

Ayurvedic management of female infertility associated with SLE [Systemic lupus erythematosus]– a case study

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ABSTRACT: SLE is an autoimmune disease with persistent inflammation in synovial membranes of joints and a perplexing disease with varied manifestations, thus treating women with infertility, which is challenging. The physician's intervention in the management of primary infertility of a couple, married for 3 years associated with SLE [Systemic lupus erythematosus] is presented as a case report in this article.

The present case study was done to evaluate the role of ayurvedic treatment in the management of SLE-related health issues and fertility management. This is a case report of a 22-year lady who presented with SLE with symptoms of increased burning sensation and ulceration on the clitoris and cervix, unable to conceive. After considering clinical features, *dosha* involvement management principles of *vaatarakta* [rheumatic disorder], *vandhyatva* [infertility] were incorporated. After the treatment, her ulceration was cured, her health condition improved and within 3 months of intervention, conception occurred. Even though SLE is a threat, her antenatal period finished uneventfully, and the patient delivered a healthy female baby weighing 2.9kg. This case report highlights the scope of ayurvedic treatment in the management of primary infertility associated with SLE, but further studies in large samples are needed to conclude.

Keywords: SLE, infertility

INTRODUCTION

Infertility is defined as the inability to conceive within one or more years of regular unprotected coitus. As per WHO, the overall prevalence of primary infertility in India is between 3.9% to 16.8%^[1]. SLE manifestations that change over time commonly seen are severe fatigue, joint pain, joint swelling, headache, hair loss, anemia, blood clotting problems, Raynaud's phenomenon, and specific symptoms based on the system affected. Like other autoimmune disorders, epigenetics and thereby environmental factors play a vital role in triggering and propagating the disease. A higher disease prevalence is seen in women than men. By the end of 20th century, the female-to-male ratio in the childbearing years was reported to be about 12:1^[2]. This inadvertently suggests that hormonal factors play important role in SLE pathogenesis^[3]. Treating women with SLE and infertility is challenging, due to multifactorial presentation and the treatment options ranging widely from hormones to ART^[4]. A direct description of SLE in classical ayurvedic texts is not available. After considering clinical features, *dosha* involvement, management principles of *vaatarakta*, and *vandhyatva* were adopted.

PATIENT INFORMATION

A 22-year-old lady diagnosed with SLE for 5 years, came with complaints of being unable to conceive even after 3 years of unprotected sex. She had recurrent mouth ulcers, joint pain, fever, and hair loss. She was on medical management for SLE by modern medicine, and major symptoms were managed by ongoing treatments. Her menstrual cycle was 2-3 days in duration with a regular interval of 34-38 days, with a moderate amount of clots. She was normally built with a BMI of 23. She presented with an increased burning sensation all over her body and complained of ulceration in her clitoris. Occasional joint pain and pain during coitus due to the ulcer at clitoris, that troubled her both physically and psychologically. Her husband's semen analysis and other parameters were normal.

CLINICAL FINDINGS

She came with the main complaint of being unable to conceive after 3 years of unprotected sexual intercourse. Her investigations are suggestive of anovulatory cycles. In addition, she complained of dyspareunia, increased body heat and occasional joint pains. On examination, she had ulcer on the clitoris, speculum examination revealed cervical erosions with slight yellowish discharge. Her personal history revealed that she had a sedentary lifestyle and mixed diet, her bowels were often constipated, appetite reduced, sleep was sound and psychologically she was over-anxious.

DIAGNOSTIC ASSESSMENT

On the detailed evaluation of previous investigations: known case of SLE, No pedal edema, No macrohematuria, normal urine output, joint pains, skin rashes, oral ulcer and photosensitivity as history. It was observed on Renal biopsy: Diffuse global proliferative lupus nephritis class IV G (A), Activity index: 6/24, chronicity index: 0/12. ANA +ve, dsDNA +ve. All investigations were suggestive of SLE. Unable to conceive despite 3 years of cohabitation diagnosed as primary infertility. At the time of consultation, she had occasional episodes of joint pain and increased burning sensation all over the body and vaginal ulceration. Clinical features point out the higher prevalence of *pitta* in the body causing inflammatory changes along with *vaata*. When *pitta* is aggravated inadvertently *rakta* also gets vitiated. The positive reports of the rheumatic profile, clearly indicate *vaatarakta*. By analyzing the clinical features and investigations the disease was diagnosed as *vandhyatva* associated with *vaatarakta*. The predominant *doshas* were *vaata* and *pitta*.

Dosha :Vaatapradhana-tridoshas

Dooshya :Rasa, Rakta, Mamsa, Medas, Asthi &Sukra

Srotas: Rasa-vaha, Rakta-vaha, Mamsa-vaha, Medovaha, Asthi-vaha, Sukra-vaha, Aarttava-vaha

Srotovikṛti :Atipravṛtti, Sanga, Vimaarga-gamanam

Samparapti :- Vaata & rakta vitiate, disturb other dhatus by vimaarga-gamanam, sanga & atipravṛtti, that causes aarttava-vahadushati.

THERAPEUTIC INTERVENTION

Internal medicines are given for 3 weeks up to the next menstrual cycle attained.

Table 1
Samana medicine

Medicine	Dose
Manjishtadi Kashaya ^[5]	15 ml <i>Kashaaya</i> + 45 ml warm water 2 times before food
Shaddharana churna ^[6]	1 tablet mixed with <i>Kashaya</i>
Chandanasavam ^[7]	25 ml 2 times after food
Nalpamara Kashaya ^[8]	Washing on vaginal ulcer.
Jatyadi Ghrita ^[9]	Application on vaginal ulcer.

This set of medicines was continued for a period of 3 weeks. Once the *agni* was assessed to have improved, *sodhana* therapies were advised, which are detailed in table No 2.

Table 2
Sodhana Therapy

Procedure	Medicines used	Duration
<i>Rookshana</i>	Vaiswanara churna ^[10] mixed with buttermilk	3 days
<i>Sneha-paana</i> (internal administration of ghee)	Thiktaka ghrita ^[11]	6 days
<i>Abhyanga</i> and <i>Swedana</i> (massage and steam)	Pindataila ^[12]	3 days
<i>Virecana</i> (purgation)	Avipathichurna ^[13]	1 day
<i>Ksheeravasti</i> (medicated enema)	Thiktaka ghrita+ <i>Yashtimadhu Kalka</i> + <i>Gudoocyaadi Ksheerakashaaya</i> + Mahanarayana taila	3 days
<i>Uttaravasti</i>	Mahanarayana taila ^[14]	3 days

Internal medicines were given during the postovulatory period as 5g *Kalyanakaghrita*^[15] on an empty stomach in the early morning, *Ksheerabala 101 Avartti*^[16]-10 drops with warm milk in the evening, and advised to take *Guoocyaadi toyapaaka* for intermittent drinking. After conception along with these internal medicines, *yashtimadhu* milk decoction is added as the chances of abortion are high in SLE. These medicines continued throughout the first trimester. Later, regular antenatal check ups with relevant immunization etc were taken.

Observation and Result

Both the subjective and objective parameters were assessed before and after treatment. After *sodhana karma* menstrual period is attained with an interval of 29-30 days. Ulceration in the clitoris healed gradually. Burning sensation reduced. On per speculum examination, it was observed that abnormal vaginal discharge and other visible changes due to cervical erosion were reduced completely. On the next cycle, the patient conceived and delivered a female baby weighing 2.9 kg through FTND. The successful outcome was obtained within 3 months of ayurvedic intervention.

Table 3
Response to treatment

Parameters	Before treatment	After treatment
USG findings		
Right ovary	No dominant follicle	Follicular size 18mm
Left ovary	No dominant follicle	Follicle with 15mm size
Endometrial thickness	7mm	10 mm
On clinical examination		
Interval of the menstrual cycle	Irregular (34-38 days)	Regular (29-30 days)
Vaginal discharge	Slight yellowish vaginal discharge	Absent
Cervical erosion	Present	Absent
Dyspareunia	Present	Absent

Discussion

The diagnosis of the case is primary infertility associated with SLE. The chief complaint presented by the patient was the inability to conceive after 3 years of married life troubled by her clinical diagnosis of SLE. According to ayurveda, this case was diagnosed as *vandyatva* associated with *vaatarakta*. The etiology of *vaatarakta* is evident with a sedentary lifestyle and *viruddhaahara-sevana* causing *vaata* vitiation and *pitta* is also vitiated by its own vitiating

factors. Dooshyas found mainly are *rasa, rakta, mamsa, medas, asthi, majja* and *śukra*. *Rasa-vaha, rakta-vaha* and *aarttava-vaha* were the number of *srotas* involved. Because of the *prakupita vaata-pitta, rakta* were inadvertently vitiated and causing inflammatory changes in the kidney (lupus nephritis) and ulcers on the cervix, vagina, and mouth, and the disease manifested as *vandhyatva* and *vaatarakta*.

Internal medicines started with the aim to reduce inflammation and burning sensation, increase digestive power, relieve joint pain and to heal the ulcers. An initial dose of Shaddharana churnam with the properties *aama paacana, tridosha harana, rasa prasaadana, medoharana,* and *kleda-harana,* was given to reduce the severity of the inflammation due to SLE. Manjishtadi *Kashaya* for its *tridosha-hara* property helped in the clearing of channels and anti-inflammatory action. Chandanasavam due to its *pitta samana* property helped to reduce the burning sensation and yellowish vaginal discharge. *Vrana ropana* property of Nalpamara *Kashaya* and Jatyadi ghrita healed vaginal ulcer.

Aacaaryas have profoundly said the importance of *sodhana* therapies prior to impregnation, in order to beget a healthy progeny. Thus *snehapaana* and *virecana* (purgation) were done followed by *vasti* and *uttaravasti* as planned. After attaining the proper *agnideepti* the patient was advised to take *snehapaana* with Thiktaka Ghrita, starting with 25 ml. It took about 6 days to obtain the *samyak snigdha lakshanas* (signs of attaining the proper *snehapaana* medication). Thiktaka ghrita is also having properties like *pitta kapha-haratva, srotassodhana karma* and *daaha-prasamana karma*. After *snehapaana, sarvanga abhyanga* was done with Pindataila, which has *pittahara-karma*, so it also helped to reduce the burning sensation all over the body. *Virecana* was selected as *sodhana karma* with Avipattichurna to subside *pitta kapha-kopa*. Fourteen *vegās* were expelled, and the entire process was completed uneventfully. A modified form of *khseeravasti* was administered in the next phase. The basic reference of *ksheeravasti* is explained in the treatment of *vaaatasonita*. Here it is ideal regarding both conditions as it was the specific combination of Thikthaka ghrita, milk processed with *yashtimadhu-kalka* and *gudoocyaadi ksheera kashaaya*. *Uttara vasti* is one of the most important *sthaanika cikitsas* for the gynecological disorders^[17]. Maha Narayana thailam, which is *brmhana* and *vaata-hara* with an added indication in *vandhyatva* was the selected medicine.

After the procedure, the next menstrual cycle got delayed by one week and UPT was found to be positive. Chances of miscarriage are an important concern regarding SLE. After conception

yashṭimadhu-ksheerapaaka^[18], Kalyanaka ghrita, Ksheerabala (101) and *Gudoocyaadi toyapaaka* were administered up to 12 weeks for the proper implantation and to prevent abortion. *Tridosha-samana, vrshya, medhya, vandhya-hara, mana-prasaadana* properties of Kalyanaghrita *jeevana, brmhana* and *vaata pitta-samana* properties of Ksheerabala(101) Avarti are to be considered. *Gudoocyaadi toyapaaka* is *kapha pitta-hara, daaha-prasamana* and *agnideepana*. The antenatal period was uneventful. The patient delivered a healthy female baby weighing 2.9 kg through FTND. The successful outcome was obtained within 4 months of ayurvedic intervention.

Conclusion

This case report highlights the scope of ayurvedic treatment in the management of primary infertility associated with SLE, but further studies in large samples are needed to get a conclusion.

PATIENT'S PERSPECTIVE

Patient was overwhelmingly happy with the outcome, and controlled symptoms of SLE.

LEARNING POINTS/TAKE HOME MESSAGES

Tinospora cordifolia would be the drug of choice in SLE^[19].

A combined SLE and infertility needs to be tackled as per the pathogenesis involved.

Sodhana and *samana* therapies are very helpful in *vandhyatva*, especially including *uttaravasti*.

Pleasantness of mind and reducing stress have a vital role to play in infertility.

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