

Effect of Pre-Conceptional Care in the Management of Repeated Pregnancy Loss With Torch Infection: A Case Report

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ABSTRACT

Introduction – Pregnancy is a complex phenomenon which includes physiological, psychological and social changes. RPL is a distressing condition that affects millions of women worldwide. RPL is defined as the loss of two or more consecutive pregnancies before 20 weeks of gestation. RPL can be correlated with Putraghni Yonivyapada and Garbhastravi Vandhya explained in Ayurvedic classics.

Aim- To evaluate the effect of Pre-conceptional Ayurvedic protocol in RPL with TORCH infection.

Methodology – A female patient aged 32 years having previous history of two pregnancy loss visited in the OPD of PTSR department, ITRA Jamnagar on September 2022. She took allopathic medications for 1 year. Her investigation revealed positive TORCH Pannel test and follicular study showed oligo-ovulation. Pre-conceptional care plan includes Shodhana Chikitsa followed by Shamana Chikitsa.

Result – After 4 months of pre-conceptional care she conceived without any complications. Now she is having healthy pregnancy of 7 Months 22 days.

Discussion - Putraghni is a Yoniroga characterised by repeated pregnancy losses due to the excessive use of Rooksha Ahara and Vihara which leads to Vata Prakopa further causing Shonita Dushti and Artava Dushti which in turn results in repeated loss of pregnancy. The overall TORCH infection positivity rate was 61.1%. Pre-conceptional care plays important role to stabilizing the previous disease conditions, to prevent any reproductive disease and to ensure that women enter pregnancy with optimal state of health which would be safe for both fetus and her.

Keywords: RPL, TORCH, pre-conceptional care, Putraghni Yonivyapada, Garbhastravi Vandhya.

INTRODUCTION

Recurrent miscarriage or Recurrent Pregnancy Loss is defined as the loss of two or more consecutive pregnancies before 20 weeks of gestation.^{1,2}RPL can be caused by genetic, hormonal, anatomical or immunological factors. RPL is a distressing condition that affects millions of women worldwide. RPL is an important reproductive health issue, because it affects 2%–5% of couples.^{3,4}The incidence of RPL varies widely between reports because of the differences in the definitions and criteria used, as well as the populations' characteristics. Primary RPL refers to multiple losses in a woman with no previous viable infants, whereas secondary RPL refers to multiple losses in a woman who has already had a pregnancy beyond 20 weeks of gestation. Tertiary RPL refers to multiple pregnancy losses between normal pregnancies^{5,6} The incidence of RPL is increasing and its management is quite varied and challenging.

Almost half of the causes remain unexplained and are empirically treated using progesterone supplementation, anticoagulation, and/or immunomodulatory treatments.⁷ TORCH is groups of infections which is the main threats of serious congenital infection during pregnancy, which may ultimately cause fetal damage or other anomalies. In most cases, the infection can be severe enough to cause serious damage to a fetus than his/her mother. The gestational age of the fetus influenced the degree of severity.⁸ Ayurveda can bring promising results by Shodhana Karma or purificatory procedures ending with Uttara Basti. It is estimated that 10–15 % of clinically recognized pregnancies worldwide end in a miscarriage. The occurrence of spontaneous miscarriage in India has been reported to be around 10 %. However, the actual rates of miscarriage might be higher as many women have very early miscarriages without ever realizing that they are pregnant.⁹ pre-conceptional intervention can be divided into 3 ways i.e., Physical, Psychological and Spiritual. 1. Physical interventions include Panchkarma, Aahar -Vihar, Yoga, Pranayam. 2. Psychological - In Ayurveda, the achar rasayan was clearly mentioned. The thoughts which occupy the mind of the couple before & during conception can produce fetus resembling the nature of thoughts. 3. Spiritual Interventions- (Daivavyapashryaya Chikitsa) - Acharya Charak and Kashapad described “Putreshti yagna vidhi” for the progeny.¹⁰ The spiritual energy will have some psychological effect on woman & man. Acharya Charaka has mentioned Garbha Sanjaaya Sampada in Atulyagotriyashariram.¹¹ As per Acharya Sushruta, without the congruence of the four factors it is not possible to achieve conception.¹² Ritu – optimum time of conception i.e., time of ovulation, fertilization and window of implantation. Kshetra – Garbhashaya and its Anushanga Anga. Ambu – nourishing fluid through mother’s Ahara Rasa. Beeja – Shukra and Shonita. Pre-conceptional care plays an important role to stabilizing the previous disease conditions, to prevent any reproductive disease and to ensure that women enter pregnancy with optimal state of health which would be safe for both fetus and her.

PRESENTING CONCERNS

A 32 years old married female patient visited to OPD of Streeroga Evum Prasuti Tantra, Department of ITRA, Jamnagar on September 2022. She had a previous history of two pregnancy loss in 2022. After 1st pregnancy loss she started taking allopathic medications for 1 year. After first pregnancy loss her menses became irregular. So, ovulation induction started with medications during which her ovulation study showed delayed ovulation (24th day). During this treatment she conceived again but missed abortion was diagnosed and induction was done with MTP pills. Her investigations revealed positive TORCH test (Rubella and CMV). So, for pre-conceptional care and healthy progeny outcome she approached OPD of PTSR department.

CLINICAL FINDINGS

Last menstrual period - 01/09/2022

Menarche: - 14 years

Married life: - 7 years

Menstrual history: Duration – 5 days,

Interval – 29-30 days

Painless, without clots

3-4 pads/day, fully soaked

Contraceptional history: - Nil

Coital history: - 2-3 times/week

No dyspareunia
No burning sensation

GENERAL EXAMINATIONS

Height - 142 cm
Weight - 48 kg,
Body mass index - 25 kg/m²
Blood pressure - 116/72 mm Hg.
Appetite – Good
Sleep – Sound
Urine – Regular
Bowel – Non-satisfactory

SYSTEMIC EXAMINATIONS

Central Nervous System – Patient was conscious and well oriented
Cardiovascular System – S1 & S2 normal, no abnormal sounds was heard
Respiratory System – Bilateral clear, no added sounds was there
Per Abdomen examination – Soft, no tenderness
Per speculum & per vaginal examination –
Mild sticky discharge present
Cervix healthy, no congestion
Uterus anteverted anteflexed non-tender
Cervix – firm, CMT – absent
Bilateral adnexa clear
Bilateral fornixes clear

ROGI PARIKSHA

Ashtavidha Pariksha: (As per table no. 1)

1.	Nadi	86/min
2.	Mala	Niram
3.	Mutra	Prakrit
4.	Jivha	Niram
5.	Shabda	Spashta
6.	Sparsha	Sheeta
7.	Drika	Prakrit
8.	Akruti	Madhyam

Dashavidha Pariksha: (As per table no. 2)

1.	Prakriti	Pittapradhana Kaphanubandhi
2.	Vikriti	Pitta, Vata
3.	Saar	Rasa Saar
4.	Samhanana	Madhyam
5.	Pramana	Height: 142 cm

		Weight: 48 kgs
6.	Satmya	Madhyam
7.	Satva	Madhyam
8.	Ahara Shakti	Abhyavaharana Shakti: Madhyam Jarana Shakti: Madhyam
9.	Vyayama Shakti	Madhyam
10.	Vaya	Madhyam

DIAGNOSTIC FOCUS AND ASSESSMENT

Investigations (As per table no. 3)

Hematological tests – Normal

Biochemistry tests – Normal

Serological tests – Normal

Investigations (15/06/2022)	
Total T3	136.8 ng/dL
Total T4	9.45 µg/dL
Sr. TSH	3.09 µIU/mL
Sr. PRL	12.21 ng/mL
Sr. LH	20.91 mIU/mL
Sr. FSH	6.67 mIU/mL
Sr. AMH	3.99 ng/mL
Anti-Nuclear Antibody (ANA)	Negative
TORCH Complex (22/08/2022)	
Rubella IgG	104 IU/ mL
Rubella IgM	less than 10 IU/ mL
CMV IgG	137 U/ mL
CMV IgM	6.75 U/ mL
TOXO IgG	Less than 3 IU/ mL
TOXO IgM	Less than 3 IU/ mL
HSV I IgG	1.01 Index
HSV I IgM	1.55 Index
HSV II IgG	0.31 Index
HSV II IgM	0.36 Index
Anti Phospholipid IgG	1.48 U/ mL
Anti Phospholipid IgM	1.75 U/ mL
Anti Cardiolipin Antibody IgG	1.96 GPL/ mL
Anti Cardiolipin Antibody IgM	3.21 MPL/ mL

USG (09/11/2022)

Uterus anteverted anteflexed

Endometrial thickness – 2.8 mm

Bilateral ovaries bulky MCO

THERAPEUTIC FOCUS AND ASSESSMENTS

Pre-conceptional care plan includes Shodhana Karma and Shamana Aushadhi

SHODHANA KARMA –

1. Virechana Karma
2. Palashadi Yoga Basti
3. Matra Basti with Sahacharadi Taila
4. Uttara-basti with Kashmarya Kutaja Siddha Ghrutha

1. VIRECHANA KARMA (As per table no. 4)

No.	Procedure	Drug & Dose	Duration
1.	Deepana, Pachana	Shunthi Churna 1 gm Haritaki Churna 2 gms Guduchi Churna 3 gms with warm water before meal twice in a day. (As per Kostha and Agni)	5-7 Days
2.	Snehapana	Go-Ghrita Paan (As per Kostha and Agni)	3-7 Days
3.	Abhyanga Swedana	Bala Taila (Sida cordifolia Linn)–1 time a day, Dashmoola Vashpa Nadi Swedana	4 Days
4.	Virechana Karma (Trivrutadi Avaleha- Ash. Hr. K. 2/9)	As per Kostha and Agni	1 Day
5.	Sansarjana Karma	Diet (As per Shuddhi)	3-7 Days

2. PALASHADI YOGA BASTI

Anuvasana Basti - 60 ml Dashamoola Taila Bhojan Paschata

Niruha Basti - 350 ml Abhukta Kala

Makshika – 60 ml

Saindhava – 6 gms

Sneha – Dashamoola Taila 60 ml

Kalka – Vacha Churna – 5 gms

Pippali Churna – 5 gms

Shatapushpa Churna – 20 gms

Kwatha – Palashadi Kwatha 200 ml

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Anuvasana	Niruha	Anuvasana	Niruha	Anuvasana	Niruha	Anuvasana	Anuvasana

3. MATRA BASTI

- **Sneha** – Sahachara Tail
- **Dose** – 60 ml
- **Kala** - Bhojana Paschata
- **Duration** – 7 days

Procedure of Matra Basti**Poorva Karma:**

- The patients will be instructed to come after taking a light diet.
- They will be subjected for local Abhyanga and Mrudu Swedana prior to the administration of Matra Basti.

Pradhana Karma:

- After Poorva Karma patient will be is advised to lie down in left lateral position.
- A small quantity of SahacharadiTaila will be applied on the patient's anal canal and rubber catheter.
- The catheter will be gently inserted into the anal canal and enema syringe containing 60ml Sahachara Taila will be administered with uniform pressure.

Pashchat Karma:

- Patient will be asked to take rest for at least 30 minutes in supine position.

4. UTTARABASTI

- **Duration** – 6 days
- **Sneha** – Kashmarya Kutaja Siddha Ghrutha
- **Dose** – 5 ml

Procedure of Uttar-basti**Poorva Karma-**

- Snehana: - Abhyanga with Bala Taila in Kati Pradesha (back side) and Adhodara (Lower abdomen) for 10 minutes.
- Swedana: - Nadi Sweda with Ushna Jala as per need.
- Yoni Prakshalana: With Triphala Kwatha (Q. S.)

Pradhana Karma-

- 5 ml Intrauterine Uttara Basti of Kashmarya Kutaja siddha Ghrutha (for 6 days) will be given as per Uttara Basti procedure in proper aseptic condition in O.T.

Pashchat Karma-

- Complete bed rest in head low position for at least 2 hours. Hot fomentation on lower abdomen will be done with hot water bag.
- Light diet will be advised during the course of treatment. Coitus must be avoided during procedure.

SHAMANA AUSHADHI**Before Conception**

Following Shamana Aushadhi given to patient for 4 months. (As per table no. 5)

No.	Dravya	Matra	Kala	Anupana
1.	Rasnasaptaka Kashaya	40 ml	Empty stomach in morning and evening	Water
2.	Kanchanara Guggulu	2 Vatis	After food twice in a day	Water
3.	Avipattikara Churna	5 gms	At night	Water

4.	Arogyavardhini Rasa Triphala Churna Haridra Churna Guduchi Churna	500 mg 3 gms 1 gm 1 gm	After food twice in a day	Water
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Patient was advised to follow Rajaswala Paricharya, Dincharya, Ahar-Vihar, Pathya-Apathya, Suryanamaskara, Yoga, Pranayama.

PATHYA-APATHYA

PATHYA

- Ahara- Brown rice, green gram, wheat, flour of parched rice, butter, ghee and milk.
- Seasonal fruits
- Pulses, vegetables, small bowl of rice, buttermilk
- To have Saumanasya by good readings
- Vihara- to take good sound sleep for 7- 8 hours.
- Yoga and meditation after performing regular bowel habits.

APATHYA

- Use of sour, salty and spicy food.
- Processed food, Coffee /Tea /Cold drinks, Alcohol, Pan, Chocolate fast-food.
- Unpasteurized dairy products like milk and cheese.
- Smoking, Alcohol, Tobacco chewing
- Sleeping during daytime, Staying awake at night, Heavy exercise
- Over exposure of sun, fire
- Tight & synthetic undergarment
- Stress, anxiety

After Conception

Following Shamana Aushadhi given to patient. Garbhini Paricharya is advised to patient. (As per table no. 6)

No.	Dravya	Matra	Kala	Anupana
1.	Cap. FALOVA	2 capsules	After breakfast once in morning	Water
2.	Cap. TORCHNIL	1 capsule	After food once in a day	Water
3.	Tab. Garbha Chintamani Rasa	1 tablet	After food once in a day	Water
4.	Bala Churna Shatavari Churna Guduchi Churna Bramhi Churna	2 gm 2 gm 1 gm 1 gm	Empty stomach twice in a day (morning and evening)	Milk
5.	Amalaki Churna	3 gm	After food twice in a day	Sharkara

FOLLOW-UP AND OUTCOMES

Patient is in regular follow-up since September 2022. After these pre-conceptional treatment protocol patient conceived and her LMP is 5th January 2023.

USG Report (07/06/2023)

GA – 22.4 weeks

EDD – 07/10/2023

EFW – 525 gms

AFI – 16.7 cm

Placenta – anterior grade 1 maturity

Cervical length – 46.4 mm

Normal color doppler parameters

Hematological investigations (14/06/2023) – WNL

DISCUSSION

Recurrent pregnancy loss can be correlated with Putraghni Yonivyapad and Garbhasravi Vandhya explained in Ayurvedic classics. Putraghni is a Yoniroga characterised by Repeated Pregnancy Losses due to the excessive use of Rooksha Ahara and Vihara which leads to Vata Prakopa further causing Shonita Dusti and Artava Dusti which in turn results in repeated loss of pregnancy.¹³ Acharya Charaka classified this under Vatika Yonivyapad whereas Acharya Sushruta considered it as Paithika Yonivyapad. Acharya Sushruta explained that in this condition, the fetuses are repeatedly destroyed due to bleeding besides there are other clinical features of vitiated Pitta like burning sensation and heat.¹⁴ Acharya Charaka and Acharya Sushruta have mentioned Putraghni Yonivyapad while Acharya Vagbhata has mentioned Jathaghni Yonivyapad.

Recurrent Pregnancy Losses especially in unexplained cases, Ayurveda can bring promising results by Shodhana Karma or purificatory procedures ending with Uttara Basti. Shodhana therapy is helpful in improving the quality of Beeja in males and females (sperm and ovum) thus begetting a healthy child. As per the causes of RPL, the primary cause being chromosomal abnormalities which is becoming an important factor now a day. So pre- conceptional care plays more significant role in Beeja Dushti as per Ayurveda. For every couple pregnancy is one of the most beautiful precious events created by nature and it should always be planned not by accident or chance. The concept of Preconception is described in Ayurveda as Garbhdhanavidhi. It explains about the right mode of conception and importance of diet, lifestyle and Shodhana. Pre-conceptional care plays important role to identify the risk factors, stabilizing the previous disease conditions, to prevent any reproductive disease and to ensure that women enter pregnancy with optimal state of health which would be safe for both fetus and her.

In RPL we can expect vitiated Doshas to accumulate in the body. To eliminate those, Shodhana Karma will be required. The main Dosha vitiation in RPL is Vata and Pitta with association of Raktadushti. Virechana is the best Shodhana Karma to normalise these Doshas. Yoniroga, Yoni Shukrashaya Roga are mentioned as Virechana Sadhya diseases as per both Susruta Samhita and Ashtanga Hrudaya.^{15,16} Virechana is the treatment modality for Adhobhaga Doshahara¹⁷ and best Shodhana in eliminating Pitta Dosha.¹⁸ Palashadi Yoga Basti mentioned in Charaka Siddhithana specially indicated in Yonidosha.¹⁹ Acharya Charaka while explaining the benefits of Anuvasana Basti, states that Anuvasana Basti will help women in getting a progeny.²⁰ Acharya Vagbhata explained Sahacharadi Taila in Chikitsa Sthana, Vatavyadhi Chikitsa. The Yoga is indicated for Yoniroga as well.²¹ Uttara Basti is the main line of

treatment in Yoniogas. It acts on endometrium, increases receptivity of endometrium and facilitates ovulation and nidation of fertilized ovum. The Ghrutha is processed with drugs like Kashmari and Kutaja which are Vata Pitta Shamaka, Garbha Sthapaka, Raşayana, Brumhana, Raktasthambhaka and Sangrahi. Also, Acharya Charaka has mentioned that Uttara Basti with this Yoga in Raktayoni, Arajaska and Putraghni Yonivyapad.²²

CONCLUSION

The incidence of RPL is increasing and its management is quite varied and challenging. Most studies demonstrate a spontaneous miscarriage rate of 10-15%; of which 80% spontaneous abortion occur during the second and third month of pregnancy. Almost half of the cases remain unexplained and are empirically treated using progesterone supplementation, anticoagulation, and/or immunomodulatory treatments.²³ Management of RPL has to be revised as it requires intervention from the pre-conceptual period itself. Ayurveda gives great importance for the pre-conception care & Garbhini Paricharya, to ensure a healthy and successful progeny i.e., Supraja²⁴.

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Conflicts of interest

There are no conflicts of interest.

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