



## MANAGEMENT OF PELVIC INFLAMMATORY DISEASE THROUGH AYURVEDIC REGIMEN: A CASE STUDY

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**ABSTRACT** Pelvic inflammatory disease or PID is an inflammatory condition of female reproductive tract. It is mainly caused due to Neisseria gonorrhoeae and Chlamydia trachomatis. The inflammation found along with the pain in lower part of abdomen or hyogastrum and pelvic region, purulent vaginal discharges, pyrexia and dyspareunia. In Ayurveda all the pathological conditions related with female genitals included under twenty types of *Yonivyapada* and the symptoms of PID closely relates with the symptoms mentioned in *Paripluta Yonivyapada*. *Paripluta Yonivyapada* is caused due to the vitiation of *Vata* and *Pita doshas*. The present case study was carried out on a 30 year old female patient suffering from the symptoms of *Paripluta Yonivyapada*. The patient first visited in Prasutitantra and Streeroga OPD of National Institute of Ayurveda, Jaipur on 23 January 2020 with chief complaint of pain & heaviness in lower abdomen associated with abnormal purulent vaginal discharge since two months. After proper examinations, complete history taking, Ultra sound report and Erythrocyte sedimentation rate (ESR) she was diagnosed with Pelvic Inflammatory Disease or *Paripluta Yonivyapada*. There after she was prescribed with oral medication as *Jeeraka-dvaya* (2gm BD with water). The medication was continued for one month and gradual relief in symptoms found. *Jeeraka-dvaya* that is *Shweeta Jeeraka* (*Cuminum cyminum*) and *Krishna Jeeraka* (*Carum bulbocastanum*) were selected for the treatment of *Paripluta Yonivyapada* because of their *Krimihara* (Bacteriocidal) and *Garbhashaya-Suddhikara* properties.

**KEYWORDS** : Pelvic inflammatory disease, Polymicrobial infection, *Paripluta Yonivyapada*, *Jeerak-dvaya*, *Shweeta Jeeraka*, *Krishna Jeeraka*

### Introduction

Pelvic inflammatory diseases or pelvic inflammatory disorder (PID) is the infection of upper genital tract of female typically involves endometrium, fallopian tubes, ovaries, pelvic peritoneum and other around structures<sup>1</sup>. PID generally found simultaneously with other pathological conditions. Untreated Pelvic infections give rise to other pathological conditions like infertility, ectopic pregnancy, chronic pelvic pain etc<sup>2</sup>. PID presents with the clinical finding like pyrexia, hypo-gastric pain, pelvic pain, menstrual irregularities, dysmenorrheal, dyspareunia, and purulent vaginal discharge.

In Ayurveda, the symptoms of PID directly correlated with *Pita pradhana Yonivyapada* because inflammation or *paka* which is an inherent karma of *Pita dosha*. According to Acharya Charaka the symptoms like inflammation and tenderness of *yonis*, painful menstruation, discoloration of menstrual blood, lumbo-sacral pain, pelvic pain, groin region pain, backache and fever found due to the discordance of *Vata* and *Pita Dosha* which is present in *Paripluta Yonivyapada*<sup>3</sup>, all these symptoms by Acharya Charaka can be seen in acute inflammatory stage of gonococcal infection. Beside the symptoms of *Vataja Yonivyapada* Acharya Sushruta added severe dyspareunia in *Paripluta Yonivyapada*<sup>4</sup> which is caused due to vitiation of *Vata*, these symptoms correlates with the late stage of gonococcal infection<sup>5</sup>. Acharya Vagbhata follows Acharya Charaka and includes the symptoms like heaviness in the bladder and lower abdomen, diarrhea and anorexia<sup>6</sup>. *Madhukosha Tika* on Madhava nidana defines the meaning of *Paripluta* as '*Pari*' means all around and '*Pluta*' means features like extreme *Vataja Vedana*; and it completely defines as severe irritation or discomfort all around internal and external female genitalia. Another version explains that pain during coitus is substituted by excessive liking of coitus. It is a psychological abnormalities which usually seen during chronic condition of dyspareunia. It seems that all classical views are different stages of same disease<sup>7</sup>.

Modern science treats PID with antibiotics, antimicrobials and NSAIDS, but these are not any authentic and absolute treatment for this condition. Sometimes patients become resistant for the antibiotics and do not get any relief after long term consumption of these medicines. These medicines also have many side effects like gastrointestinal upset, dizziness, drowsiness, headache etc<sup>8</sup>. PID usually affects 1.5% of young female yearly and have 3-10% estimated admissions in the hospitals of India for the same<sup>9</sup>. So it is necessary to develop a proper treatment for PID or *Paripluta Yonivyapada* so its symptoms decline without causing any side effects to the sufferer. Since PID as a major concern in the area of Gynaecology, the present study was carried out to find its effective Ayurvedic management.

### Methodology

The patient for the trial was registered from the OPD of Prasutitantra and Streeroga department of National Institute of Ayurveda, Jaipur. After giving the treatment, patient was assessed on the basis of some objective and subjective parameters.

### Case Study:

A 30 year old married female visited Prasutitantra and Streeroga OPD of NIA on 23.1.2020 with chief complaint of pain, discomfort & heaviness in lower abdomen associated with abnormal purulent vaginal discharge since two months. Complete history of present illness was taken along with proper examinations. Some necessary investigations also carried out to rule out other pathologies.

### Personal History:

Appetite- Satisfactory intake of meal  
Bowels- Unsatisfactory, 2-3 times a day  
Micturition- burning (on/off)  
Sleep – Sound, No day sleeping

**Past Medical History** – Patient was known case of *Amlapitta* (acidity) since 6 months with long term history of taking liquid Gelusil.  
No any significant past surgical and family history.

### Menstrual & Marital History

Menarche attained at the age of 12 years  
Menstrual flow- duration – 5-6 days, interval – 32-35 days, regular  
Moderate flow with slight pain  
Married life- 9 years

### Obstetric History

O/H- G<sub>2</sub> P<sub>1</sub> L<sub>1</sub> A<sub>1</sub>  
G1- Spontaneous abortion of 2 month fetus, 9 year back, Dilatation and Curratage was done.  
G2- Full term normal delivery, female child, 6yrs back at Mahila Chikitsalaya in Jaipur

### Physical Examination

Height- 154 cm  
Weight- 55 kg  
B.P- 110/70 mm Hg  
Averagely built and well nourished body  
Pallor- Absent  
Icterus- Absent  
No evidence of Pedal oedema & lymphadenopathy found  
Nails, tongue and conjunctiva- Pink

**Systemic Examination**

Cardio-vascular system, Respiratory system, Central nervous system, all appears Normal

**Gynaecological examination**

Per abdominal examination - tenderness found in pelvic region but no mass felt  
 Per speculum examination - cervix was congested with purulent discharge  
 Per vaginal examination - tenderness found in bilateral fornix, cervical motion tenderness also present

**Investigation**

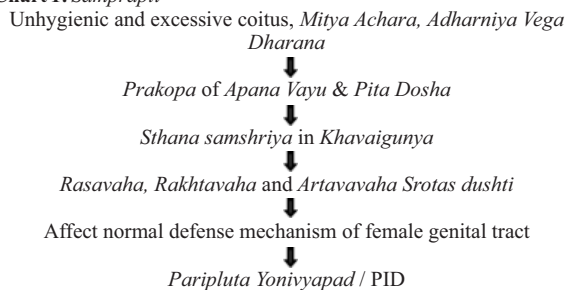
Hemoglobin (Hb): 12.1 gm%  
 Blood group: A+  
 Erythrocyte sedimentation rate (ESR): 40mm/hr↑  
 Urine routine examination: within normal limit  
 Random Blood Sugar (RBS): 100.2 mg%  
 VDRL, Australia antigen (HBsAg), HIV test: All Non-reactive  
 TSH screening: 1.54 μ IU/ml (within normal limit)  
 Renal function test and Liver function test: within normal limit.  
 USG for uterus and adnexa: Uterus 8.2cm size, anteverted, both ovaries were normal in size and shape, **free fluid seen in the Pouch of Douglas**

**Diagnosis**

*Paripluta* i.e. Pelvic inflammatory disease  
 The *lakṣhaṇa* mentioned of *Paripluta* are *vedana in sroni, vañkṣaṇa pṛstha, graamyadharmā ruja, shoona- sparshaakṣama, saarti neela pittamasṛkasraveta, jvara* etc

- *Paripluta Yonivyapada* = Pelvic Inflammatory Disease
- *Shroni, vañkṣhaṇa, pṛstha arti* = Backache & lower abdominal pain
- *Gramyadharmā ruja* = Dyspareunia
- *Shoona (Yonishotha)* = Inflammation of genital organs
- *Sparshakṣma* = Tenderness over fornix
- *Saarti- neelpittam asṛaka* = Abnormal vaginal discharges with pelvic pain
- *Guruta in basti & kuṣhi* = Heaviness in bladder and lower abdomen

**Chart 1: Samprapti**



**Table 1: Samprapti Ghataka**

<i>Dosha</i>	<i>Vata – Pita</i>
<i>Dushya</i>	<i>Rasa – Rakta -Artava</i>
<i>Agni</i>	<i>Jatharagni, Dhatvagni Mandhya</i>
<i>Srotasa</i>	<i>Rasavaha – Raktavaha -Artavavaha</i>
<i>Srota-dushti</i>	<i>Atipravarti, Vimargagamana</i>
<i>Udbhava-sthana</i>	<i>Amashaya</i>
<i>Sthana-samshraya</i>	<i>Garbhashaya</i>
<i>Vyakta-sthana</i>	<i>Triyavarta Yoni</i>

**Table 2: Desired action on Paripluta Yonivyapada**

S. No.	<i>Samprapti Ghataka</i>	<i>Actions of Jeeraka-dvaya</i>	<i>Interpretation of Jeeraka-dvaya actions</i>
1.	<i>Vata, Pitta</i>	<i>Vatahara</i>	Applicable in <i>Paripluta Yonivyapada</i>
2.	<i>Rasa, Rakta</i>	<i>Pachana</i>	Normalizes functional capacity of <i>Rasa-Rakta Dhatu</i> without nourishing them and will only be utilized for limited time period.

3.	<i>Jatharagni, Dhatvagni Mandya</i>	<i>Deepana, Pachana, Jarana, Ajeernanashaka, Grahanirogahara, Adhmanahara, Atisarahara.</i> <sup>10</sup>	Normalize metabolism by normalizing <i>Agni Mandhya</i> .
4.	<i>Rasavaha, Raktavaha and Artavavaha Srotasa</i>	<i>Garbhashaya Vishodhana</i> <sup>11</sup>	Removes metabolic toxicity from uterus and improves the quality of natural vaginal secretions.
5.	<i>Atipravarti, Vimargagamana</i>	<i>Ushna, Katu, Tikta, Pachana, Krimihara</i>	Responsible to break reproductive cycle of harmful microbes
6.	<i>Amashaya</i>	<i>Ushna, Katu, Tikta, Pachana</i>	Eradicate <i>Aama</i> (endotoxins) from <i>Amashya</i> and form new, pure and sustainable <i>Dhatu</i> s which later improves the diseased condition.
7.	<i>Garbhashaya</i>	<i>Garbhashaya Vishodhana</i>	Purifies and clean the uterus & creates a healthy atmosphere for development of healthy progeny, etc.

**Treatment Plan**

After confirming the diagnosis, patient was prescribed with 2 gm powder of *Jeeraka-dvaya* that is *Shweeta Jeeraka (Cuminum cyminum)* and *Krishna Jeeraka (Carum bulbocastanum)* with water twice a day for a month.

All the disorders of female genital tract included in the term *Yonivyapada* and vitiation of *Vata Dosha* is main causative factor of all the *Yonivyapada*, so *Jeeraka-dvaya* was selected because of its *Vatahara, Krimihara and Garbhashaya Vishodhana* properties.

**Table 3: Ayurvedic Properties and actions of Jeeraka**

Properties		Actions	
<i>Rasa</i>	<i>Katu, Tikta</i>	<i>Doshagnata</i>	<i>Vatahara, Kaphahara or Vata-Kaphahara,</i>
<i>Guna</i>	<i>Ruksha, Laghu</i>	<i>Karma</i>	<i>Deepana, Pachana, Jarana, Vrushya, Balya, Garbhashaya Vishodhana, Ruchya, Medhya, Sangrahi, Chakshushya, Hrudya</i>
<i>Veerya</i>	<i>Ushna</i>		
<i>Vipaka</i>	<i>Katu</i>	<i>Rogagnata</i>	<i>Krumihara, Shophahara, Shoolprashamana, Ajeernanashaka, Grahanirogahara, Adhmanahara, Atisarahara Gulmanashaka, Chhardinashaka, Jwaraghna</i>

**Table 4: Effect of treatment**

S. No.	Sign and Symptoms	Before Treatment	After Treatment
1.	Pain, discomfort and heaviness in lower abdomen	Present	Absent
2.	Abnormal purulent vaginal discharge	Present	Absent
3.	Painful intercourse	Present	Absent
4.	Burning Micturation	Present	Absent
5.	Acidity	Present	Mild
6.	Tenderness of pelvic region	Present	Absent
7.	Congested cervix (in per speculum examination)	Present	Absent
8.	Tenderness in bilateral fornix (in per vaginal examination)	Present	Mild tender
9.	Cervical motion tenderness (in per vaginal examination)	Present	Mild tender

10.	ESR	40 mm/hr	16 mm/hr
11.	USG for uterus and adnexa	Free fluid present in Pouch of Douglas	No free fluid seen

### Result

There was no pain, discomfort and heaviness in the lower abdomen. The complaint of purulent vaginal discharge also relieved. The patient had no longer pain during coitus. The value of increased ESR came under normal range. USG findings also revealed no more free fluid found in Pouch of Douglas. Patient also got relief in associated complaint like burning micturation and acidity.

### Discussion

Before starting any treatment, proper history taking plays very crucial role to find out the route cause of any disease. In present case patient presented with the chief complaint related to female genital tract but after proper history taking the associated complaint of *Amlapitta* found since 6 month. The patient was already stressful after taking lots of medications for both the conditions. So there was a need for less number of drugs affecting on both the complaints of *Paripluta Yonivyapada* or PID and *Amlapita*. *Jeeraka-dvaya* is one of the popular herbs used since ago for various such conditions as mentioned by Ayurveda. Based on *Deepana*, *Pachana*, *Jarana*, *Ruchya*, *Sangrahi*, *Ajeernanashaka*, *Grahanirogahara*, *Adhmanahara*, *Atisarahara*, *Gulmanashaka* and *Hrudya* properties of *Jeeraka-dvaya* it found on the *Mahasrotas* of body that is Gastro-intestinal tract (GIT) and alleviates *Agni Mandhyata*. So the drug found effective in relieving the root cause of *Amlapita* that is '*Aama*' *Jeeraka* (Cumin seeds) is an alkaline drug which regulates hyperacidity and stimulate enzyme secretions to relieve indigestion<sup>12</sup>. As per *Krumihara*, *Shophahara*, *Shoolprashamana* and *Garbhashaya Vishodhana* property of *Jeeraka-dvaya* it found effective in infective conditions of female reproductive tract. *Jeeraka* is also having *Sangrahi* property which helps in absorption of free fluid present in Pouch of Douglas. The oil content of *Jeeraka-dvaya* has effective larvicidal and antiseptic property and also works on antiseptic resistant microbes<sup>13</sup> that directly attack on immune system. It also contains anti-inflammatory property<sup>14</sup> that reduces the symptoms like pain, burning, discharge etc. So the drug is directly established as choice of drug in GIT associated Pelvic inflammatory disease. In this way *Jeeraka-dvaya* not only relieves the symptoms but also rectify the root cause of pathogenesis.

### Conclusion

This study concluded that Ayurveda regimen is found effective in Pelvic inflammatory disease. Ayurvedic drugs are safe and also economical. This is a single case study on single drug effect. Further studies need to be done with this treatment in similar kind of cases so the data can be statistically more significant.

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