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Case Report

Ovarian Endometrioma

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Exploring the efficacy of Basti and Sthanika Chikitsa in Ovarian Endometrioma Management: A Case Study

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Introduction: Endometriosis, prevalent in 10-12% of women of reproductive age worldwide, is a common gynecological disorder that is increasingly observed in developing countries like India. It involves endometriomas - cystic lesions, often called chocolate cysts, primarily located in the ovaries. Symptoms include chronic pelvic pain, dysmenorrhea, dyspareunia, depression, and infertility. A 32-year-old software engineer presented to SDM Institute of Ayurveda and Hospital, Bengaluru, with a 2-year history of painful menstrual cycles. Investigations revealed left ovarian endometriomas.

Method: Panchakarma Chikitsa was initiated with Ama Pachana, followed by Lekhana Basti and local treatments on an inpatient basis. Shamana Aushada was recommended for continued care after discharge.

Result: Before treatment (April 13, 2023), pelvic ultrasound revealed two endometriotic cysts in the left ovary: 2.5×2.1×2.2 cm (10cc) and 4.5×4.2×4.3 cm (40cc). After Lekhana Basti (April 22, 2023), follow-up ultrasound showed no remaining cysts.

Discussion: Endometriotic cysts, or chocolate cysts, can be managed similarly to Granti (cysts) with Chedana (surgical intervention) as the primary approach. Due to recurrence and financial constraints, the patient chose non-invasive Ayurvedic treatment. Basti and Sthanika Chikitsa with Lekhana and Ropana properties was used for effective management. After treatment, the patient experienced only mild dysmenorrhea and has resumed normal daily activities.

Keywords: Endometrioma, Lekhana Basti, Granthi Chikitsa, Sthanika Chikitsa

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Introduction

Endometriosis is an oestrogen-dependent, inflammatory gynaecologic condition characterized by the abnormal presence of endometrial tissue outside the uterine cavity.[1] Affecting approximately 10% of reproductive-aged women, it is a leading cause of chronic pelvic pain, dyspareunia, dysmenorrhea, and infertility.[2] Endometriosis predominantly manifests within the pelvic region, with the ovaries being the most common site.

Pathophysiology of Endometriomas

Endometriomas, often referred to as "chocolate cysts" due to their thick, dark brown fluid content, are cystic lesions resulting from endometriosis. These lesions are most commonly found in the ovaries, occurring in about 17–44% of women diagnosed with endometriosis.[3] They are indicative of a more severe disease state and can negatively impact ovarian reserve. The pathogenesis of endometriomas is hypothesized to arise either from endometriotic invasion or metaplasia of functional cysts, or through ovarian surface endometriosis that bleeds into the ovarian cortex. In women presenting with subfertility, approximately 17% have been found to have endometriomas.[4]

Clinical Presentation and Symptoms

Patients with symptomatic endometriosis are typically nulliparous, reproductive-aged females presenting with cyclical pelvic pain, particularly during menstruation. The hallmark symptom is painful and prolonged menses (lasting more than seven days), often accompanied by chronic pelvic pain that may start two to three days before menstruation and persist for a few days after.[5] Key symptoms of endometriosis include:

- Pelvic pain
- Heavy menstrual bleeding
- Painful menstruation (dysmenorrhea)
- Back pain
- Painful sexual intercourse (dyspareunia)
- Painful defecation (dyschezia)
- Painful urination (dysuria)
- Urinary frequency
- Nausea and vomiting
- Bloating

Diagnostic Evaluation

While imaging and laboratory studies play a limited role in the definitive diagnosis of endometriosis, several evaluations can aid in identifying underlying causes of pelvic pain:

- **Laboratory Tests:** A complete blood count (CBC), cancer antigen 125 (CA-125), CCR1, urinalysis, and testing for sexually transmitted infections (STIs) may be considered.[6]
- **Imaging:** Transvaginal ultrasound is commonly used to detect pelvic abnormalities; however, it cannot visualize superficial endometriosis implants. Magnetic resonance imaging (MRI) and computed tomography (CT) can be utilized for further evaluation.
- **Definitive Diagnosis:** The gold standard for diagnosing endometriosis is laparoscopy. During this procedure, lesions typically appear as blue, black, red, white, or non-pigmented spots.[7] The presence of significant adhesions, peritoneal defects, or endometriomas indicates more severe disease. Laparoscopic biopsy and subsequent pathological examination for endometrial glands & stroma confirm diagnosis.

Therapeutic approach

Endometriosis treatment primarily involves hormonal therapy or surgery, depending on the severity of the disease:

- **Hormonal Therapy:** Milder cases of endometriosis can be managed with oral contraceptive pills, progesterone (oral or intrauterine device), gonadotropin-releasing hormone (GnRH) agonists (e.g., leuprolide), or androgens (e.g., danazol).[8]
- **Surgical Treatment:** In more severe cases, or when conservative management fails, surgical excision of endometrial lesions via laparoscopy is recommended. This approach may improve pain symptoms and fertility outcomes.

Ayurvedic point of view

Ayurveda views ovarian endometriomas as a condition influenced by *Udavarta* (the upward movement of *Vata*) and *Granti* (cystic formations), involving an imbalance of all three *Doshas*.[9]

Vata Dosha is implicated in dislocation and erratic movement of endometrial tissue, disrupting normal menstrual flow. *Pitta Dosha* contributes to inflammatory changes, causing pain and discomfort around endometrial implants, while *Kapha Dosha* is associated with formation of cysts, such as endometriomas, and development of adhesions. Ayurvedic treatment aims to restore balance among *doshas* to manage symptoms & improve reproductive health.

Case Report

- **Name:** XYZ
- **Age:** 32 years
- **Gender:** Female
- **Marital Status:** Single
- **Occupation:** IT Professional
- **Religion:** Hindu
- **Address:** Kengeri
- **Socioeconomic Status:** Middle class

Medical Details

- **OPD No.:** 247878
- **IPD No.:** 021378
- **Date of Admission (DOA):** 13/04/2023
- **Date of Discharge (DOD):** 22/04/2023

Family Details

- **Husband's Name:** Not applicable (Single)

***Pradhana Vedana Vrittanta* (Main complaints)**

The patient reports experiencing increased menstrual pain for the past two years, occasionally accompanied by heavier-than-normal bleeding.

***Adhyatana Vedana Vrittanta* (History of main complaints)**

A 31-year-old female presented with a history of sharp, spasmodic pain that intensifies just before her menstrual periods and persists for 2 to 3 days into the cycle. The pain, concentrated in her lower abdomen, back, and thighs, has progressively worsened over the past few months. Between cycles, she experiences bloating, intermittent constipation, and general discomfort. After her last period on 4/4/23, she sought medical attention at SDMIAH OPD on 13/4/23 due to a significant increase in lower abdominal pain.

***Poorva Vyadhi Vrittanta* (History of past illness)**

Medical History: Occasional use of Meftal Spas for pain relief during menstruation.

Surgical History: Dilation and curettage (D&C) performed for a missed abortion 5 years ago, approximately 2.5 months into the pregnancy.

***Kula Vrittanta* (Family history)**

- All her female family members are said to be healthy.

***Vaiyaktika Vrittanta* (Personal history)**

- **Diet (*Aahara*):** Mixed diet
- **Sleep (*Nidra*):** Disturbed
- **Bowel Movements (*Mala*):** Regular, with occasional constipation
- **Urination (*Mutra*):** 3-4 times per day
- **Exercise (*Vyayama*):** Walks daily for approximately 30 minutes

***Rajo Vrittanta* (Menstrual history)**

- **Menarche:** Age 11 years
- **Menstrual Cycle:** Regular cycles, lasting 2-3 days with a frequency of 28-30 days

Pad Usage:

First Day: 4-5 pads per day

Subsequent Days: 2 pads per day, with gradual reduction in bleeding

- **Last Menstrual Period (LMP):** 4/4/23
- **Menstrual Flow:** Dark brown color, no clots, accompanied by lower abdominal pain

Obstetric history:

- Now she is single
- G1 P0 L0 A1 D0

Clinical Findings

Ashtasthana Pareeksha

1. Nadi: Vata Kaphaja
2. Mutra: 3-4 times / day
3. Mala: 1-2 times / day
4. Jihwa: prakruta
5. Shabda: Prakruta
6. Sparsa: Anushna sheeta
7. Drik: Prakruta
8. Akriti: Madhyama

Dashavidha Pareeksha

1. Prakruti- Vata Kaphaja
2. Vikruti- Rasa, Rakta, Arthava
3. Sara- Madhyama
4. Samhana- Madhyama
5. Satva- Madhyama
6. Satmya- Madhyama
7. Pramana- Madhyana
8. Vaya- 32 Yrs, *Madyama*
9. Ahara Shakti- Madhyama
10. Vihara Shakti- Madhyama

- **Vitals:** Stable throughout the hospital stay.
- **Systemic Examination:** No abnormal findings (NAD).

Pelvic Examination:

- **Per Speculum Examination (P/S):** Cervix shows mild ectropion with a mild white discharge; no specific odour detected.
- **Per Vaginal Examination (P/V):** Uterus is normal in size and anteverted.
- **Fornices:** Right fornix is free; left fornix is free but exhibits tenderness and a nodular mass.

Timeline

Patient approached OPD on 13/04/2024 with severe pain abdomen associated with tiredness.
↓

Patient was advised USG Abdomen and Pelvis on 14/04/2023- revealed Two Left endometriotic/chocolate cyst.

25*21*22 mm- 10 cc vol
45*42*43 mm- 40 cc vol
↓

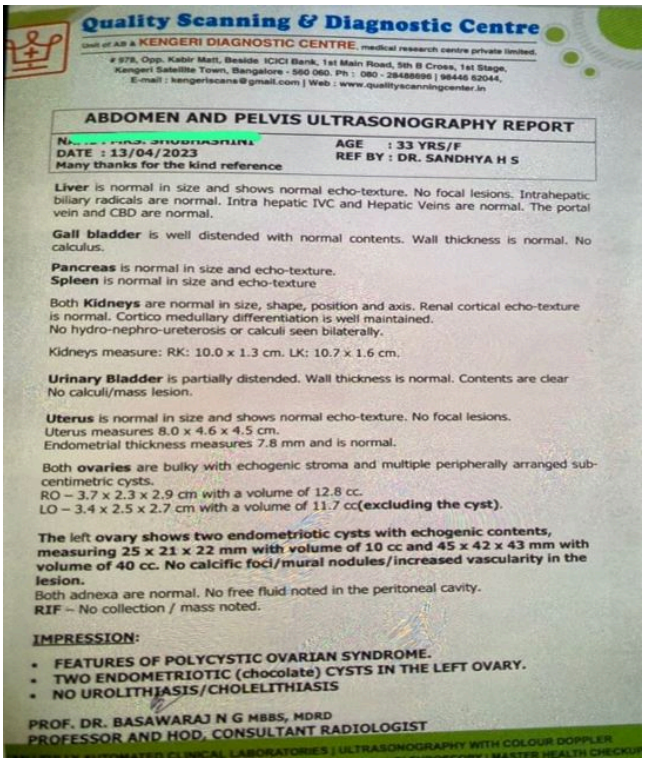
Lekhana Basti was planned for 8 days from 15/04/2024 to 22/04/2024 alongside other *Panchakarma* and *Sthanika Chikitsa.*
↓

Post treatment USG Abdomen and Pelvis on 21/04/2024- revealed regression in size of Left Endometriotic cysts.

1. 2.3*1.7 cms
2. 1.5*1.3 cms
↓

Further Follow-ups following treatment and regular medications, there was no cyst development and is Symptom free for 7-8 months.

Diagnostics Assessment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ABDOMEN AND PELVIS ULTRASONOGRAPHY REPORT

DATE : 13/04/2023 AGE : 33 YRS/F
Many thanks for the kind reference REF BY : DR. SANDHYA H S

Liver is normal in size and shows normal echo-texture. No focal lesions. Intrahepatic biliary radicals are normal. Intra hepatic IVC and Hepatic Veins are normal. The portal vein and CBD are normal.

Gall bladder is well distended with normal contents. Wall thickness is normal. No calculus.

Pancreas is normal in size and echo-texture.
Spleen is normal in size and echo-texture

Both **Kidneys** are normal in size, shape, position and axis. Renal cortical echo-texture is normal. Cortico medullary differentiation is well maintained.
No hydro-nephro-ureterosis or calculi seen bilaterally.

Kidneys measure: RK: 10.0 x 1.3 cm. LK: 10.7 x 1.6 cm.

Urinary Bladder is partially distended. Wall thickness is normal. Contents are clear
No calculi/mass lesion.

Uterus is normal in size and shows normal echo-texture. No focal lesions.
Uterus measures 8.0 x 4.6 x 4.5 cm.
Endometrial thickness measures 7.8 mm and is normal.

Both **ovaries** are bulky with echogenic stroma and multiple peripherally arranged sub-centimetric cysts.
RO – 3.7 x 2.3 x 2.9 cm with a volume of 12.8 cc.
LO – 3.4 x 2.5 x 2.7 cm with a volume of 11.7 cc**(excluding the cyst)**.

The left ovary shows two endometriotic cysts with echogenic contents, measuring 25 x 21 x 22 mm with volume of 10 cc and 45 x 42 x 43 mm with volume of 40 cc. No calcific foci/mural nodules/increased vascularity in the lesion.
Both adnexa are normal. No free fluid noted in the peritoneal cavity.
RIF – No collection / mass noted.

IMPRESSION:

- FEATURES OF POLYCYSTIC OVARIAN SYNDROME.
- TWO ENDOMETRIOTIC (chocolate) CYSTS IN THE LEFT OVARY.
- NO UROLITHIASIS/CHOLELITHIASIS

PROF. DR. BASAWARAJ N G MBBS, MDRD
PROFESSOR AND HOD, CONSULTANT RADIOLOGIST

Pre-Treatment Laboratory Results (as of 14.04.23)

- **Hemoglobin (Hb%):**2 g/dL
- **Cancer Antigen 125 (CA-125):**8 U/mL
- **Fasting Blood Sugar (FBS):** 95 mg/dL
- **Thyroid Function Tests:**
  - **Triiodothyronine (T3):** 131 nmol/L
  - **Thyroxine (T4):**2 nmol/L
  - **Thyroid-Stimulating Hormone (TSH):**05 mIU/L
- **Urinalysis:** Normal

Final Diagnosis:

Left Endometriotic cyst-Chocolate Cyst

Therapeutic Intervention

After evaluating the patient's *Dosha (Vata-Kapha), Dushya (Rasa, Rakta,* and *Arthava), Aushadha (Teekshna), Desha (Sadharana), Kala (Sadharana), Satmya (Madhyama), Satva (Madhyama), Agni (Vishama), Prakruti (Vata-Kapha), Vaya (Madhyama),* and *Bala (Madhyama),* the treatment plan outlined in Table 1 was adapted and implemented over an 8-day period.

Table 1: Treatment Protocol - *Panchakarma* Procedure

SN	Procedure	Particulars advised	Duration
1.	Shirodhara	Brahmi Taila	8 days
2.	Yoni Prakshanala	Panchavalkala Kwatha	8 days
3.	Yoni Dhoopana	Haridra Churna	8 days
4.	Yoni Pichu	Triphala Taila (in the evening hours)	8 days
5.	Yoga Basti Course	Anuvasana Basti 1. M.D. Forte Taila- 100ml Niruha Basti 1. Madhu- 50ml 2. Saindhava Lavana- 5 gms 3. Sneha- M.D. Forte Taila- 80ml 4. Kalka- Shatapushpa Churna-10gms, Asanadi Kwatha Churna- 150gms, Lashuna- 10 cloves 5. Kashaya- Asanadi Kashaya- 400ml 6. Yavakshara- 3g	8 days

Following treatment, the patient was discharged with a 15-day prescription for combination oral medications and was instructed to return for a follow-up after this period.

Table 2: *Shamana Aushadi* prescribed at the time of discharge

SN	Formulation	Dosage	Duration
1.	Varunadi Kashaya	10ml-10ml-10ml with equal warm water After food	15 days
2.	Kanchanara Guggulu	1-1-1 After food	15 days
3.	Trayodashanga Guggulu	1-0-1 After food	15 days
4.	Cheriya Madhu Snuhi Rasayana	1tsp-0-1tsp After food	15 days

Pathya: Healthy vegetarian diet. Yoga and good sleep

Apathya: spicy, deep-fried food, late night work and to reduce Travel.

Follow-Up and Outcomes

Previously, the patient experienced endometriotic cysts every 2-3 months, accompanied by severe menstrual cramps requiring hospitalization. However, since starting regular treatment in May 2021, including *Panchakarma therapy* and oral medications, she has been symptom-free and cyst-free for the past 7-8 months. Currently, she continues to receive holistic treatment and attends regular follow-up appointments.

Discussion

Endometriomas, or chocolate cysts, have a high recurrence rate and are often associated with severe secondary dysmenorrhea and infertility. In contemporary medicine, laparoscopic surgery is considered the "gold standard" for both diagnosis and treatment. However, due to the costs, hospitalization, and risks of post-surgical complications like adhesions and infertility, patients often seek non-invasive, palliative treatments.

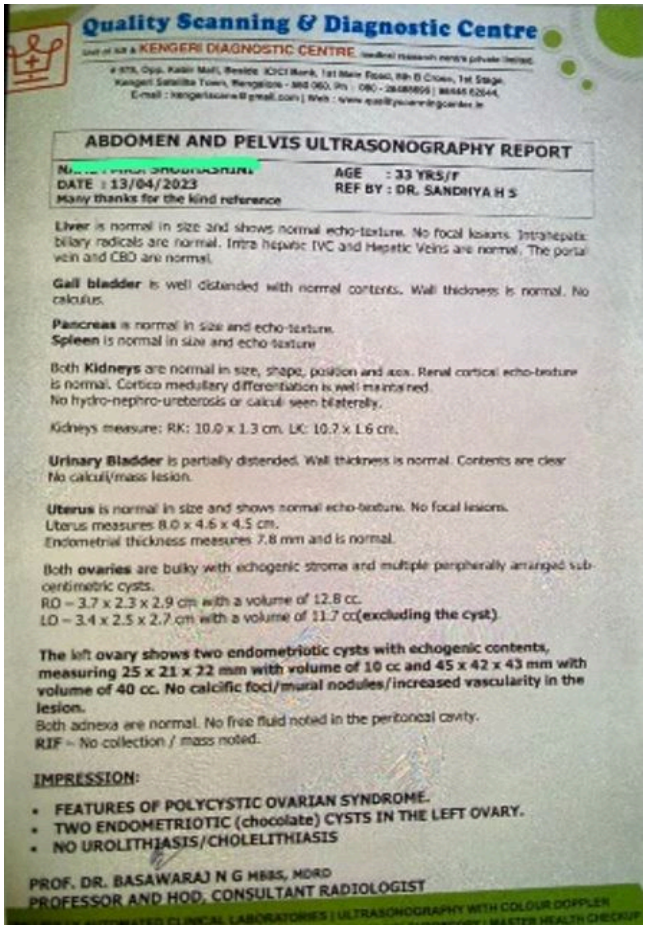
Ayurveda offers a holistic approach to managing endometriosis, viewing it through the lens of *Udavarta* (a condition caused by the upward movement of *Vata*) and *Granti* (cystic or nodular formations), with the involvement of all three doshas*: Vata, Pitta,* and *Kapha. Vata Dosha* is implicated in the dislocation and erratic movement of endometrial tissue; *Pitta Dosha* contributes to the inflammatory changes within the endometrial implants, causing pain and discomfort; and *Kapha Dosha* is associated with the formation of adhesions and the cystic nature of endometriomas.

Ayurvedic treatments aim to balance these doshas and alleviate symptoms. *Niruha Basti* (medicated enema) with *Gomutra* (cow urine) and *Yavakshara* (an alkaline preparation) is used to help dissolve *Granti* (cysts) through its purifying and detoxifying effects. *Anuvasana Basti* (oil enema) with *M.D. Forte Taila*, containing herbs like *Mundi (Sphaeranthus indicus)* and *Dhanyaka (Coriandrum sativum),* works to balance *Vata-Kapha*, reduce *Vata-Rakta* (vitiated blood), and promote wound healing through its anti-inflammatory and soothing properties.**[10]**

Yoni Prakshalana with *Panchavalkala Kwatha* offers a comprehensive Ayurvedic approach to managing ovarian endometriomas by providing anti-inflammatory, antibacterial, and tissue-healing benefits. This combination supports internal detoxification, reduces inflammation, and cleanses the reproductive tract, effectively addressing endometriosis symptoms and enhancing overall reproductive health by balancing the doshas. Complementing this, *Yoni Dhupana* with *Haridra Churna* leverages turmeric's potent anti-inflammatory and antimicrobial properties to reduce ovarian endometrioma size, alleviate pain, and promote reproductive health.

Finally, *Yoni Pichu* with *Triphala Taila* aids in further reducing inflammation, supporting tissue repair, and improving pelvic circulation, contributing to shrinkage of endometriomas and overall enhancement of reproductive tissue health. Together, these *Sthanika Chikitsa* synergistically work to alleviate symptoms, promote healing, and restore balance in reproductive system. Oral medications such as *Cheriya Madhu Snuhi Rasayana*, known for its excellent anti-inflammatory (*Shophahara*) properties, are used to reduce inflammation and support overall reproductive health. Additionally, *Yoga Basti* (a combination of different *Basti* therapies) and *Sthanika Chikitsa* (local treatments) have demonstrated significant effectiveness in alleviating dysmenorrhea, reducing recurrence of endometriomas, and improving fertility by addressing root causes and enhancing body's natural healing mechanisms. This integrative approach not only aims to manage symptoms but also seeks to restore balance and promote long-term health, offering a comprehensive alternative to conventional surgical interventions for patients seeking holistic and non-invasive treatments.

Diagnostic Pre and Post Assessment



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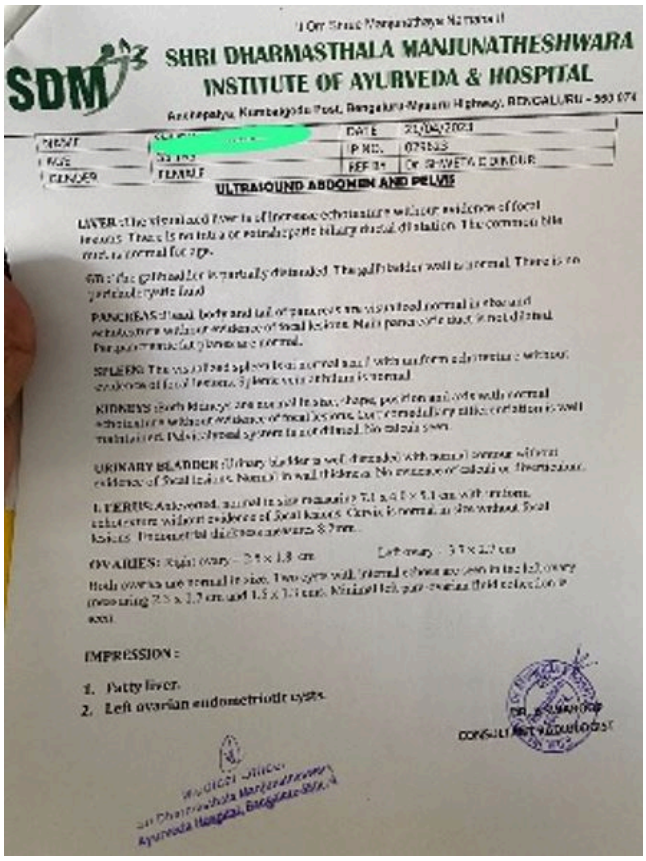

SDM SHRI DHARMASTHALA MANJUNATHESHWARA INSTITUTE OF AYURVEDA & HOSPITAL

ULTRASOUND ABDOMEN AND PELVIS

IMPRESSION :

1. Fatty liver.
2. Left ovarian endometriotic cysts.

Conclusion

Endometriomas, or chocolate cysts, are commonly treated with surgery, but *Ayurveda* offers a holistic approach by addressing *Dosha* imbalances. Ayurvedic therapies like *Niruha Basti* and oral medications such as *Cheriya Madhu Snuhi Rasayana* reduce inflammation and balance *Vata, Pitta*, and *Kapha* to promote tissue healing. Local treatments, including *Yoni Prakshalana* with *Panchavalkala Kwatha* for anti-inflammatory and tissue-healing benefits, *Yoni Dhupana* with *Haridra Churna* for pain relief and reproductive health, and *Yoni Pichu* with *Triphala Taila* to enhance pelvic circulation and reduce endometrioma size, provide targeted, non-invasive management. This comprehensive approach not only alleviates symptoms but also supports long-term reproductive health.

Patient Perspective

The patient reports a significant reduction in dysmenorrhea and is now remarried with plans to conceive.

Informed Consent

The authors confirm that they have secured all necessary patient consent forms.

The patient has been notified that their initials will not be disclosed, and every effort will be made to protect their identity.

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