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 Panel 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. 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. 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.

**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-conceptual 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 antverted 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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>6.</td>
<td>Satmya Madhyam</td>
</tr>
<tr>
<td>7.</td>
<td>Satva Madhyam</td>
</tr>
<tr>
<td>8.</td>
<td>Ahara Shakti Abhyavaharana Shakti: Madhyam Jarana Shakti: Madhyam</td>
</tr>
<tr>
<td>9.</td>
<td>Vyayama Shakti Madhyam</td>
</tr>
<tr>
<td>10.</td>
<td>Vaya Madhyam</td>
</tr>
</tbody>
</table>

### DIAGNOSTIC FOCUS AND ASSESSMENT

**Investigations** (As per table no. 3)

- Hematological tests – Normal
- Biochemistry tests – Normal
- Serological tests – Normal

<table>
<thead>
<tr>
<th>Investigations (15/06/2022)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Total T3</td>
<td>136.8 ng/dL</td>
</tr>
<tr>
<td>Total T4</td>
<td>9.45 µg/dL</td>
</tr>
<tr>
<td>Sr. TSH</td>
<td>3.09 µIU/mL</td>
</tr>
<tr>
<td>Sr. PRL</td>
<td>12.21 ng/mL</td>
</tr>
<tr>
<td>Sr. LH</td>
<td>20.91 mIU/mL</td>
</tr>
<tr>
<td>Sr. FSH</td>
<td>6.67 mIU/mL</td>
</tr>
<tr>
<td>Sr. AMH</td>
<td>3.99 ng/mL</td>
</tr>
<tr>
<td>Anti-Nuclear Antibody (ANA)</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**TORCH Complex (22/08/2022)**

<table>
<thead>
<tr>
<th>Tecno</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Rubella IgG</td>
<td>104 IU/ mL</td>
</tr>
<tr>
<td>Rubella IgM</td>
<td>less than 10 IU/ mL</td>
</tr>
<tr>
<td>CMV IgG</td>
<td>137 U/ mL</td>
</tr>
<tr>
<td>CMV IgM</td>
<td>6.75 U/ mL</td>
</tr>
<tr>
<td>TOXO IgG</td>
<td>Less than 3 IU/ mL</td>
</tr>
<tr>
<td>TOXO IgM</td>
<td>Less than 3 IU/ mL</td>
</tr>
<tr>
<td>HSV I IgG</td>
<td>1.01 Index</td>
</tr>
<tr>
<td>HSV I IgM</td>
<td>1.55 Index</td>
</tr>
<tr>
<td>HSV II IgG</td>
<td>0.31 Index</td>
</tr>
<tr>
<td>HSV II IgM</td>
<td>0.36 Index</td>
</tr>
<tr>
<td>Anti Phospholipid IgG</td>
<td>1.48 U/ mL</td>
</tr>
<tr>
<td>Anti Phospholipid IgM</td>
<td>1.75 U/ mL</td>
</tr>
<tr>
<td>Anti Cardiolipin Antibody IgG</td>
<td>1.96 GPL/ mL</td>
</tr>
<tr>
<td>Anti Cardiolipin Antibody IgM</td>
<td>3.21 MPL/ mL</td>
</tr>
</tbody>
</table>

**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)

<table>
<thead>
<tr>
<th>No.</th>
<th>Procedure</th>
<th>Drug &amp; Dose</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Deepana, Pachana</td>
<td>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)</td>
<td>5-7 Days</td>
</tr>
<tr>
<td>2.</td>
<td>Snehapana</td>
<td>Go-Ghrita Paan (As per Kostha and Agni)</td>
<td>3-7 Days</td>
</tr>
<tr>
<td>3.</td>
<td>Abhyanga</td>
<td>Bala Taila (Sida cordifolia Linn)–1 time a day, Dashmoola Vashpa Nadi Swedana</td>
<td>4 Days</td>
</tr>
<tr>
<td>4.</td>
<td>Virechana Karma</td>
<td>As per Kostha and Agni</td>
<td>1 Day</td>
</tr>
<tr>
<td>5.</td>
<td>Sanssarjana Karma</td>
<td>Diet (As per Shuddhi)</td>
<td>3-7 Days</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Day</th>
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<th>Day</th>
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<th>Day</th>
<th>Day</th>
<th>Day</th>
<th>Day</th>
<th>Day</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Anuvasana</td>
<td>Niruha</td>
<td>Anuvasana</td>
<td>Niruha</td>
<td>Anuvasana</td>
<td>Niruha</td>
<td>Anuvasana</td>
<td>Anuvasana</td>
<td>Anuvasana</td>
</tr>
</tbody>
</table>

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 Uttar Basti of Kashmarya Kutaja siddha Ghrutha (for 6 days) will be given as per Uttar 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)

<table>
<thead>
<tr>
<th>No.</th>
<th>Dravya</th>
<th>Matra</th>
<th>Kala</th>
<th>Anupana</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rasnasaptaka Kashaya</td>
<td>40 ml</td>
<td>Empty stomach in morning and evening</td>
<td>Water</td>
</tr>
<tr>
<td>2.</td>
<td>Kanchanara Guggulu</td>
<td>2 Vatis</td>
<td>After food twice in a day</td>
<td>Water</td>
</tr>
<tr>
<td>3.</td>
<td>Avipattikara Churna</td>
<td>5 gms</td>
<td>At night</td>
<td>Water</td>
</tr>
</tbody>
</table>
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)

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

4. Arogyavardhini Rasa  
   Triphala Churna  
   Haridra Churna  
   Guduchi Churna  
   500 mg  
   3 gms  
   1 gm  
   After food twice in a day  
   Water
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. 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. Acharya Charaka and Acharya Sushruta have mentioned Putraghni Yonivyapad while Acharya Vaghbhata 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 Garbhhdhanavidhi. 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. Virechana is the treatment modality for Adhobhaga Dosahara and best Shodhana in eliminating Pitta Dosh. Palashadi Yoga Basti mentioned in Charaka Siddhithana specially indicated in Yonidosha. Acharya Charaka while explaining the benefits of Anuvasana Basti, states that Anuvasana Basti will help women in getting a progeny. Acharya Vagbhata explained Sahacharadi Taila in Chikitsa Sthana ,Vatavyadhi Chikitsa. The Yoga is indicated for Yoniroga as well. Uttara Basti is the main line of
treatment in Yonirogas. 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, Rakstasthmabhaka and Sangrahi. Also, Acharya Charaka has mentioned that Uttara Basti with this Yoga in Rakatayoni, Arajaska and Putraghi Yonivyapad.\textsuperscript{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.\textsuperscript{23} Management of RPL has to be revised as it requires intervention from the pre-conceptional period itself. Ayurveda gives great importance for the pre-conception care & Garbhini Paricharya, to ensure a healthy and successful progeny i.e., Supraja \textsuperscript{24}.

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Nil.

Conflicts of interest
There are no conflicts of interest.

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