



**ORIGINAL RESEARCH PAPER**

**Ayurveda**

**AYURVEDIC MANAGEMENT OF INFERTILITY DUE TO ENDOMETRIOTIC CYST: A CASE STUDY**

**KEY WORDS:** Endometriotic cyst, *Vandhyatwa*, Infertility, *Vatiki*

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**ABSTRACT**

Endometriotic cyst is a debilitating condition characterized by high recurrence rates. Endometriosis affects roughly 10% of reproductive age women and girls globally. The principal aim of the treatment include relief of symptoms, resolution of existing implants. And prevention of new foci of ectopic endometrial tissue and regain fertility. There is no evidence that a combination of medical- surgical treatment significantly enhances fertility, and it may unnecessarily delay further fertility therapy. In Ayurveda these condition may be correlated as *Vatiki*. According to Ayurveda four factors are responsible to get a *supraja*. They are *Ritu* (ovulation), *Kshetra* (healthy uterus and passage), *Ambu* (proper nutrition) and *Beeja* (healthy sperm & ovum). Any abnormality in above factors causes *vandhyatwa*. This is a case study of a 26 year old married woman with the complaints of inability to conceive even after 6 years of unprotected married life and severe dysmenorrhea, dyspareunia and pain in the right lower quadrant prior to menstruation. The ultrasonography revealed endometriotic cyst measuring 5.5\* 4.5 cm size in the right adnexa. It affects the factors like *kshetra* and *Ritu* which may reduce the fertility rate. Here Ayurveda treatment protocol including *sodhana* (Purification) and *samana* (Pacification) *chikitsa* was done which resulted in complete disappearance of endometriotic cyst and there after preconceptional care was given. After 3 months she got conceived. This case report provides us a guideline that endometriotic cyst can be successfully treated in Ayurveda with valid *chikitsa sidhantha*.

**INTRODUCTION**

Infertility affects millions of people of reproductive age worldwide, and has an impact on their families and communities. In the female reproductive system, infertility may be caused by a range of abnormalities of the ovaries, uterus, fallopian tube, and the endocrine system. Among them ovarian masses are very common cause for female infertility. It affects the normal anatomy of the reproductive system.

Endometriosis is a debilitating condition characterized by high recurrence. About 25-50% of infertile women have endometriosis, and 30-50% of women with endometriosis are infertile [1]. Patients with endometriosis mainly complain of pelvic pain, dysmenorrhea and dyspareunia. Infertility occurs due to the probable effects of endometriosis on the pelvic cavity, ovaries, fallopian tubes or uterus [2]. Current therapeutic approaches are far from being curative; they focus on managing the clinical symptoms of the disease rather than fighting the disease. Specific combination of medical, surgical and psychological treatments can ameliorate the quality of life of women with endometriosis. Although theoretically advantageous, there is no evidence that a combination of medical- surgical treatment significantly enhances fertility, and it may unnecessarily delay further fertility therapy.

Ayurveda eliminates the deep seated root cause of any disease and naturally restores biological balance in the body. Ayurvedic concept of health and ill health are purely based on the theory of *tridoshas- vata, pitta and kapha*. The main cause for disease in Ayurveda is *Dosha vaishamya*. In the case of endometriotic cyst the *Apana vata vaigunya* is the main *dosha* vitiation. The endometriotic cyst may be correlated to *Vatiki* in Ayurveda [3]. It also affects the *kshetra* and *Ritu* which may reduce the fertility rate. In this case the patient had endometriotic cyst in the right ovary and it affected the fertility of the patient. With Ayurveda treatment, her endometrial cyst completely disappeared and after following the preconception care she conceived naturally.

**Case study**

A 26 year old married woman with her husband aged 33 years residing in Thiruvananthapuram consulted the Prasutitantra and Streeroga outpatient department of Government Ayurveda

College Thiruvananthapuram with the complaints of inability to conceive even after 6 years of unprotected married life and severe dysmenorrhea, dyspareunia and pain in the right lower quadrant prior to menstruation. From the past history, she was diagnosed with bilaterally adherent tubes and ovaries with bilaterally chocolate cyst. Then she underwent operative laparoscopy & hysterectomy. Adhesiolysis done and chocolate cyst peeled off, ovaries freed and tubes released. After 1 year of cystectomy she again developed pain in the right iliac fossa, then the ultrasonography revealed endometriotic cyst in the right ovary measuring 5.5\* 4.5 cm size in the right adnexa. As per ultrasonography, CA 125 was advised to her which was found to be within normal limit (24 IU/ml). The follicular study shows anovulation. The gynaecologists advised ART (Artificial Reproductive Technique) and the couple were not willing for that.

On detailed evaluation, her menstrual history shows regular cycles with the duration 7-8 days heavy bleeding and interval of 28-30 days. Sexual history reveals severe dyspareunia. On per speculum examination, white curdy discharge from all the fornices and mild erosion in the cervix noticed and in per vaginal examination, normal sized anteverted uterus with fornices free. Cervical motion tenderness was absent. In hematology report low hemoglobin count (10 mg/dl) was noticed.

Considering the principles of Ayurveda literature, this condition may be taken as *Vatiki* and management was planned in the way to correction of *Kshetra dushti* (uterus with endometriotic cyst) along with *Ritu* (anovulation). The patient was admitted in the IPD of Prasutitantra and Streeroga and treatment was planned based on the condition of the patient. The detailed treatment schedule is given in table no.1 and table no.2. After 45 days of IP management she got discharged from the hospital and continue the discharge medicines mentioned in table no.3.

**Internal medicines (Table no. 1)**

Medicine	Dose	Anupana	Duration
<i>Maharasnadi kasaya</i>	15 ml bid	60 ml lukewarm water	7 days
<i>Chandanasava</i>	30 ml bid	Nil	7 days
<i>Annabhedhi sindoor</i>	1 pinch	Lemon juice	7 days

Brihat triphala churna	1 tsp at bedtime	Hot water	7 days
Dhanvantaram gulika	1 tablet bid	Kasaya	7 days
Ashtachurna	1 tsp, morning	Hot water	7 days

**Procedures (Table no.2)**

Treatment	Medicine	Duration
Snehapana	Mahatiktaka ghrita & Madhuyashtyadi taila	7 days
Abhyanga & ushma sweda	Pindataila	3 days
Virechana	Avipathy churna – 25gm	1 day
Adha kaya dhara	Murivenna & pinda taila	7 days
Matravasthi	Madhuyashtyadi taila – 100 ml	7 days
Yoni kshalana	Panchatiktaka kasaya	3 days
Yogavasthi	Snehavasthi - mahatiktaka ghrita + madhuyashtyadi taila Kasayavasthi - sahacharadi kasaya + satapushpa churna + madhu+ saindhava	8 days
Uthara vasthi	Mahatiktaka ghrita + madhuyashtyadi taila	3 days
Pichu ( lower abdomen)	Murivenna	7 days

**Discharge medicines (Table no.3)**

Medicine	Dose	Anupana	Duration
Mahatiktaka ghrita	1tsp morning	Hot water	1 month
Dhanwantaram gulika	1 tab bid	Kasaya	1 month
Maharasnadi kasaya	15 ml bid	60 ml lukewarm water	1 month

After all those treatments she got mild relief from the severe dysmenorrhea, ultrasonography was taken and the cyst size was reduced to 2 cm and presence of fluid in the pouch of douglas (post ovulatory). After that the above medicines were revised and given Madhuyashtyadi taila, Sukumara rasayana and Gomutraharitaki lehya for 3 weeks and thereafter Rasagandhi mezhuku given for 2 weeks. The details were given in the table no.4.

**Follow up medicines (Table no.4)**

Medicine	Dose	Anupana	Duration
Gomutra haritaki lehya	1 tsp , Morning	Hot water	3 weeks
Madhuyashtyadi taila	1 tsp bid	Milk	3 weeks
Sukumara rasayana	1 tsp, Evening	Milk	3 weeks
Rasagandhi mezhuku	1 tab daily	Water	2 weeks

After 2 months of follow-up medication ultrasonography revealed complete absence of the endometriotic cyst (Table no.5). After that preconceptional care was given to the patient which include Phalasarpi, Dhanvantaram gulika, Annabhedi sindooram and Vata ksheera kasaya (B.N- Ficus benghalensis). After 3 months her urine pregnancy test was found to be positive and intrauterine gestation corresponding to a gestational age of 6 weeks 1 day with EDD 22/05/2022 was noted in obstetric sonography on 27/09/2021.

**OBSEVATIONS & RESULTS (Table no.5)**

Before treatment	A cyst measuring 5.5cm * 4.5 cm size seen in the right adnexa. It contains tiny echogenicities suggestive of endometriotic cyst. A thin septum is noted. Doppler study does not show any abnormal vascularity. No cyst or mass is seen in the left adnexa. Impression- right benign ovarian cyst-endometriotic cyst
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After 3 months of treatment	Scan shows significant reduction in size of the right adnexial endometriotic cyst which at present measures 2 cm size. The previously noted follicle in right ovary as ruptured with presence of fluid in pouch of douglas ( 15 <sup>th</sup> day of LMP)
After 5 months of treatment	Uterus is normal in size measuring 8 cm in length with uniform echotexture. Ovaries are normal on both sides without any cyst or mass. The previously note right endometriotic cyst is no longer seen and has completely disappeared. The largest follicle is seen on right ovary and measures 10mm at present.
After 8 months of treatment	Uterus is anteverted, an intra-uterine gestational sac with regular sac with yolk sac of 4 mm size noted. CRL measures 0.5 cm corresponding to 6 weeks 1 day. Fetal cardiac activity present. FHR – 122beats/min, internal os closed. Impression- SLIUF corresponding to 6 weeks 1 day detected. EDD- 22/05/2022

**DISCUSSIONS**

According to Ayurveda four factors are responsible to get a supraja. They are Ritu (ovulation), Kshetra (healthy uterus and passage), Ambu (proper nutrition) and Beeja (healthy sperm & ovum) [4]. Any abnormality in above factors causes Vandhyatwa. At the same time Aharavihara dosha, Manaso abhitapa, Akalayoga are also the contributing factors [5]. In the present case, the patient was having Kshetra dushti, i.e ovary with endometriotic cyst along with the Ritu also get affected. After the treatment of yonivyapath, healthy yoni was achieved which is vital for conception.

As a first line of treatment Ama pachana, Raktha Sangraha and Dosha sodhana upayas are done, after that Garbhasthapana and Pumsavana karmas are adopted. As the patient was having severe dysmenorrhea and heavy bleeding, the first set of medicines were given, they all are having the properties to reduce the pain and heavy bleeding. In this case the patient was having severe dysmenorrhea. According to our classics there will not be any origin of pain without the involvement of vata (Vatat rite nasti ruja) [6], Maharasnadi kasaya which is proven to be vata samana acts judiciously here [7], thereby reducing the soola. Chandanasava is having seeta guna. By the reference of Hemadri (stambane hima) it helps to reduce the bleeding [8]. As the patient was having low hb (10 g/dl) Annabhedi sindooram was also added. It nourishes the Rakta dhatu. Here the Patient was having vibanda (constipation) as an associated complaint Brihat triphala churna which is anulomana was given. Ashtachurna is given for Ama pachana and agni deepana [9].

After the first set of medications Sodhana therapy was started. Prior to that snehapana was done. Mahatiktaka ghrita is especially indicated in diseases of Kaphapitha vitiation .It is rakta prasadana, gulmahara, and sophahara in action and thus reduces the Sopha in Garbhasthapa and also indicated in pittaja type of asrigdara [10]. Here the patient had complaints of menorrhagia associated with endometriotic cyst. So mahatiktaka ghrita was selected. Madhuyashtyadi taila is vatapitha samana, rakta prasadana and sula prasamana [11]. So it was added for snehapana.

According to prakruti (nature) of the patient (pithapradhana kapha prakruthi) and the also by considering the dosa vitiated in this condition virechana was opted for sodhana karma, Acharya Kasyapa also opines asrigdara should be treated by virechana [12]. So virechana was selected.

Vandhyatwa is a vataja nanatmaja vyadhi and there is also classical reference that yoniroga will never occur without the involvement of vata, so vasthi chikitsa which is 'param vata hara'

[13] was selected here. As mentioned above *Mahatiktaka ghrta* and *madhuyashtyadi taila* were taken for *sneha vasthi*. *Sahacharadi kasaya* is used for *kasaya vasthi* as it is *vata samana*[14].

Patient was having discharge per vagina and based on the nature of discharge *Pachatiktaka kasaya* is used for *yonikshalana* and *utharavasthi* is done with *Mahatiktaka ghrta* and *Madhuyashtyadi taila*. *Utharavasthi* alleviates *vata* in *garbhasaya*, hence it helps for conception.

After the *Sodhana therapy*, *Samana chikitsa* were adopted. For that a set of medicines were given. *Gomutra haritaki* is mentioned in the context of *Arsas* [15]. It is mentioned for *sopha*, *granthi*, *arbuda* etc and it is *kaphahara*. *Sukumara rasayana* is *tridoshahara* and *vata anulomana*[16]. It is *rasayana*, *vrishya* and *garbhasaya sudhikara* also. And it is *brimhana*, *srotosodhana* and *deepana*. *Rasagandhi mezhugu* was administered for a period of 14 days. It is a herbomineral preparation which has *Tikta rasa*, *Usna virya*, *Dipana* and *Kapha vatahara* property. *Tikta rasa* is responsible for the *sosha of Meda, Kleda, Vasa and Majja*. It clears the obstruction of the *Srotas* and pacifies *Kapha*. It is indicated in *granthi* and *arbuda*. All these medications she continued for a period of about 6 months, then the ultrasonography showed complete disappearance of the cyst.

Then after the complete disappearance of the cyst, pre-conceptional care including *garbhashthapana* and *pumsavana karma* were given. *Phalasarpi* is *tridoshashamana*, *balya*, *brimhana*, *rasayana* and it is *pumsavanam param*[17]. The drug *Vata* (*B.N- Ficus benghalensis*) is mentioned in *pumsavana karma*. It has got *garbhashthapana* property[18].

**CONCLUSION**

The management of endometriotic cyst in modern medicine mostly ends with surgery which have greater chances of recurrence as well as leading to complications such as adhesions. This only produces temporary relief and not have any contribution for future conception. Ayurveda through its holistic approach not only cures the disease but also provides an environment for the fertilization as well as the development of healthy offspring. On the basis of present case study it can be concluded that the Ayurvedic treatment modalities like *Sodhana* and *Samana chikitsa* have shown excellent results in the complete disappearance of endometriotic cyst and to regain fertility.

**REFERENCE**

1. CarloBullettietal. 2010,June.ncbi.Endometriosisandinfertility. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2941592/>
2. WHO.2021.March.Endometriosis.<https://www.who.int/news-room/fact-sheets/detail/endometriosis#:~:text=In%20addition%20to%20the%20abov,ovaries%2C%20fallopian%20tubes%20or%20uterus>
3. Prof.K.R.Srikantha Murthy.(2012,Vol3,p.308).Astanga Hridayam.Choukamba Krishnadas Academy.Varanasi.
4. Srikantha murthy KR. (2014.vol1.p.26) Trans.Illustrated Susrutha samhitha sareeraasthana.reprinted.Chawkhambha orientalia Varanasi
5. Dr Ram Karan Sharma, Vaidya Bhagawan Dash (2016, vol 2, p.452). Varanasi Chowkhamba Sanskrit series office
6. Srikantha murthy KR. (2014.vol1.p.125) Trans.Illustrated Susrutha samhitha Suthrasthana.reprinted.Chawkhambha orientalia Varanasi
7. Abhinava Vagbhata. (2015,p.82). Sahasrayogasujana priyavykyanam. Vidyaramba publications Alappuzha
8. T.Sree Kumar.(2008,p.45).Astanga Hridaya Sutra sthana I.Hareesree hospital Thrissur.
9. Prof.K.R.Srikantha Murthy.(2010,Vol2,p.406).Astanga Hridayam.Choukamba Krishnadas Academy.Varanasi
10. Prof.K.R.Srikantha Murthy.(2010,Vol2,p.473).Astanga Hridayam.Choukamba Krishnadas Academy.Varanasi
11. Abhinava Vagbhata.(2015,p.166). Sahasrayogasujanapriyavykhyana. Vidyaramba publications Alappuzha
12. Prof.P.V.Tewari. (2013,p.268) Kasyap asamhitaorvrddhajivakiyantra. Chaukhambha visvabharati
13. T.Sree Kumar.(2011,p.300).Astanga Hridaya Sutra sthana I.Hareesree hospital Thrissur.
14. Abhinava Vagbhata.(2015,p.77).Sahasrayoga .Vidyaramba publications Alappuzha
15. Prof.K.R.SrikanthaMurthy. (2012,Vol2,p.382). AstangaSangraha of Vagbhata. Choukamba orientalia. Varanasi
16. Prof.K.R.SrikanthaMurthy.(2010,Vol2,p.398).AstangaHridayam.Choukamba Krishnadas Academy.Varanasi

17. Prof.K.R.Srikantha Murthy.(2009,Vol3,p.326).Astanga Hridayam.Choukamba Krishnadas Academy.Varanasi
18. Dr.J.L.NSastry(2014,vol2,p.941). IllustratedDravyagunavijjnana. Choukhambha orientalia