rich in Terminalia chebula and Terminalia bellerica. In Siddha Literature Annabedi is indicated as internal and external medicine for prolapsed uterus. Annabedi chendooram (Mineral reparation) is an Astringent which brings the deranged Vali and Iya humour to normal in Prolapsed uterus. Tripala is also Astringent which brings the deranged Vali and Iya humour to normal. Combination of these both internal and external medicines may strengthen the connective tissue and it was very effective in the management of prolapsed uterus Grade I. When compared to other alternative treatments for prolapsed uterus this Aloe vera and Tripala Bandage is cost effective.

4. Conclusion

After treatment with both internal and external medicines, clinical symptoms of Prolapsed uterus (karuppai adithallal) were reduced and the quality of life improved. It is Non-invasive and cost effective treatment for Prolapsed uterus Grade I. This case report highlights that Prolapsed uterus Grade I can be managed with Aloe vera Tripala bandage effectively.

Limitations

After menopause estrogen level usually reduces drastically. Due to this the collagen content of the connective tissue may reduce. So prognosis may be delayed for menopausal age group.

Recommendations

This treatment may be better for the patients who are not fit for surgery. It can be considered for other Grade I and Grade II Pelvic organ prolapses. Studies are needed to determine the efficacy of Aloe Vera and Tripala Bandage in Prolapsed uterus Grade II and Grade III.

Declaration of Patient Consent

Written Informed consent was obtained from the patient for publication.

Conflict of Interest

The authors declare that they have no conflict of interest to disclose.

Acknowledgement

1. Dr. Natarajan S, Research Officer Siddha, HOD, Department of Clinical Research, Siddha Central Research Institute, Central Council for Research in Siddha, Arumbakkam, Chennai-106.
2. Dr. Kannan M, Research Officer Siddha, HOD, Literary Research and Documentation Department, Siddha Central Research Institute, Central Council for Research in Siddha, Arumbakkam, Chennai-106.
3. Dr. kanakavalli, The Director General, Central Council for Research in Siddha, Arumbakkam, Chennai-106

Funding

No funding was obtained for this study.

References

1. Sambasivam pillai TV. Siddha medical Dictionary. Directorate of Indian medicine and Homeopathy publications, Chennai, India 1 (1994): 163-164.
2. Thiagarajan R, Gunapaadam thaadhu-seeva vaguppu. Directorate of Indian medicine and Homeopathy publications, Chennai, India (1952): 284.
3. Gyhagen M, Bullarbo M, Nielsen T, et al. Prevalence and risk factors for pelvic organ prolapse 20 years after childbirth: A national cohort study in singleton primiparae after vaginal or caesarean delivery. British journal of obstetrics and Gynaecology 120 (2013): 152-160.
4. Hagen S, Stark D, Maher C, et al. Conservative management of pelvic organ prolapse in women (Review). The Cochrane Collaboration. Published by John Wiley and Sons, Ltd (2009): 1-20.
5. Aytan Hakan, Ertun Devrim, Tok Celalettin, et al. Prevalence of pelvic organ prolapse and related factors in a general female population. Turkish Journal of Obstetrics and Gynecology 3 (2014): 176-180.
6. Surendran ES, Akash Lal M, Pratap Shankar KM, et al. Conservative Management of Young Age Onset Pelvic Organ Prolapse through Ayurvedic Management: A Case Report. Journal of Research in Ayurvedic Sciences 2 (2018): 254-258.
7. Uththamaraayan KS, Siddhar aruvai maruthuvam, Directorate of Indian Medicine and Homeopathy chennaipublications Chennai India (2005): 93.
8. Shanmugavelu M. Noi naadal Noi mudhal naadal thirattu part I, Department of Indian medicine and homeopathy publications, Chennai, India (2006): 254.
9. Susila R, Jeeva Gladys R, Balagurusamy K, et al. A Review of Siddha Cardiology and Cardioprotective Herbs. International Journal of Herbal Medicine 1 (2013): 71-77.
10. Edward J Gill, Glenn Hurt W. Pathophysiology of pelvic organ prolapse. Obstetrics and Gynecology Clinics of North America 25 (1998): 757-769.
11. Peggy A, Norton MD. Pelvic floor disorders: The role of fascia and ligaments. Clinical Obstetrics and Gynecology 36 (1993): 926-938.
12. Makinen J, Soderstrom K, Kiilhomma P, et al. Histologic change in the vagina connective tissue of patients with and without uterine prolapse. Archives of Gynecology 239 (1986): 17-20.

13. Janet M Shaw, Nadia M Hamad, Tanner J Coleman, et al. Nygaard Intra-abdominal pressures during activity in women using an intra-vaginal pressure transducer *Journal of Sports Science* 32 (2014): 1176-1185.
14. Brincat M, Moniz CF, Studd JWW, et al. Sex hormones and skin collagen content in postmenopausal women. *British medical Journal* 287 (1983): 1337-1338.
15. Keerthy Unni, Sheela Karalam B, Vijayasankar AV. Scientific basis for the preparation and characterization of Iron based traditional drug Annabhedhi sindooram: A materialistic approach. *International Journal of Research in Ayurveda and Pharmacy* 4 (2013): 149-152.
16. Rajalakshmi P, Geetha sudeer R, Vadivel V, et al. Analytical studies on Annabedhi Chenthuram: A Siddha Herbomineral Formulation. *Indian Journal of Pharmaceutical Sciences* 79 (2017): 987-993.
17. Saha PK, Patrab PH, Pradhana R, et al. Effect of terminalia chebula and terminalia bellerica on wound Healing in induced dermal wounds in Rabbits. *Pharmacology online* 2 (2011): 235-241.
18. Krishnamoorthy G, Madhan B, Sadulla S. Stabilization of collagen by the plant polyphenolics acacia mollissima and Terminalia chebula. *Journal of applied polymer science* 108 (2008): 199-205.
19. Kirubanandan S, Bharathi ravi, Renganathan S. Histological and biochemical evaluation of wound regeneration potential of terminalia chebula fruits. *Asian journal of pharmaceutical and clinical research* 9 (2016): 228-233.
20. Muthusamy senthil kumar, Shanmugam kirubanandhan, Ramasamy sripriya. Thiripala promotes healing of infected full thickness dermal wounds. *Journal of Surgical Research* 144 (2008): 94-101.
21. Chanvorachote P, Pongrakhananon V, Luanpitpong S, et al. Type I pro-collagen promoting and anti-collagenase activities of Phyllanthus emblica extract in mouse fibroblasts. *Journal of Cosmetic Science* 60 (2009): 395-403.
22. Dai X, Zou ZZ, Zhang TT, et al. The effect of tannic acid on the gonad hormones in plateau pikas (*Ochotona curzoniae*) and root voles (*Microtus oeconomus*). *Acta Theriol Sin* 31 (2011): 278-283.
23. Priyanka Sharma, Amit C Kharkwal, Harsha Kharkwal, et al. A Review on Pharmacological Properties of Aloe vera. *International Journal of Pharmaceutical Sciences Review and Research* 29 (2014): 31-37.
24. Poorfarid M, Karimi Jashni H, Houshmand F. The effects of Aloe Vera sap on progesterone, estrogen and gonadotropin in female rats. *Journal of Jahrom University of Medical Sciences* 10 (2013): 6-10.
25. Eman GE Helal, Rasha AA El sayed, Hoda M Abu-Taleb. Studies on the Use of Aloe vera Extract as a Contraceptive in Female Rats. *The Egyptian Journal of Hospital Medicine* 60 (2015): 274-281.

Citation: Esaivani S, Susila R, Kavitha T, Usha A, Sathiyarajeswaran P. Management of Prolapsed Uterus-Grade I with Siddha External Therapy Aloe Vera and Tripala Bandage: A Case Study. *Archives of Clinical and Medical Case Reports* 4 (2020): 266-272.



This article is an open access article distributed under the terms and conditions of the

[Creative Commons Attribution \(CC-BY\) license 4.0](https://creativecommons.org/licenses/by/4.0/)