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EXPLORING AYURVEDIC THERAPEUTICS IN UNILATERAL TUBAL OCCLUSION: A CASE REPORT

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ABSTRACT:
Female infertility is a complex medical condition rising alarming concern in recent era due to its detrimental effect on both physical and mental health. Tubal blockage is one of the prevalent causes of infertility accounting for 25-35% of all the cases of female infertility. Conditions such as congenital abnormalities, abdominal surgery, Pelvic inflammatory diseases, endometriosis etc contributes to the partial or complete blockage of fallopian tubes. Conventional management involves invasive procedures such as tubal cannulation or surgery comprising certain risk factors. Ayurveda, the Indian System of medicine offers unique & holistic approach to manage tubal blockage focusing on removal of causative factor along with lifestyle modification. There is no direct reference of Tubal blockage in Ayurveda. However, Kshetra, a crucial component responsible for fertilization denotes all the reproductive structures including fallopian tube. Sanga Srota dusti of the artavavaha srotas due to tridoshic imbalance particularly Vata and Kapha dosha may be considered responsible in the etio-pathogenesis of the disease. A 28 years old female visited the OPD with complaints of irregular menstruation and failure to conceive for 5 years despite regular and unprotected sexual activity. Hysterosalpingography (HSG) findings revealed unilateral (Right sided) tubal block. Classical Virechana with Trivrit avaleha followed by oral administration of Shamana aushadhi (Phalaghrita, Kanchanara Guggulu, Lodhrasava, Rajahpravartini vati & Puspadhanwa rasa) along with lifestyle modification were given for 3 months. After the completion of treatment HSG was repeated which showed complete removal of blockage i.e. bilaterally patent tube. On a follow up after 3 month, it was found that the patient conceived naturally, which again confirmed the efficacy of the given treatment. This case study not only highlights the potential role of Ayurvedic management in restoring tubal function by removing blockage but also suggests the scope of Ayurveda in Gynecological condition offering a non-invasive, cost-effective alternative treatment modality.

KEYWORDS: Tubal blockage, Infertility, Artava vaha srotas, Phalaghrita

INTRODUCTION

Female infertility can be caused by various factors; one of the most common causative factors for infertility is fallopian tube obstruction. The fallopian tubes are muscular tubes that are lined with ciliated columnar epithelial cells and peg cells (non-ciliated secretory cells). These cilia facilitate the movement of sperm up from the uterus and an ovum down from the ovaries to the uterus. Since most ova are fertilized in the fallopian tubes, they are crucial to conception. Damage to any section of the fallopian tube may cause scar tissue to obstruct it, impairing its ability to operate. This blockage may result from Pelvic infections, Pelvic surgeries, Peritubal adhesions, Endosalpingeal damage, Salpingitis isthmica nodosa, Tubal endometriosis, Polyps or mucous debris within the tubal lumen and Tubal spasms.1 According to recent studies, 19.1% of women in the fertility age group suffer from fallopian tubal obstruction.2 In Ayurvedic medicine, tubal blockages can be correlated with Sanga Sroto Dushti of Artavavaha Srotasa, involving an imbalance of Vata and Kapha Doshas.

According to ancient Ayurvedic texts, Acharya Susruta identified four essential factors for conception: Ritu (Season), Kshetra (Reproductive system, including fallopian tubes), Ambu (Nourishing substances) and Beeja (Ovum and sperm).3 Abnormalities in these elements can lead to infertility. According to Acharya Charaka and Vagbhata, infertility is considered a complication of various Yoni Vyapads (gynecological disorders).4 Specifically, Acharya Harita classified tubal blockage-related infertility under Garbhakoshabhanga (Uterine abnormalities).5

Case Report:

A 28 years old married female patient visited the OPD with Chief complaints of irregular menstruation and failure to conceive for 5 years despite regular and unprotected sexual activity. Patient visited multiple physicians from time to time but was not getting her desired effect by any treatment.

- **Past medical history**- Nothing significant

- **Past surgical history**- Nothing significant
- **Family history**- Nothing significant

Menstrual history-

Age of Menarche	**12**
Cycle	Irregular
Interval	2-3 months
No. of days of bleeding	4
No. of pads/day	2-3
Pain	++
Clots	+
Discharge	+

Personal history-

Diet	**Non vegetarian**
Bowel movement	Normal
Bladder movement	Normal
Sleep	Disturbed
Appetite	Diminished
Occupation	Housewife
Addiction	No such

General Examination-

Pallor	+
Icterus	-
Cyanosis	-
Clubbing	-
Edema	-
B.P.	120/76 mm Hg
P.R.	80 beats / min
Weight	53 kg
Height	5’1’’

Astavidha pariksha-

Nadi	**Vata-kaphaja, 80 / min**
Mutra	Swabhavik
Mala	Nitya
Jihva	Saam

Shabda	Swabhavik
Sparsha	Ushna
Drik	Swabhavik
Akriti	Madhyam

Diagnostic Assessment:
As per symptoms (Lakshana) and USG finding, the patient was diagnosed as –
Ayurveda diagnosis- Sanga Sroto Dushti of Artavavaha Srotas
Contemporary science diagnosis- Unilateral Tubal blockage

Therapeutic Intervention:

Sl.no.	Sodhana Karma	Drug & Dose	Duration
1.	Deepana and Pachana	Panchakola Churna 5 gm twice daily before meal with luke warm water (L.W.W)	5 days
2.	Snehapana	Phala Ghrita starting with 40ml on 1st day and ending with 200ml on 5th day, once early morning (6 AM) (D1-40, D2-70, D3-110, D4-150, D5-200)	5 days
3.	Sarvanga Abhyanga	Abhyanga with Tila taila (Q.S)	3 days
4.	Sarvanga Bashpa Swedana	Dasamoola kwath for 10 minutes	3 days
5.	Virechana Karma	Trivritavaleha 80 gm with L.W.W No. of Vega- 17	1 day
6.	Samsarjana Krama	Day 1- Peya, Day 2- Vilepi, Day 3- Vegetable soup, Day 4- Chicken soup Day 5- Normal homemade food	5 days
7.	Shamana chikitsa		
	Kanchanara guggul	500 mg Twice daily after meal With sukhaushna jala (luke warm water)	90 days
	Lodhrasava	20 ml Twice daily after meal With equal amount of sukhaushna jala	90 days
	Rajahpravartini vati	500 mg Twice daily after meal With sukhaushna jala	90 days
	Puspadhanwa rasa	250 mg Twice daily after meal With sukhaushna jala	90 days
	Phalaghrita	15 ml Twice daily before meal With sukhaushna jala	90 days

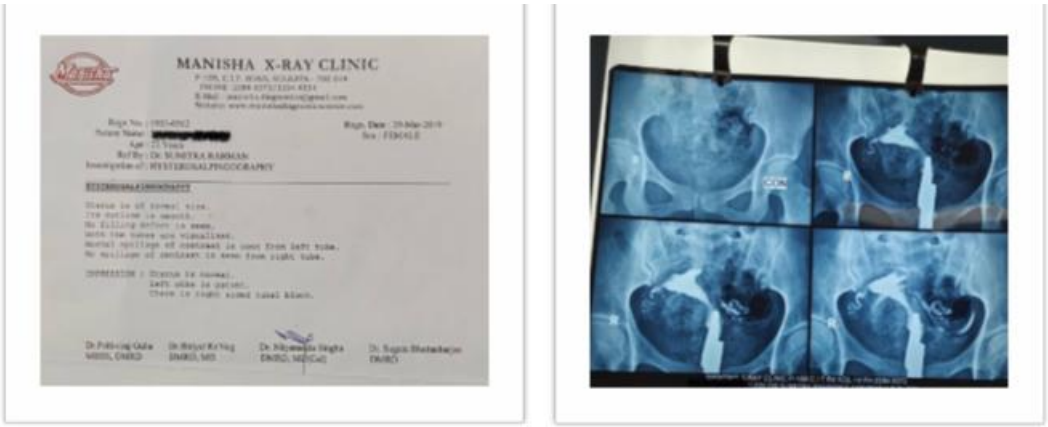
Pathya (Wholesome Diet)
Green leafy vegetables like broccoli, spinach, vegetable soup, and high-fibre rich fruits like apples, oranges and guava.

Apathya (Unwholesome Diet)
Curd, Banana, Spicy food, sour food, oily food, junk food, heavy meals, fast food, all canned and packaged items, high-calorie food etc.

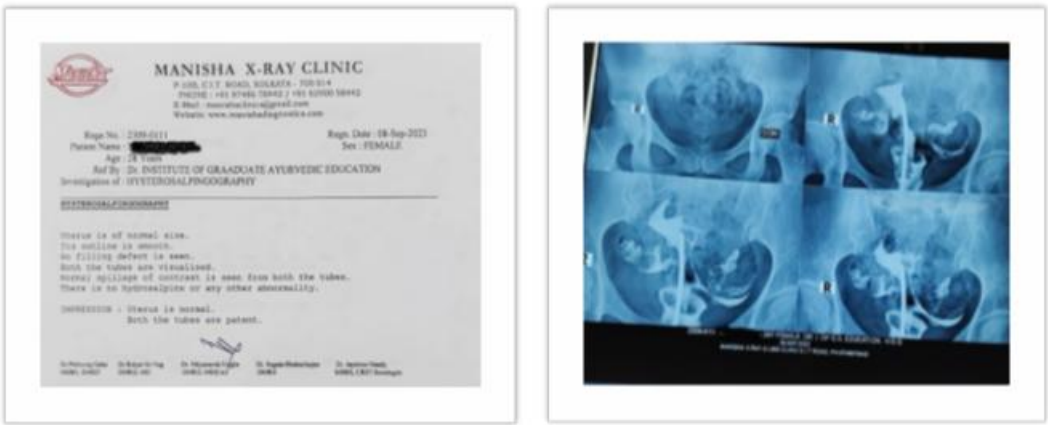
Follow Up And Outcome: After the completion of treatment HSG was repeated which showed complete removal of blockage i.e. bilaterally patent tube. On a follow up after 3 month, it was found that the patient conceived naturally, which again confirmed the efficacy of the given treatment. Patient was very much satisfied with Ayurvedic intervention.

Hysterosalpingography report-

Before treatment (29/03/2019)	**After treatment (08/09/2023)**
Uterus normal, Left tube is patent, Right side tubal block	Uterus is normal, Both the tubes are patent



Hysterosalpingography on 29/03/2019



Hysterosalpingography on 08/09/2023

DISCUSSION:

In Ayurveda, Artavavaha Srotas encompasses the female reproductive tract as a structural and functional unit. Artava refers to both Raja (sperm) and Beeja (ovum). Specifically, fallopian tubes are termed Artava Bija Vaha Srotas, as they transport ovum. Tubal blockage is primarily caused by Vata and Kapha imbalances. Acharya Kashyapa classified Bandhyatva (infertility) as a Vata-related disorder. Vata causes narrowing (Samkocha) of the tubal lumen due to its Ruksha, Khara & Darana guna, while Kapha's Avarodhaka property leads to occlusion.6

Effective treatments for fallopian tube blockage should possess Vata-Kapha shamaka properties. Virechana (purgation) helps eliminate vitiated Doshas through Adhomarga, cleansing micro-channels via Anupravana Bhava. Virechana benefits Artava Roga (female reproductive disorders).

Trivrita Avaleha possess properties like Sukshma (subtle), Ushna (heating), Tikshana (sharp) which enable it to reach micro-channels, Liquefy accumulated Dosha and Break down waste (Mala) in micro-form.7

To break the disease pathology, Samprapti vighatan drugs like Kanchanara Guggulu, Lodhrasava, Rajapravartini Vati, Puspadhanwa rasa & Phalaghrita were chosen. The main ingredients in Kanchanara guggulu are Kanchanara, Triphala, Trikatu and Guggulu. These ingredients have Kaphamedohara, shothahara (anti-inflammatory), lekhana (scrapping), granthihara (reduce cystic swelling), and mutrakrichhahara properties. Through these properties, Kancanara Guggulu supports the proper function of the lymphatic system, balances Kapha dosha, and promotes the elimination of inflammatory toxins. Kancanara Guggulu is mentioned in Sharangdhara Samhita, Madhyam Khanda, where it is indicated in the management of Gulma (abdominal lump), Apachi (chronic lymphadenopathy/Scrofula), Granthi (cyst), Vrana (ulcer).8 Due to its lekhaniya guna and anti-inflammatory properties, it reduces the excessive kleda. Triphala and

Trikatu have a property like srota sodhan (cleansing of microchannels), which helps in srotavarodha (obstruction in microchannels) due to the vitiation of Kapha. Guggul has anti-inflammatory properties that help to clear blockages, having ushna, snigdha and picchila guna; Pittaghna by kasaya and madhur rasa; Kaphaghna due to its katu, tikshna, tikta guna. It is tridosahara, medohara, lekhana and Raktaprasadana.
In Lodhrasava, Lodhra (Symplocos racemosa) is the main ingredient. It is having Tikta, Kashaya rasa, Sita virya. Lodhra strengthens the uterine lining and reduces inflammation. Lodhra is traditionally used to treat gynecological disorders and improve reproductive health.9

Rajahpravartini Vati is mentioned in the classical text under Yonivyapat Chikitsa. This formulation is having identical properties like Katu rasa, Ushna veerya, Sara & Teekshna guna and Pitta vardhaka. All these properties remove obstruction in the passage and do Sroto Shodhana (cleansing the channel). Even drugs have Rajahpravartaka property.10
In Pushpadhanwa Rasa, Dhatura, Bhaang, Ngavalli, Naga, Vanga etc. are the Chief ingredients which are having properties like Dhatu Vridhikar, Agni diptikar, Vajikaran, whereas Dhatura, Bhaang, Nagvalli having stimulant effect over Neuro-endocrinal system. It is indicated in condition like amenorrhea or anovulation.11 Minerals present in this drug having activities like Rejuvenation and regulates the menstrual cycle, Pacifying Vata and Kapha Doshas. Where Naga Bhasma having Lekhana, Deepana, Stambhana etc. properties and Vanga Bhasma acts as Garbhashaya Chyutihara, Kamavardhana, Karshyahara, Vranahar, Raktapittaghna and Agnimandya Hara. Most of the ingredients of Pushpadhanva Rasa having Tridosha Nashaka properties.12 In Rasatarangini, Pushpadhanva Rasa is indicated in improper growth of ovaries & fallopian tubes leading to Bandhyatva.13
Phala Ghrita has ingredients including milk, ghee, Manjistha, Kustha, Tagara, Triphala, Madhuka, Dipyaka, Katurohini, Vacha, Meda, Kakoli, Wajigandha, Shatavari, Payasya, Hingu, and more. The majority of these Dravyas possess the qualities of Rasa (Katu, Tikta, Madhura) and Guna (Laghu, Snigdha) and Vipaka (Madhura, Katu, Ushna) and Sheeta Virya. Additionally, it possesses the attributes of Anulomana, Dipana, Pachana, Lekhana, Balya, and Prajasthapana. Phala Sarpi is said to nourish Medhya, Dhanya, and Pumsavana and is good for all kinds of Yonidoshas.14

CONCLUSION:
The present case study not only highlights the potential role of Ayurvedic management in restoring tubal function by removing blockage but also suggests the scope of Ayurveda in Gynecological condition offering a non-invasive, cost-effective alternative treatment modality. Further research is warranted to Standardize Ayurvedic protocols for tubal blockage treatment, Investigate synergistic effects of herbal formulations and Compare Ayurvedic management with conventional treatments.

LIMITATIONS:
1. Small sample size (single case study).
2. Short follow-up period.
3. Need for controlled trials to establish efficacy and safety.

Future directions:
1. Large-scale clinical trials.
2. Mechanistic studies on Ayurvedic herbal formulations.
3. Development of Ayurveda-based fertility treatment protocols.

Declaration of patient consent: The authors have obtained patient consent for publication of images and clinical information, with assurance of anonymity to the extent possible.

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Conflicts of interest: Nil

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