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Treating Bilateral Cornual Tubal Block by Ayurvedic Medications: A Case Study

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Abstract: Tubal diseases accounts for 25%–35% of infertility in women. The line of treatment for it is tubal cannulation and microsurgical reconstruction. Moreover, In Vitro Fertilization (IVF) is suggested to patients post tubal microsurgery. These treatments have low success rate but have high costs. Hence, it is important to look for alternative therapies which are safe and cost-effective. From an Ayurvedic perspective, tubal blockage can be considered as *Sangha Srotodushti of Artavabeejvaha srotas* due to vitiated *Tridosha*. This is a case report of a female patient with a Bilateral cornual tubal block with a history of infertility. Due to *Kapha -Vata dosha*, 5ml *Kshartail Uttarbasti* was planned for 2 days for 3 consecutive menstrual cycles to remove obstruction produced in the tube. Due to *Vyavayi* (spreading fast throughout the body), *Vikasi* (distribution throughout the body without routine digestive process), and *Sukshma* (minute) properties of *Kshartail*, it spreads quickly into minute pores of the tube. Due to its *Ushna* (hot), *Tikshna* (penetrates deep tissue), *Chedan* (punctures tissue), and *Bhedan* (break down of particles) properties it scrapes the obstructing substance and removes fibrosed and damaged endometrial lining of the tube & uterus. Due to its *Avakashkara* (produces space), *Srotoshodhak* (purification of *srotas*) *Ropan* (wound healing), and disinfectant properties, it promotes the rejuvenation of tissue and improves the conductive functions of tubes and its *Snigdha* (oily), *Ushna* (hot) properties neutralises vitiated *Vata dosha*. After removal of the tubal block, the patient gets conceived naturally within 4 months and delivers a healthy baby. The result suggests that *Uttarbasti* is a highly effective, safe, low-cost Ayurvedic treatment without apparent complications.

Keywords: Bi-Cornual Tubal Block, *Sangha Srotodushti*, *Artavavaha Srotas, Kshartail*, and *Uttarbasti*

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1. INTRODUCTION

Tubal disease accounts for 25%–35% of infertility in women1-5. The tubal block may be caused due to urogenital tract infections and several other factors like hydrosalpinx, previous ectopic pregnancy, endometriosis, scar tissue from abdominal surgery, tuberculosis or congenital conditions.1,2 Hysterosalpingogram (HSG) is the best diagnostic tool used to assess the fallopian tubes' patency in women. Based on previous research studies, tubal block rates are higher in women with secondary infertility than those with primary infertility. Higher rates in secondary infertility are due to post-abortal or post-partum infection6. Tubal blockage usually involves the proximal, mid, or distal portion. Proximal blockage of the fallopian tube occurs in 10%– 25% of women with tubal disease 3,7,8. Surgical procedures can treat it like tubal cannulation, and microsurgical reconstruction9-14 Moreover, In Vitro Fertilization (IVF) & Embryo Transfer (ET) is suggested to the patients post tubal microsurgery and the costs of this treatment are very high with only about 20 -30% success rate2. Hence, it is essential to look for alternative treatments which are safe and cost-effective. According to Ayurveda Rutu, Kshetra, Ambu, Beej are essential for conception and called Garbhasambhav Samugri.15 The term Rutu means ovulation period of the menstrual cycle in women. The term Kshetra means female reproductive organs. Ambu means foetal nourishment from the mother. And Beej means ovum & sperm. According to Ayurveda, the tubal block can be considered as Kshetra Vikruti. Specifically, it can be regarded as sangha srotodushti of artavavaha srotas due to vitiated Tridosha.15-18 Vitiated Vata dosha causes Sankocha (constriction)16,19. Vitiated Kapha dosha causes Avarodha (block) & Shopha (swelling).16 Vitiated Pitta dosha produces Paka (inflammation)20. Uttarbasti is one of the vital Panchakarma to treat urinogenital diseases described in Ayurveda.18 Uttarbasti means urethral or vaginal administration of medicated oils or decoctions.21 In females, Vaginal Uttarbasti is indicated in Yonivyapad (female reproductive system disorders) and infertility.21 It is a cost-effective, non-surgical procedure carried out without local anesthesia. Hence safe Ayurvedic alternative for the treatment of tubal block. To remove the obstruction produced in the tube due to Kapha -Vata dosha, the drug used for local administration (Uttarbasti) should be Vyavayi (spreading fast throughout the body), Vikasi (gets distributed all over the body without passing through the routine digestive process), and Sukshma (minute/piercing) to spread quickly into minute pores of tube and should be Ushna (hot in potency), Tikshna (penetrates deep tissue), Chedan (puncture the tissue), Bhedan (break down of particles) to scrape the obstructing substance and also to remove fibrosed and damaged endometrial lining of tube & uterus and should be Avakashkara (produces space), Srotosodhak (purification of srotas) Ropan (wound healing), disinfectant, to promotes rejuvenation of tissue and improves conductive functions of tubes. The Kshara Tail has all above-mentioned properties22. So, to evaluate the efficacy of Kshara Taila for the treatment of sangha srotodushti of artavavaha srotas (tubal block), Uttarbasti of Kshara tail was planned for 2 days for consecutive 3 menstrual cycles was planned.

2. PATIENT INFORMATION

A female Patient of 28 years visited our facility who was diagnosed for Bilateral cornual block, since 7 years of regular unprotected intercourse. The semen parameters of the Male partner were normal. The patient is a housewife and has been married for 8 years. The patient had not taken any medicine for infertility. She had visited another institute for the treatment of infertility, where she got diagnosed as bilateral cornual block. She was advised of surgical procedures but was not willing for these procedures and visited our facility. A detailed medical history of the patient is given in Table 1.

Table 1:Medical History

Chief Complaints	Infertility since 7 years
Past History	No any major illness
Menstrual History	5days/28days cycle/painless/normal flow LMP – 12/10/2020
Past Menstrual History	Menarche – at the age of 14 yrs. 5days/28days cycle/painless/normal flow No Administration of Hormonal therapy/Contraceptives
Obstetric History	Gravida0 Para 0 Abortion 0
Family History	No family member had same gynaecological history No History of Diabetes, Hypertension

Table 1 illustrates that patient has been suffering from primary infertility for 7 years & had a regular menstrual cycle.

2.1 Clinical Findings

The clinical findings of the patient are described in Table 2.

Table 2: Clinical Examination

Date	Clinical Examination	Findings
20/10/2020	Height	155 cm
	Weight	46 kg
	BMI Index	19.1
	Pulse	85/ min
	BP	120/80 mm of hg
	Per Abdominal exam	No tenderness, no pain

Per Speculum examination	Cervix was normal in size; no cervical erosion was seen. No white discharge was seen.
Per Vaginal examination	Cervix is placed downwards and backward; the uterus is ant everted and mobile.

Table 2 illustrates that the patient's general examination parameters, i.e., BMI Index, Pulse, BP were normal and her Per Speculum & Per Vaginal examinations were also routine.

2.2 Investigations & Special Tests

- Routine Blood & Urine investigations were carried out.
- Random Blood sugar, T3, T4, and TSH investigations were carried out.
- Serological tests for HIV, HBsAg (Australia antigen for hepatitis B) and VDRL were carried out.
- Transvaginal Ultrasound for Follicular Study & to rule out any pelvic pathology before treatment was carried out. And for confirmation of pregnancy after treatment, Transvaginal Ultrasound was done.
- Hysterosalpingography was carried out before and after treatment.

The above investigations are described in Table 3, Table 4, Table 5, Table 8, Table 9.

Table 3: Investigations

Date	Type	Values
28/09/2020	Hb	12.5 b/dL
	BSL (R)	98 mg/dl
	T3, total (triiodothyronine)	98 ng/dL
	T4, total (thyroxine)	7.2 µg/dL
	TSH (thyroid-stimulating hormone)	3.7 mU/L
	HIV I & II	Non-Reactive
	Australia Antigen (HBsAg)	Negative
	V.D.R.L.	Non-Reactive
	CBC	WNL
	Urine (R)	WNL

Table 3 illustrates that patient's CBC, Haemoglobin, Blood Sugar Level, Thyroid Function Test, and Urine test were in normal Ranges. And patient's HIV, HBsAg, and VDRL test were negative.

Table 4:Transvaginal Ultrasound Report -Follicular Study

Date	Uterus	Day of Cycle	Right Ovary	Left Ovary	Endometrium Thickness	Impression
26/09/2020	Retroposed, showed normal size, 58x34mm, Myometrium normal	12th	22x20 mm Dominant follicle seen		8.5 mm	
28/09/2020		14th	Showed corpus luteum		9.0 mm	Recent ovulation

Table 4 illustrates that the Patients endometrial thickness is 9. 0 mm on the day of ovulation which suggests her ovarian cycle and endometrial cycles are normal.

Table 5:Hysterosalpingography (Before Treatment)

Date		Report	Impression
22/06/2014	HSG	Both fallopian tubes not visualized No e/o of free spill contrast on either side	Bilateral cornual block
18/10/2020	HSG	No evidence of delayed-type reaction to the used contrast medium Angiografin -20cc 1. Uterus – Anteverted, normal-sized uterus, no mucosal irregularity seen in contrast opacified area of the uterus 2. Both fallopian tubes not visualized 3. No e/o of free spill contrast on either side	Bilateral cornual block

Table 5 illustrates that patient has a Bilateral cornual block.

2.3 Diagnosis

From the hysterosalpingography report (Table 5 & Figure 1), this case was diagnosed as a Bilateral cornual tubal block.

2.4 Selection of The Drug

In this case the tubal block was caused due to vitiated *Vata dosha* & *Kapha dosha*. Obstruction in the tube was produced

by *Kapha dosha*, which led to the vitiation of *Vata dosha*. The vitiated *Vata dosha* causes spasms of the tube. Hence the treatment protocol is removing the obstruction and balancing vitiated Kapha & Vata dosha in the tube. To remove the obstacle in the tube, local administration of a drug which is *Laghu* (light), *Sukshma* (minute/piercing), *Tikshna* (penetrates deep tissue), *Chedan* (puncture the tissue), *Bhedan* (break down of particles), *Vyavayi* (spreading fast throughout the body), *Vikasi* (gets distributed all over the body without passing through routine digestive process), *Ushna virya* (hot in potency), *Avakashkara* (produces space), *Sangha nashak* (Removes block), *Srotoshodhak* (purification of *srotas*) *Ropan* (wound healing), disinfectant, & *Kapha-Vata dosha Shamak (neutraliser)* is applicable. *Kshartail*[22] has all these properties hence it is selected for the treatment.

2.5 Timeline

Timeline for treatment is given in Table 6.

Table 6: Timeline

20/10/2020	The patient visited our facility with a complaint of infertility 7 years due to bilateral cornual block
14/11/2020 to 16/11/2020	*Basti* (Medicated enema)
17/11/2020 to 18/11/2020	*Uttarbasti* (Vaginal administration of liquid medicines)
12/12/2020 to 14/12/2020	*Basti* (Medicated enema)
15/12/2020 & 16/12/2020	*Uttarbasti* (Vaginal administration of liquid medicines)
09/01/2021 to 11/01/2021	*Basti* (Medicated enema)
12/01/2021 to 13/01/2021	*Uttarbasti* (Vaginal administration of liquid medicines)

2.6 Treatment Protocol

Patient had not been given any oral medicines. Therefore, only Local treatment of Uttarbasti was planned. Its protocol is as below. On the sixth day, after cessation of menstruation, the patient had given Sesame oil enema through anus after lunch. Plain sesame oil (without *murchana*) was boiled and lukewarm oils were used. On the seventh day of menses, she had given *Dashamula Kadha*[18] enema through the anus with an empty stomach in the morning after full body oleation (*Snehan*) & full body steam (*Swed*en). The patient was given a sesame oil enema on the eighth day after lunch. On the ninth and tenth days of menses, the patient had given *Uttarbasti* after oleation with sesame oil and steam by *Nadiswed* on the lower abdomen, back, and lower limbs. The main procedure of *Uttarbasti* was carried out in the operation theatre with all aseptic precautions. The Patient had been given a lithotomy position with the head low. Then her external genital region was cleaned with Betadine liquid, and the vagina & cervix were visualized with the help of Cusco's speculum. A 5 ml syringe filled with 5 ml *Kshara Taila*[22] was attached to the *Uttarabasti* cannula. The *Kshara Taila* was autoclaved in a glass bottle before the procedure. Then the cannula was passed through the cervix into the uterine cavity, and the medicine *Kshara Taila*[22] was pushed with constant and gentle force. Then the *Uttarabasti* cannula was removed, followed by the removal of Cusco's speculum, and the patient was asked to stay lying in a low head position for 1 hr. This procedure was followed for three consecutive menstrual cycles. Detailed treatment protocol for basti & Uttarbasti is described in Table 7.

Table 7: Protocol of Basti & Uttarbasti

Date	*Basti*	Drug	Dose	Duration
14/11/2020 to 16/11/2020	*Anuwasan Basti* (oil enema)	Sesame Oil	100 ml	3 days 1st day – *Anuwasan basti* (oil enema) 2nd day – *Niruha basti* (Herbal Decoction enema) 3rd day - *Anuwasan basti* (oil enema)
	Niruha Basti (Herbal Decoction enema)	450 ml *Dashamula Kadha* (Decoction) + 50 ml Sesame oil + 250 mg *Saindhav* (salt)+ 5 ml Honey	500 ml	
17/11/2020 to 18/11/2020 First Cycle	*Uttarbasti* (Vaginal administration)	*Kshartail* (Arya Vaidya Sala, Kottakkal)	5 ml	2 days
12/12/2020 to 14/12/2020	*Anuwasan Basti* (oil enema)	Sesame Oil	100 ml	3 days 1st day – *Anuwasan basti* (oil enema) 2nd day – *Niruha Basti* (Herbal Decoction enema) 3rd day - *Anuwasan basti* (oil enema)
	Niruha Basti (Herbal Decoction enema)	450 ml *Dashamula Kadha* (Decoction) + 50 ml Sesame oil + 250 mg *Saindhav* (salt)+ 5 ml Honey	500 ml	
15/12/2020 to 16/12/2020 Second Cycle	*Uttarbasti* (Vaginal administration)	*Kshartail* (Arya Vaidya Sala, Kottakkal)	5 ml	2 days
09/01/2021 to 11/01/2021	*Anuwasan Basti* (oil enema)	Sesame Oil	100 ml	3 days

	Niruha Basti (Herbal Decoction enema)	450 ml *Dashamula Kadha* (Decoction) + 50 ml Sesame oil + 250 mg *Saindhav* (salt)+ 5 ml Honey	500 ml	1st day – *Anuwasan basti* (oil enema) 2nd day – *Niruha basti* (Herbal Decoction enema) 3rd day - *Anuwasan basti* (oil enema)
12/01/2021 to 13/01/2021 Third Cycle	*Uttarbasti* (Vaginal administration)	*Kshartail* (Arya Vaidya Sala, Kottakkal)	5 ml	2 days

2.7 *Precautions*

During the above procedure, the patient was asked to avoid spicy food to avoid any gastric trouble and was advised to take a light diet. And asked to avoid coitus to avoid any infection.

2.8 Assessment of Complications

Severe lower abdominal pain, vaginal bleeding, and any urogenital infection were the most apparent complications during and after the procedure.

2.9 Criteria for Assessment

For assessment of treatment, HSG was repeated to check the patency of bilateral block after the cessation of menstruation in the fourth cycle from starting the treatment.

2.10 Follow-Up Study

A follow-up study for any late complications for 2 months and a follow-up study for pregnancy for 4 months after the completion of treatment was carried out.

3. RESULTS

On the third cycle of Uttarbasti, on the second day, immediately after administration of uttarbasti, the patient feels pain on both sides in the pelvic region, which is suggestive of the peritoneal spill.

Table 8: Hysterosalpingography (After Treatment)

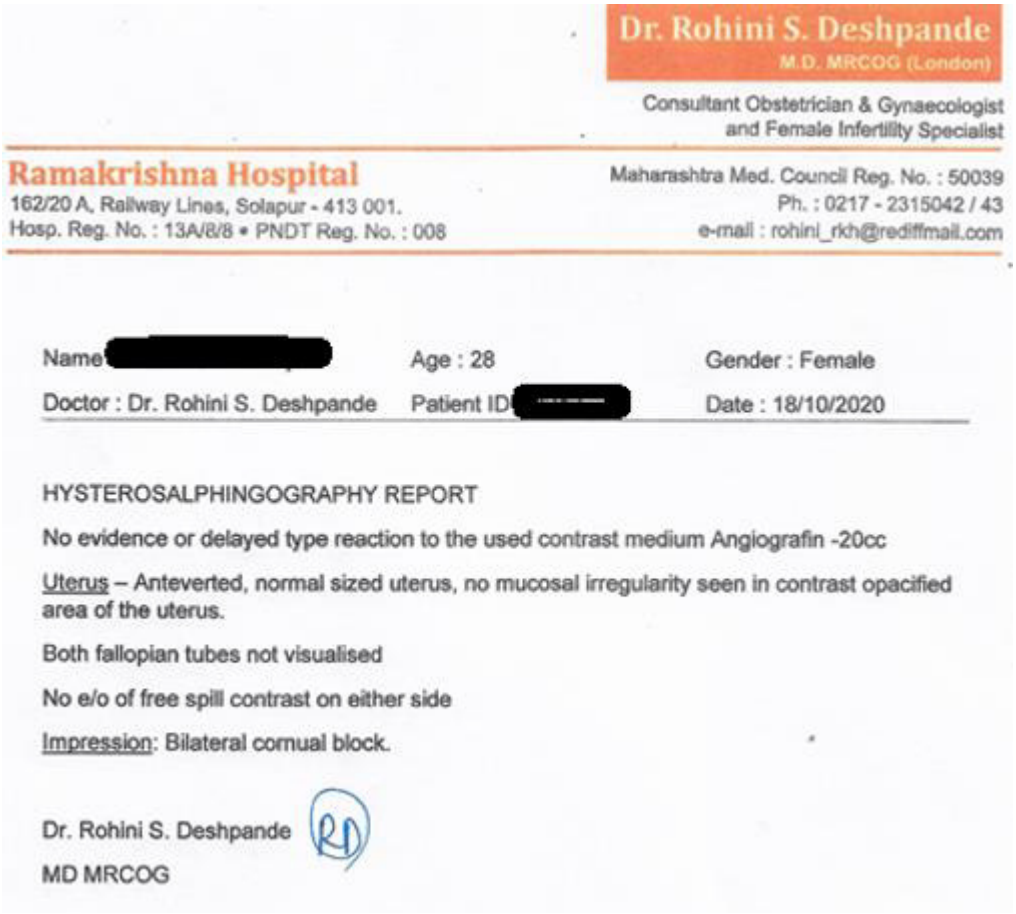
Date		Report	Impression
08/02/2021	HSG	The uterine cavity appears normal in shape, size, and position. No filling defect is seen. The fallopian tube looks patent and shows a free peritoneal spill of the contrast.	Normal Study

After two consecutive days of uttarbasti after cessation of menstruation for three successive menstrual cycles, HSG was carried out after the fourth menstrual cycle. Table 8 illustrates that free peritoneal spill of contrast indicates the removal of bilateral cornual block and both patent fallopian tube.

Table 9: USG Report after conception

Date	Impression
09/05/2021	Patient conceived (Pregnancy confirmed by USG) 5 weeks 4 days.

After the removal of the tubal block, the patient gets conceived naturally within 4 months (Table 9)



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Name [redacted] Age : 28 Gender : Female

Doctor : Dr. Rohini S. Deshpande Patient ID [redacted] Date : 18/10/2020

HYSTEROSALPHINGOGRAPHY REPORT

No evidence or delayed type reaction to the used contrast medium Angiografin -20cc

Uterus – Anteverted, normal sized uterus, no mucosal irregularity seen in contrast opacified area of the uterus.

Both fallopian tubes not visualised

No e/o of free spill contrast on either side

Impression: Bilateral cornual block.

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Fig 1: Illustrates that patient has a Bilateral cornual block.

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Doctor : Dr. Rohini S. Deshpande Patient ID [redacted] Date : 08/02/2021

HYSTEROSALPHINGOGRAPHY REPORT

Uterine cavity appears normal in shape, size and position.

No filling defect is seen.

Both the fallopian tube looks patent and shows free peritoneal spill of the contrast.

Impression: Normal Study

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Fig 2: After two consecutive days of uttarbasti after cessation of menstruation for three successive menstrual cycles, HSG was carried out after the fourth menstrual cycle. Figure 2 shows a free peritoneal spill of contrast, indicating the removal of bilateral cornual block and both patent fallopian tubes.

4. DISCUSSION

The HSG report (Table 5 & Figure 1) shows the patient has bilateral cornual block. In this case, the tubal block was caused due to vitiated *Vata dosha* & *Kapha dosha*. Obstruction in the tube was produced by *Kapha dosha*, which led to the vitiation of *Vata dosha*. The vitiated *Vata dosha* causes a spasm of the tube. Hence the treatment protocol is removing the obstruction and balancing vitiated Kapha & Vata dosha in the tube by *Uttarbasti* (vaginal administration) of *Kshara tail*. ***Uttarbasti*** (Vaginal administration of liquid medicine) acts directly on the site of pathogenesis, i.e., *yoni* (female genital organs). So, it is indicated in *yonivyapad* (diseases of the female reproductive system) and infertility. 21 The *uttarbasti* should be given after cleansing her body by *basti*.[18] So, the patient has been shown 3 basti in which *Anuwasan* (oil enema) and *Niruha basti* (herbal decoction enema) are given alternately before every *Uttarbasti* as shown in table no 6. *Uttarbasti of Kshara tail* is given for consecutive 2 days for 3 cycles starting from the 9th day of menses.

Selection of Kshara tail (Arya Vaidya Sala, Kottakkal) for Uttarbasti

It is sesame oil preparation using *Mulaka Kshara* (Alkali of *Raphanus sativus*), *Yava Kshara* (Alkali of *Hordeum vulgare*), *Sarji Kshara* (Alkali of plants growing in sodium-rich soil), *Vida Lavana* (Vida salt), *Samudra Lavana* (Common salt), *Saindhav Lavana* (Rock salt), *Sauvarchala Lavana* (Social salt), *Hindu* (*Ferula Foetida*), *Shigru* (*Moringa oleifera*), Dry Ginger (*Zingiber Officinalis*), *Devadaru* (bark of *Cedrus deodara*), *Vacha* (*Acorus Calamos*), *Kushta* (*Saussurea lappa*), *Rasanjana* (Aqueous extract of *Berberis aristata*), *Shatapushpa* (*Anethum Sowa*), *Granthika* (Root of *Piper longum*), *Musta* (Root of *Cyperus rotundus*), Juice extract of *Kadali* (*Musa paradisiaca*), Juice of *Beejapoora* (*Citrus medica*), and *Madhu Shukla* (Fermented sweet preparation).[22]

The properties of its ingredients are as below

Mulaka Kshara, *Yava Kshara*, *Sarji Kshara* – These are *Katu* (pungent), *Ruksha* (dry), *Ushna* (hot), *Laghu* (light), *Tikshna* (penetrates deep tissue), *Sukshma* (minute/piercing), *Chedan* (puncture the tissue), *Bhedan* (break down of particles), *Ropan* (wound healing) balances *Vata dosha* & *kapha dosha.* [18,23]

Asafoetida (*Ferula Foetida*) – Light, pungent, hot, *Snigdha* (oily), *Tikshna* (penetrating in nature), *Chedan* (scrapes channel), disinfectant, balances *Kapha* & *Vata dosha*. [24]

Five *Lavan* (Salt) – *Tikshna* (penetrating in nature), *Sara* (promotes movements of liquids in the srotas /channel), *Chedan* (scrapes channel), *Bhedan* (break down of particles), *Vikasi* (gets distributed all over the body without passing through the routine digestive process) *Avakashkara* (produces space), *Sangha nashak* (Removes block), *Srotoshodhak* (Purification of srotas/channels), neutralizes vitiated *Vata dosha.*[18]

Shigru (*Moringa oleifera*) is hot, light, dry, penetrating in nature, and neutralizes vitiated *Kapha-Vata dosha.*[24]

Dry Ginger (*Zingiber officinalis*) – It is hot, light, oily and neutralizes vitiated *Kapha-Vata dosha.* [24]

Devadaru (bark of *Cedrus deodara*) – It is hot, light, oily, penetrating in nature, neutralises vitiated *Kapha-Vata dosha.* [24]

Vacha (*Acorus calamus*)– It is hot, light, penetrating in nature, disinfectant, and neutralizes vitiated *Kapha-Vata dosha.* [24]

Kushta (*Saussurea lappa*) – It is hot, light, dry, penetrating in nature, and neutralizes vitiated *Kapha-Vata dosha.* [24]

Musta (Root of *Cyperus rotundus*) – It is cold, light, and dry and neutralizes vitiated *Kapha-Pitta dosha.* [24]

Rasanjana (Aqueous extract of *Berberis aristata*) - It is hot, *Chedan* (scrapes channel), *Ropan* (wound healing) neutralizes vitiated *Kapha-Vata dosha.* [24]

Shatapushpa (*Anethum Sowa*) – It is hot, light, oily, penetrating in nature, and neutralizes vitiated *Kapha-Vata dosha.* [24]

Granthika (Root of *Piper longum*) –It is hot, light, oily, penetrating in nature, and neutralizes vitiated *Kapha-Vata dosha.* [24]

Juice extract of *Kadali* (*Musa paradisiaca*) – It is oily, cold, and neutralises vitiated *Pitta-Vata dosha.* [24]

Juice of *Beejapoora* (*Citrus medica*) –It is hot, penetrating in nature, and neutralises vitiated *Kapha-Vata dosha.* [24]

Madhu Shukta (Fermented sweet preparation) - It is hot, and penetrating in nature, *Srotosodhak* (purification of *srotas*) neutralizes vitiated *Kapha-Vata dosha.*[18]

Sesame oil is oily, ushna, tikshna, Vyavayi (spreading fast throughout the body), *Sukshma* (capable of entering minute pores), disinfectant, neutralises vitiated *Vata dosha*.[18]

Medicated oils have properties similar to its ingredients.[22] Hence *Kshartail* is *Ushna* (hot in potency), *Laghu* (light), *Sukshma* (minute/piercing), *Tikshna* (penetrates deep tissue), *Chedan* (puncture the tissue), *Bhedan* (break down of particles), *Vyavayi* (spreading fast throughout the body), *Vikasi* (gets distributed all over the body without passing through routine digestive process) *Avakashkara* (produces space), *Sangha nashak* (Removes block), *Srotoshodhak* (purification of *srotas*) *Ropan* (wound healing), disinfectant, & neutralizes vitiated *Kapha-Vata dosha.* Kshara tail's properties help remove the tubal block (*sangha srotodushti of artavavaha srotas*). Due to its *Vyavayi, Vikasi,* and *Sukshma* properties it can spread quickly into minute pores of the tube & due to its hot, *Tikshna, Chedan, Bhedan, Sangha nashak* properties, it scrapes the obstructing substance and also removes the endometrial lining of tubes and uterus. It removes the fibrosis and damaged endometrium, and due to its Disinfectant & *Ropan, Avakashkara, and Srotoshodhak* properties, it promotes rejuvenation of tissue, and it balances vitiated *Vata dosha* & *Kapha dosha*. Thus, *Kshartail* removes the blockage and improves the conductive functions of tubes.

5. CONCLUSION

From an Ayurvedic perspective, tubal blockage can be considered as *sangha srotodushti of artavavaha srotas* due to vitiated *Tridosha*. The obstruction produced due to *kapha dosha* is removed by *Kshara tail* (oil) *Uttarbasti*, which has *Ushna* (hot), *Laghu* (light), *Ruksha* (dry), *Sukshma* (minute/piercing), *Vyavayi* (spreading fast throughout the body), *Vikasi* (gets distributed all over the body without passing through the routine digestive process), *Tikshna* (penetrating in nature, enters deep tissue), *Chedan* (scrapes channel), *Bhedan* (break down of particles) which are opposite to *Sheet* (cold), *Guru* (heavy), *Snigdha* (oily), *Sthula* (huge), *Sthira* (stationary) *Mrudu* (soft). And *Snigdha* (oily) and *Ushna* (hot) oil properties neutralise vitiated *vata dosha*. After removal of the tubal block, the patient gets conceived naturally within 4 months and delivered a healthy baby boy.

6. INFORMED CONSENT

Written consent was obtained from the patient for the purpose of conduction and publication of their clinical details.

7. AUTHORS CONTRIBUTION STATEMENT

Dr Harsha Gambhire-Bhadugale contributed to the patient's clinical management and was involved in the study conception, acquisition, and drafting of the manuscript. Dr U.V. Tekawade was involved in supervising the drafting and critical revision of the manuscript.Dr Suhas Herlekar contributed in the study conception, acquisition. All authors read and approved the final manuscript.

8. CONFLICT OF INTEREST

Conflict of interest declared none.

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