A Case Report on Ayurvedic management in Adenomyosis

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Abstract: Adenomyosis is a medical complication involving into the myometrium of the uterus. It is a condition where endometrial tissue proliferates in the myometrium and these ectopic endometrial tissue in the myometrium starts proliferating as a result thickening of the uterus occurs. Treating adenomyosis is a challenge and hysterectomy has been the only way to treat the condition. But by using Ayurvedic formulation with properties like Raktastambhan, Raktavardhak, Vatashamak, Balya, Lekhana etc. properties patient got significant relief from pain and excessive bleeding along with the improved quality of life.

Keywords: Adenomyosis, Asrgdhara, Dyspareunia, Raktastambhana

INTRODUCTION

Adenomyosis is a gynecologic condition characterized by ectopic endometrial tissue within the uterine myometrium. First described in 1860 by the German pathologist Carl von Rokitansky, the histopathologic finding was termed "cystosarcoma adenoids uterinum."[1] Presenting signs and symptoms vary, but most commonly are painful menses and/or heavy menstrual bleeding. Historically, the condition was a histologic diagnosis that required biopsy or more often hysterectomy. Presently, the diagnosis can be made non-invasively using ultrasound or magnetic resonance imaging (MRI). The definitive treatment for women who no longer desire pregnancy is hysterectomy, while a variety of other medical and minimally invasive therapies are available for those who want to preserve fertility or want to avoid more extensive surgery.

Etiology

While the histology is well-described, the etiology of adenomyosis is not known definitively. Researchers have postulated several theories. The most commonly accepted theory is that adenomyosis results from a disrupted boundary between the deepest layer of the endometrium (endometrium basalis) and underlying myometrium. This process leads to a cycle of inappropriate endometrial proliferation into the myometrium with subsequent small vessel angiogenesis as well as adjacent myometrial smooth muscle hypertrophy and hyperplasia. demonstrating a higher prevalence of adenomyosis following dilation and curettage and cesarean section support this theory.[2][3]

A second theory proposes an embryologic mechanism whereby pluripotent Mullerian stem cells undergo inappropriate differentiation leading to ectopic endometrial tissue. This theory has support from evidence demonstrating altered expression of specific genetic markers, in addition to case reports of endometrial tissue found in women with Rokitansky-Kuster-Hauser syndrome (Mullerian agenesis).[4][5][6][7]

Other less well-accepted theories propose altered lymphatic drainage pathways and displaced bone marrow stem cells to explain the presence of ectopic endometrial tissue.

Epidemiology

Accurate demographics and disease prevalence are unclear due to previous underreporting and underdiagnosis. Estimates range from 5% to 70% with more recent data suggesting a prevalence of 20% to 35%.[8][9] Classically, adenomyosis is described as a disease of pre-menopausal, multiparous women in their thirties to forties; however, this reflects the inherent bias towards women undergoing a hysterectomy. Improvements in the diagnostic ability of ultrasound and MRI criteria have led to more insight about affected populations.

A rare form of the disease, termed juvenile cystic adenomyosis, is characterized by more extensive hemorrhage within myometrial cysts and is typically seen in women younger than 30. Symptoms are typically refractory to medical therapy and require surgery, either myomectomy or hysterectomy.[10]

Risk factors for adenomyosis include conditions leading to increased estrogen exposure (increased parity, early menarche, short menstrual cycles, elevated body mass index, oral contraceptive pill use, tamoxifen use) and prior uterine surgery (dilation and curettage, cesarean section, myomectomy, etc.).[8]

Pathophysiology

Inappropriate endometrial tissue proliferation within the myometrium leads to symptoms through a variety of mechanisms. Normal endometrial tissue is responsible for prostaglandin production which drives the contractions of menstruation. Ectopic foci of adenomyosis lead to increased levels of prostaglandins which result in dysmenorrhea which characterizes the disease. Estrogen also drives endometrial proliferation, which medical therapies aim to reduce.

Heavy menstrual bleeding is thought to be caused by a combination of factors which include increased endometrial surface area, increased vascularization, abnormal uterine contractions, and increased cell signaling molecules such as prostaglandins, eicosanoids, and estrogen.

Histopathology

Histologic diagnosis of adenomyosis is the presence of endometrial stroma and glandular tissue within the smooth muscle of the myometrium. Different definitions of the required depth of invasion exist, some using an absolute measurement between 2.5 to 8 mm while others use a percentage. Additionally, several histologic grading classifications attempt to characterize the burden of disease.[9] Overall, the histologic diagnosis is not entirely standardized and significantly affected by the quality of tissue sampling.

CASE STUDY

A 39 years old married female patient, housewife by occupation with the complaints of heavy and prolonged menstrual bleeding per vaginum, severe pain in lower abdomen before the onset of menstruation and during menstruation since last six menstrual cycles associated with low back pain and general weakness. She was unable to perform day-today activities during menstrual cycle like household works due to heavy bleeding and severe lower abdominal pain. She visited nearby clinic and was prescribed with tablets Tranexamic acid 500mg TDS and analgesic for the pain. She had taken those tablets for last 3 months only during menstrual cycle. Even after taking these medicines the patient did not find any relief. She revisited the clinic for the same complaints and was advised for USG- Abdomen & pelvis finding adenomyosis changes in myometrium. Patient was advised for hysterectomy. As she was not willing for hysterectomy so approach to Dr. S.R. Rajasthan Ayurved University hospital 14/03/2024 for Ayurvedic treatment.

Past history of endometrial biopsy done on 26/07/2024, reported proliferative endometrium no evidence of malignancy.

Personal history

Appetite: Reduced.

Bowel: Sometimes regular sometimes constipated.

Micturition: 3-4 times a day 1-2 times in night.

Sleep: 5 hours in night and 1/2 to 1 hour afternoon (Diva Sayan)

Menstrual history

Menarche - 12 years of age

Menstrual cycle - Nature - Irregular, Duration - 60-90 days, bleeding phase - 15-20 days

No. of pads used $\frac{day}{-7-8}$ pads/day on 1st 4 days, 3-4 pads/day on 5th day, 1-2 pads/day rest of the days

Blood clots - Present

Marital history

Got married in the age of 19 years.

Obstetrical history

P₃ A₀ L₃ - FTND at hospital, L₃ - female child age 17 years

No any contraceptive history

Clinical Findings

Per Abdomen

Inspection - No any surgical scar present

Palpation - Soft, Tenderness in supra pubic and right iliac fossa, No organomegaly observed

Percussion - Tympanic

Auscultation - Normal Bowel sounds heard

Gynaecological Examination

Pelvic Examination

Examination of Vulva

- Inspection: Pubic Hair Normal
- Clitoris Normal
- Labia Normal

Per Vaginal Examination

- Cervix Soft, Mobile, Movement Painful
- Lateral Fornices Free, Non tender
- Posterior Fornix Tenderness +

Uterus (Bimanual Examination)

- Position Anteverted & Anteflexed, Size -Bulky Uterus
- Tenderness Present

Per speculum Examination

Cx healthy, no abnormal discharge

Investigation (before treatment)

USG (Abdomen +pelvis) - 19/02/2022 - Bulky uterus (94 x 73 x 59 mm) with heterogeneous echotexture of myometrium likely adenomyosis changes. ET measures 6.7 mm.

Hb - 10.20 gm. %

Treatment

The treatment is carried out with the following medicine for 6 month. During this period the patient was advised to take Pathya Ahara (nutritive diet) and avoid Amla & Lavana Aahara.

Observation and Result

The patient had followed the Aahar and drug restriction strictly. After six months of treatment, patient was comfortable and pain was very much reduced and bleeding was reduced and clots were absent. The Ultrasonography was done after 6 months of treatment.

Laboratory finding

USG (Abdomen +pelvis) - 13 september 2022

Uterus: Anteverted (87 x 53 x 42 mm). Endometrial thickness: 9-10 mm.

No gross adnexal pathology seen.

Hb-11.20 gm. %

DISCUSSION

Chandrakala Rasa contains Kajjali, Tamra Bhasma, and herbal Dravyas like Kutaki, Guduchi, and Ushira etc.

The drug contains ingredients having properties of Raktaprasadana, Raktavarodhak Balya, Raktapittahara, Dahashamana, etc. By these properties it relief the symptoms of patient heavy menstrual bleeding.

Praval Pishti, a powdered formulation of coral is hallowed with Madhura, Amla and Kashaya Rasa and shows Laghu and Snigdha Guna. Its properties like Shita Virya, Kashaya Rasa and Madhura Vipaka act as Raktaastambhak. It pacifies all the three Doshas, Kapha, Pitta and the Vata Doshas.

Pradrantak Loha content Lauh Bhasma, Tamra Bhasma, Shankh Bhasma, Vang Bhasma, Abhrak Bhasma, Trikatu, Triphala, etc. It is indicted in Pradar Roga due to properties like Kashaya Rasa which act as Sthambhana. Loha Bhasma that induces the formation of haemoglobin and RBCs. Sankha Bhasma and Abhrak Bhasma stimulate appetite and improve digestion. Trikatu and Triphala having Lekhana properties which reduce the growth of endometrium in myometrium.

In Lodhrasava, Lodhra is the main ingredient. Lodhra, the main ingredient possesses Kashaya Rasa, Seetha Veerya, Pittaghna, Sthambhana and Grahi properties. It is also highly effective astringent, and this astringent action can be attributed to an alkaloid present in Lodhra bark called loturodine. It is suggested that Lodhra might have influenced the endometrial prostaglandin apparatus, thereby acting effectively in the control of abnormal uterine bleeding.

Dashamoola Kwatha contains Bilva, Agnimantha, Shyonaka, Patala, Gambhari, Bruhati Kantakari, Shaliparni, Prisniparni, Gokshura.

Most of the drugs in Dashamooal are having Madhura & Kashaya Rasa, Laghu Ruksha Guna, Ushna Veerya, Madhura Vipaka, which mainly act on Vata Vikriti. Madhura rasa, Laghu Guna and

Madhura Vipaka helps to pacify vitiated Vata. The actions of Dashamoola are Vatahara, Shulahara, Shothahar, Balya etc. It has being also proven that Dashamoola has anti-inflammatory and analgesic properties.

CONCLUSION

Ayurveda is a holistic science in which root cause of disease is treated. In the present study, Chandrakala Rasa, Pradrantak Loha, Praval Pishti Lodhrasava, Dashamoola Kashaya and have been used for the treatment of adenomyosis, which is found to be very effective. The treatment given was very effective for heavy menstrual bleeding management and treating the adenomyosis and improved patient's general health.

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