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Research Article

## An Ayurvedic Management of Menorrhagia with Huge Leiomyoma in Perimenopause: A Case Report

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### Abstract

#### Introduction

Perimenopause is a transition phase towards physiological shut down of cyclical menstrual bleeding, thus, also a phase of hormonal shift, variations, and turbulences which may lead to physical and behavioral alterations adding to the already occurring psychological and physical stress. Menorrhagia (HMB) is one such frequently encountered gynecological complaint in perimenopausal woman (40-50 years of age) accounting for more than 70% of all gynecological consultations and one of the most common causes of hysterectomy in this age group.

**Material & Methods:** This paper presents a case study of a patient in perimenopause (40-50 years) who came to Gynaecology OPD of All India Institute of Ayurveda suffering from *rajovriddhi* of severe grade according to Menstrual Pictogram severely affecting her day-to-day activities successfully treated with *Rajonivrittikar Yoga*, a classical ayurvedic preparation. Assessment for bleeding P/V was done using Menstrual Pictogram and quality of life by Menopause Rating Scale. Routine blood investigations, hormonal profile and USG Colour Doppler Pelvis were also done. Oral intervention was given for three months follow up was done every 15 days for consecutive three months.

**Results & Observations:** There was extremely significant improvement in bleeding as assessed on Menstrual Pictogram from first month of treatment followed by absence of bleeding in subsequent months which was continued in and after follow up. Size of her huge leiomyoma decreased significantly while smaller ones were completely resolved. Improvement in Quality of Life and mild improvement in anemia was also noticed.

**Conclusion:** Ayurveda has immense potential in treatment of *Rajovriddhi* or HMB and AUB in perimenopause which is safe, effective and could be an alternative before surgery in certain cases.

**Key Words:** ayurveda, hysterectomy, menstrual pictogram, perimenopause and *rajovriddhi*.

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#### Introduction

'Perimenopause' is a combination of two words; 'peri' and 'menopause' meaning around menopause while

Heavy Menstrual Bleeding (HMB), is a common gynaecological problem which may affect quality of life of women significantly, especially during this

perimenopausal phase<sup>i</sup>. The perimenopausal period, typically occurring between the ages of 40-50, is characterized by hormonal fluctuations as ovarian function declines<sup>ii</sup>. During this time, many women experience menstrual irregularities such as polymenorrhoea (frequent menstrual cycles) and menometrorrhagia (irregular, excessive bleeding). These conditions, which are often associated with uterine fibroids, hormonal imbalances, and other reproductive system disorders, can lead to a range of symptoms, including prolonged bleeding, clotting, fatigue, mood swings and anemia. In India, approximately 25%-35% of women in the perimenopausal age group experience such menstrual irregularities.<sup>iii</sup>

The conventional management of HMB typically involves hormonal treatments, such as oral contraceptives and progestins, which aim to regulate menstrual cycles and reduce bleeding<sup>iv</sup>. However, these treatments can have significant side effects, including weight gain, mood swings, and an increased risk of thromboembolic events<sup>v</sup>. For severe cases, where medical management is inadequate, hysterectomy is often recommended. Research indicates that the rate of hysterectomy in India among women aged 45-50 years is alarmingly high, with approximately 40%-60% of women opting for this surgical intervention due to uncontrollable bleeding<sup>vi</sup>. This highlights the urgent need for alternative treatment modalities that are effective and carry minimal side effects.

In Ayurveda various medicines have been described which help and offer promising solutions for management of conditions like, HMB, menometrorrhagia and polymenorrhoea by correcting menstrual disorders and restoring hormonal balance naturally and facilitate uterine health. One such combination of drugs, *Rajonivrittikar Yoga* chosen for the study has been described in *Bhaishya Ratnavali's Yoni roga dhikar* in verse 33. This combination has been mentioned to stop menstruation when there is increased bleeding per vaginum, i.e., it aids cessation of menses. Thus, this paper in form of a case study explores the management of HMB in a 45-year-old woman, using a combination of Ayurvedic drugs to highlight that a woman may avoid hysterectomy and hormonal therapy, while addressing the underlying causes of their menstrual irregularities.

#### Patient Information

A female patient aged 45 years came to Gynaecology OPD of All India Institute of Ayurveda in March 2024 with complaints of Heavy Menstrual Bleeding with increased duration and decreased interval for past 4 years. Patient was educated (Post Graduate) housewife married for 22 years belonging to a middle-class family. Since last 2 years, she used to take medication to stop her menses starting from Day 2 of her menses till her menses stopped, which usually lasted for 15 days with interval being 15-30 days affecting her day-to-day activities during menses. She was vegetarian with affinity for salty and unctuous food.

#### Clinical Findings

Patient was conscious and well oriented with General condition of the patient being fair. Her vitals were stable BP- 130/74mmHg, PR-88/min, RR-20/min, SPO2-99%, Pallor (+), Height-150cm and Weight-55kg. Her Systemic examination revealed no abnormality. Her Obstetric History was P1A1L1 Her menses lasted for 15 days and stopped with medication only. Though she was taking combination of Tranexamic acid with mefenamic acid twice a day till menses stopped for last two years, in the last cycle she had taken hormone (Norethisterone Acetate Controlled Release) for twice a day for 25 days. Her menstrual blood was bright red in colour consisting of mild clots and used almost 63 pads per cycle. Her previous USG had revealed a large uterine fibroid approx 70x70mm and other 20x18mm s/o sub serosal fibroid. she was advised hysterectomy. She did not have any history of Blood Transfusion and her surgical and family history were not significant. Her Appetite was adequate, Bowel and Bladder movements were regular while Sleep was disturbed. She had *sama* (balanced) *agni* (digestive fire) and *mridu Koshtha* (Bowel Type) and her bodily constituency was *Vata-Pitta*. Her *vyayam shakti* or physical strength was *avar*; i.e., used to get tired after little physical work.

#### TIMELINE

The patient came in mid-march and after investigations was registered on 04/04/2024 and internal medicines were planned for a period of three months and follow up was done for next three months.

#### Diagnostic Assessment

Patient was diagnosed of Heavy Menstrual Bleeding (HMB) based on signs, symptoms and Mentrual Pictogram to assess the amount of bleeding. Her CBC showed Haemoglobin (Hb) levels-11.6g/dl, Platelet Count- 2.27 L/cmm, Total Leukocyte Count (TLC)-6800  $\mu$ L, Follicle Stimulating Hormone (FSH)-0.47 and Leutinisng Hormone (LH)-0 mIU/ml while in December 2022 FSH and LH were 31.56 and 20.22 mIU/ml respectively. Her Thyroid profile, serum Prolactin, blood sugar and ECG were also done to rule out underlying cause and found to be within normal limits. Her USG Colour Doppler (C.D.)-Pelvis was done which revealed Endometrial Thickness- 10.2mm and posterior myometrial intramural-subserosal fibroids merging with each other measuring 71x69mm indenting and displacing endometrial stripe with other similar lesions measuring 27 and 18mm s/o subserosal fibroids.

#### Therapeutic Interventions

The patient was given classical Ayurvedic formulation, *Rajonivrittikar Yoga* in form of powder (Posology & Ingredients Table 1). **Dose & Duration:** It was given in amount of 3g twice a day with lukewarm water after meals for a period of three months. **Dietary advice** was given to avoid excessive sour, salty, spicy, pungent, acrid and hot consistency or properties of food. Light exercises and timely meals were encouraged.

### Follow-Up and Outcome

Follow-up was done every 15 days and record regarding menstrual cycle was done in terms of duration, interval, total number of pads, amount of bleeding using Menstrual Pictogram and if any medication required for cessation. CBC, LH, FSH, Beta HCG and USG C.D. Pelvis were done post three months of treatment. After first month, her menses occurred after 29 days for six days with bleeding in toilet during changing pad reduced from moderate to mild, clots were moderate but confined to only Day-2, bleeding in towels reduced from severe to moderate (as per Menstrual Pictogram) using 17 pads (73% reduction) which stopped on its own without medication. Her menses did not occur after second and third month of treatment and also subsequent months including three months follow-up and lost around three kgs of weight post treatment. Her UPT and Beta HCG were negative for pregnancy. Investigations BT and AT are listed in Table 2. Her large leiomyoma reduced from 71x69mm to 42x41mm (approx 41% reduction) while two smaller ones, 27 and 18mm got completely dissolved while haemoglobin got increased by 1.2gm/dl (Overall major changes BT and AT in Table 3). Her quality of life improved in terms of reduced anxiety, irritability, mood swings and sleep disturbances.

### Discussion

This case demonstrates the effectiveness of an Ayurvedic combination in managing HMB and large uterine fibroid in a perimenopausal woman. Patient had long history of eating salty taste predominant diet which is known to vitiate *Pitta*, increase *rakta dhatu* and *visha*<sup>vii</sup> (toxins) contributing to menorrhagia, while along with heavy and unctuous diet, *ushna* (hot) and *tikshan* (pungent) guna of *pitta* and *guru* (heavy), *sthira* (poised) and *pichhila* (slippery) properties of *kapha* causing obstruction of channels which inturn leads to increased *vata* making them move and getting niche in uterus to form *granthi* or leiomyoma of uterus. Drugs present in *Rajonivrittikar Yoga* are mostly of *kashaya rasa* (astringent taste), *sheeta virya* (cold potency), *madhur vipaka*, *rasayana* (rejuvenative), pacifies all three *doshas*, blood purifying, *kapha har* and *vata anulomak* properties leading to *stambhan*, *tridosha* balance, regulates optimum *dhatu*<sup>viii, ix</sup> formation and physiological functions which contributes to reduced inflammation, reduced bleeding and also contributing factors to growth of leiomyoma. It helped in regulation of hormonal imbalances that contributes to growth of uterine fibroid. *Amalaki* has said to have rejuvenative properties, balances all three *doshas* but predominantly pacifies *Pitta* and is also mentioned in *Vayasthaapan*<sup>x</sup> group that stabalises age and in cardi tonic groups of Ayurvedic drugs.<sup>xi</sup> Also, its proved antioxidant, possessing anti-anxiety, anti-inflammatory, analgesic, immuno-modulatory<sup>xii</sup> effects help in improving anxiety, irritability, sleep and vasomotor symptoms of perimenopause. It also possesses anti-carcinogenic, anti metastatic activity,<sup>xiii</sup> cytoprotective and gastro protective properties.<sup>xiv</sup> Thus, it provides a complete package in prevention and maintainence of physical as well as psychological health post menopause and in

geriatric women. Its anti-inflammatory and antioxidant properties<sup>xv</sup>, by reducing inflammation and oxidative stress of endometrium, contributes to decreased bleeding during menses<sup>xvi</sup>. It is also a very good source of vitamin C<sup>xvii</sup> and thus better iron absorption and improved Haemoglobin levels are noticed. *Haritaki* has inhibiting effect on growth of human uterine leiomyoma cells<sup>xviii</sup> by inducing cell death by apoptosis and reducing cell proliferation by inhibiting pro-inflammatory cytokines and increasing antioxidant enzymes<sup>xix, xx</sup>. *Arjun* is a known cardi tonic and well known to support the heart and blood vessels. It inhibits NF-κB (nuclear factor kappa B) and increases Nrf2 (nuclear factor erythroid 2-related factor 2) signalling pathways and reduces inflammation and oxidative stress in the cells of leiomyoma improving uterine blood flow, reducing ischemia and hypoxia, thus, reducing leiomyoma growth and menorrhagia<sup>xxi</sup>. *Rajonivrittikar Yoga* improved natural defence and immunity propagating overall well-being and health of the patient. Its blood purifying property helped and detoxification of body and formation of quality and optimum *dhatu* formation which led to regularization of menstrual cycle and decreased menorrhagia. overall effect in the form of improvement in the symptoms, reduction in bleeding, optimum *dhatu* formation, rejuvenative, *tridosha* balance and de-stressing properties significant improvement in the anxiety, sleep disturbances, irritability and depressive behaviour was seen thus immensely improving quality of life.

In India, where hysterectomy rates remain still high due to untreated HMB, alternative approaches such as Ayurveda provide significant beacon of hope. As evident from this case study Ayurvedic approach targeting uterine health may help not only regulate bleeding, but also reduces or resolves uterine fibroids along with balancing hormonal levels and avoiding the adverse effects commonly associated with synthetic medications<sup>iv</sup>. Ayurved, thus, offers an inexpensive, non-invasive, safe, sustainable and successful solution for perimenopausal women.

### Conclusion

Ayurveda proved successful alternative, avoiding the need for hysterectomy preserving patient's reproductive organs and maintained hormonal balance. Ayurveda offers a promising alternative or complementary approach for menorrhagia in perimenopausal women and uterine leiomyoma and significant improvement in quality of life. Though, more researches should be done to strengthen the evidence & faith.

This case study emphasizes the potential of an integrative approach to managing HMB in perimenopausal women. By combining Ayurvedic treatments with conventional medicine, it is possible to achieve significant improvements in both clinical symptoms and quality of life, providing an effective alternative to invasive procedures like hysterectomy.

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Dose: 3g		Frequency: Twice/day	Adjuvant: luke warm water	Time: After meals	Duration: 90 days
S.No.	Contents	Latin Name	Family	Part Used	Amount
1.	Amalaki	<i>Embllica officinalis Gaertn</i>	Euphorbiaceae	Fruit Pericarp	1g
2.	Arjun	<i>Terminalia arjuna (Roxb.) w.&amp;A</i>	Combretaceae	Twak (Bark)	1g
3.	Haritaki	<i>Terminalia chebula Retz.</i>	Combretaceae	Phala (Fruit Pericarp)	1g

Table 1: Posology & Ingredients of Rajonivrittikar Yoga

Investigations	Before Treatment (BT)	After Treatment (AT)
CBC: Hb (g/dL)	11.6	12.8
Platelet Count (10 <sup>5</sup> /mm <sup>3</sup> )	2.23	1.57
TLC (μL)	6800	6080
FSH (mIU/ml)	0.47	139.18
LH (mIU/ml)	0	71.04
USG C.D.(Pelvis)		
Ut. Size (cm)	*7.1x6.9 +2.7& 1.8cm	11x6.8x6 *4.2x4.1cm Fibroid
ET (mm)	10.2	6
Ovarian Size (cm) R/L	2.4x1.9x.7/ 2.3x1.7x1.2	3.2x2.9x1.6/ 2x1.8x1.8

<b>Ova. Vol. (cc) R/L</b>	1.9/2.5	8/4
<b>Ut. Bl. Flow RUA- RI,PI/LUA- RI/PI</b>	0.7,1.6/ 0.7,1.7	0.9,2/ 0.8,1.6
<b>Ov. Bl. Flow ROA- RI,PI/LOA- RI/PI</b>	0.6,1/ 0.6,0.9	0.8,1.9/ 0.7,1.4

**Table2: Investigations Before & After Treatment**

<b>Parameter</b>	<b>Before Treatment (BT)</b>	<b>After Treatment (AT)</b>
<b>Bleeding (Pads/Cycle)</b>	63	0
<b>Duration (Days)</b>	15	0 (stopped without medication)
<b>Interval</b>	15-30 days	Normal
<b>Clots</b>	Mild	None
<b>Leiomyomas (Fibroid)</b>	71x69mm & 27x18mm	4.2x4.1mm (small-resolved)
<b>Pallor</b>	Present (Mild)	Resolved
<b>Anxiety</b>	Present	Resolved
<b>Mood Swings</b>	Present	Resolved
<b>Sleep Disturbances</b>	Present	Resolved
<b>Weight</b>	55 kg	51 kg

**Table 3: Overall major changes during treatment**