



AYURVEDIC APPROACH TO THE PATHOPHYSIOLOGY AND MANAGEMENT OF PELVIC INFLAMMATORY DISEASE- A NARRATIVE REVIEW

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ABSTRACT

Pelvic Inflammatory Disease (PID) is a significant global health issue due to its increased morbidity and long-term consequences. It is mainly caused due to *Neisseria gonorrhoeae* and *Chlamydia trachomatis*

It involves infection and inflammation of the upper genital tract (endometrium, fallopian tubes, ovaries, pelvic peritoneum, and adjacent structures), primarily resulting from the ascending spread of pathogens from the lower genital tract. Preventing both initial and recurrent PID remains a crucial public health goal. The condition can have major reproductive implications; 20% of affected women are infertile, 40% experience chronic pelvic pain, and about 1% are at risk for ectopic pregnancy. Currently, there is no minimally invasive or scientifically proven method to definitively differentiate upper genital tract inflammation, making diagnosis more clinical. AIM: To study Pelvic Inflammatory Disease (PID) from an Ayurvedic perspective, which includes its treatment, prevention of relapse, and conservation of reproductive health. Material and Methods: Diagnosis of PID is based on centers for disease control and prevention 2015 PID guideline. Considering it as 'Anukta Vyadhi' (unexplained disorder), this review attempts to understand the disorder by deriving its *Vikaraprakriti* (nature of disease), *Adhishtanantarani* (structures and sites affected), and *Samutthanavishesha* (specific etiological factor) based on a detailed analysis of the clinical features and other findings regarding the disease available in various textbooks and articles in the light of related references in Ayurvedic classics. Discussion and Conclusion: Pelvic inflammatory disease can be interpreted through the Ayurvedic framework of *Nidana anchaka*. Based on symptomatology and pathogenesis, *Pittala Yonivyapad* may represent the acute stage, while *Paripluta Yonivyapad* corresponds to the chronic form of PID.

KEYWORDS : Pelvic Inflammatory Disease, *Nidana Panchaka*, *Pittala Yonivyapad*, *Paripluta Yonivyapad*, *Anukta Vyadhi*, Infertility.

INTRODUCTION

Women's health significantly contributes to the well-being of families and communities, affecting both economic productivity and societal development. Advocacy for women's health promotes gender equity, mental health, disease prevention, and empowerment. Healthy women serve as role models for children and future generations, helping to improve social and cultural norms, while investing in health reduces healthcare costs and advances human rights. Pelvic Inflammatory Disease (PID) encompasses a range of infections and inflammation of the upper genital tract, including the endometrium, fallopian tubes, ovaries, pelvic peritoneum, and surrounding visceral tissues. PID is commonly caused by sexually transmitted micro-organisms i.e., *Neisseria gonorrhoeae*, and *Chlamydia trachomatis*.^[1] Despite improved understanding of its etiology and pathogenesis, enhanced diagnostic options, and the availability of broad-spectrum antimicrobials, PID remains a significant public health concern, particularly in developing countries. Its annual incidence among sexually active women is estimated at 1–2%, with about 85% of cases occurring spontaneously in women of childbearing age and 15% resulting from gynecological interventions that promote the upward movement of pathogens.^[2] Two-thirds of cases occur in women younger than 25 years, and one-third in women older than 30 years.^[3] Diagnosis of PID is based on the Clinical Diagnostic Criteria developed in the CDC 2015 guidelines.^[4] PID is a major preventable cause of infertility, and early treatment is important for reproductive healthcare. The challenges of diagnosing and associated long-term reproductive damage necessitate that clinicians maintain a low threshold for clinical suspicion. Prevention remains an emerging public health challenge for both early and recurrent PID.

MATERIALS AND METHODS

The concept of this research was developed from classical Ayurvedic texts and modern research literature obtained through searches on Google Scholar, PubMed Central, Elsevier, ScienceDirect, DHARA, and the AYUSH portal. The collected context was systematically investigated and described to arrive at the correct interpretation.

DISCUSSION

Pelvic Inflammatory Diseases, as *Anukta Vyadhi*

Charak Samhita, outlines three types of systematic methodology—*Vikara Prakriti*, *Adhishtanantarani*, and *Samutthanavishesha*—which underpin such *Anukta Vyadhi*. The disease is caused by *Vikaraprakriti*, the first *Vatadi dosha*, one of three governing functional systems in the body that determine health and disease. This '*Adhishtanantarani*' refers to *Rasadi dhatu* (the tissues) and other organs or structures affected by the disease itself. '*Samutthanavishesha*' refers to the causes of disease associated with the pathological state of *dosha-dhatu dushti*.^[5]

Diseases of the female genital tract and reproductive organs are classified under *Yonivyapad*, as in Ayurveda, *Yoni* means vagina, cervix, uterus, and the entire female genital tract. For example, a *Dosha* in the situation of one of the included *Dosha* will also bear *Yoni roga*, thus will have the associated *Vatadi dosha - lakshana*. Deha is associated with *Yoni sthana* or the pelvic space, where symptoms start to localize.^[6] No *Yonivyapad* will occur without *Vata* support.

CLINICAL SIGNS

Cervical motion tenderness, uterine tenderness, and adnexal tenderness are present on per vaginal examination and suggest the presence of underlying peritoneal inflammation. Pain is caused by the stretching of the peritoneum by the

transit of the cervix that brings traction on the adnexal structures. From Ayurveda, pain is attributed to the vitiation of *Vata*; congestion, tenderness, and burning sensation are secondary to the aggravated *Pitta*. *Vata* and *Pitta* are mutually involved, making the condition more complex, and as the *Yoni* develops, it is a system upwards through *Trayaavarta Yoni*. It consists of the cervix, the uterus, and fallopian tubes.

SYMPTOMS

Lower backache and pelvic pain, painful intercourse, painful menstruation, heavy menstrual bleeding, burning sensation in the lower genital tract, mucopurulent cervical/vaginal discharge, fever.

Inflammatory disease affecting the lower back, pelvic pain, and dysmenorrhea Pelvic Inflammatory Disease pain is caused by inflammation, fibrosis, and adhesions. Chronic pelvic pain affects nearly one-third of patients and strongly predicts its recurrence. All the diseases of *Yoni* cannot occur without the involvement of *Vayu*.^[7] Therefore, from the Ayurvedic view, disturbance of *Apana Vayu* caused by *Vatakopa*, *Vegadharana*, or *Srotorodha* induces reversed movement causing pelvic pain, lower back pain, and abdominal discomfort. *Vegadharana*, or *Srotorodha* induces reversed movement causing pelvic pain, lower back pain, and abdominal discomfort.

Dyspareunia: It is a common sexual dysfunction, defined as genital pain occurring before, during, or after intercourse. In Ayurveda, it is described as a feature of *Paripluta Yonivyapad*^[8], caused by disturbance of *Vata* (pain) and *Pitta* (tenderness), with involvement of the *Artavavaha dhamani* originating from the uterus.^[9]

Heavy Menstrual Bleeding: It refers to regular cyclic menstruation with excessive blood loss (>80 ml) or prolonged duration (>7 days). Uterine congestion leads to hypertrophy of the endometrium and myometrium, resulting in uterine enlargement, while similar vascular disturbances involving the ovaries may cause cystic changes and frequent menstruation. In Ayurvedic terms, disturbance of *Rakta* is correlated with *Pradara*^[10], manifesting as excessive menstrual bleeding.

Burning Sensation in the Lower Genital Tract: It is commonly associated with urinary tract infections, which result from persistence of pathogenic organisms within the urogenital system, most often bacterial in origin. From an Ayurvedic perspective, disturbed *Pitta*, due to its hot nature, involves the vagina and bladder, producing burning sensation, suppuration, and fever.

Abnormal Cervical/Vaginal Discharge: Assessment of both vaginal and endocervical secretions is an essential component in the evaluation of patients with PID.^[11] It is a key feature of PID, often showing increased polymorphonuclear leukocytes due to bacterial infection. In Ayurveda, it is primarily linked to *Kapha* and *Rasa dhatu* disturbance, with aggravated *Vata* and *Pitta* producing mucopurulent discharge, and *Vata-Kapha* imbalance causing thick, mucoid discharge.

Fever: Fever in PID may arise due to circulating *Aama Rasa*, which impairs the function of *Agni* and triggers systemic inflammatory responses.

Table No.1: With above explanation, Vikaraprikriti and Adhistanantarani are compiled as-

Vikaraprakriti	
Primary Dosha	Vata (Apana Vata)
Secondary Dosha	Pitta & Kapha
Adhistanantarani	

Dhatu	Rasa
Updhatu	Artava
Agnimandya	Jatharagnimandhya, Rasadhathvagni
Strotas	Rasavaha and Artavaha
Strotodushti	Sanga and Vimargagamana

DIAGNOSTIC TESTING

Ultrasonography is beneficial for severe PID cases (those that do not respond to early therapy) in patients, with findings indicating the severity of the infection. Early imaging aids in timely diagnosis and treatment, which may help prevent potentially irreversible complications.

Samutthanavishesha (Specific etiological factor)

After identifying the involved *dosha* and *dhatu*, specific etiological factors responsible for their vitiation should be determined. Since the disease mainly affects *Vata-Pitta dosha* and *Rasa dhatu*, patients should be assessed for dietary and lifestyle factors, particularly those related to nourishing food.

CLINICAL EVALUATION

In Ayurveda, *Nidana Panchaka* forms the foundation of *Rogapariksha* (disease assessment) and includes five components: *Nidana* (etiological factors), *Purvarupa* (prodromal symptoms), *Rupa* (clinical features), *Upashaya* (relieving or aggravating factors), and *Samprapti* (pathogenesis).^[12]

Nidana (Etiological Factors):

Nidana refers to any factor capable of causing disease.^[13] In PID, probable etiological factors include *Mithya Ahara* and *Vihara* (improper diet and lifestyle), abnormal *Artava*, *Beeja Dosha*, and *Daiva* (destiny-related factors).^[14]

- Ahara (Dietary Factors):** Improper diet (*Ruksha*, *Sheeta-Ushna*, *Amla*, *Lavana*, *Kshara*, *Katu*, *Langhana*, *Abhojana*)
- Vihara (Lifestyle Factors):** *Vegasandharana* (suppression of natural urges), excessive *Vamana*, *Virechana*, *Shirovirechana*, overexertion, irregular *Vyayama* (exercise), *Divaswapna* (daytime sleep), trauma, repeated intrauterine procedures (D&C, D&E), and frequent use of vaginal washes.

Sexual History: use of *Apadravya*, abnormal posture, multiple sex partners, unhygienic sex.

Purvarupa (Prodromal Features):

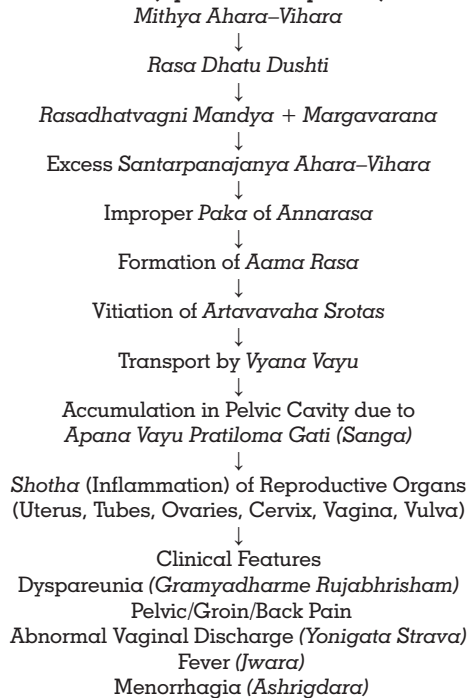
Purvarupa indicates the forthcoming disease.^[15] Early signs of PID may include yellowish vaginal discharge, *Kashtartava* (painful menstruation), mild pelvic pain, and burning sensation in the vaginal area.

Rupa (Clinical Features):

The clinical manifestations of PID with prominent clinical features^[16] include dyspareunia (*Gramyadharme Rujabhrisham*), abnormal vaginal discharge with pain, burning, and itching (*Yonigata Strava*), pelvic pain (*Yonishoola*), fever (*Jwara*), and occasionally menorrhagia (*Asrigdara*).

Upashaya (Therapeutic Trials)

Any measure that alleviates the patient's symptoms—including *Aushadha* (medications), *Ahara* (diet), or *Vihara* (lifestyle practices)—is termed *Upashaya*, while those that aggravate the condition are referred to as *Anupashaya*.^[17] In PID, probable *Upashaya* measures include *Vata-Pitta shamaka diet and lifestyle*, *local pelvic massage and fomentation* (*Abhyanga-Swedana* with *Ushna Aushadha*), and *maintenance of local hygiene*.

SAMPRAPTI^[18] of PID (Ayurvedic Perspective)**Yonivyapad Correlation****Resembles:**

- **Pittala Yonivyapad^[19]** Burning, fever, white/yellow discharge (acute infection)
- **Paripluta Yonivyapad**
- **Charaka^[20]**: Atipravriti → Fever, tenderness, bluish-yellow painful bleeding, pelvic pain
- **Sushruta**: Sanga → Predominant dyspareunia

Dosha Contribution

- **Vata Prakopa** → Pain, dyspareunia
- **Pitta Prakopa** → Burning, fever, tenderness, discharge

CHIKITSA**1. Nidana Parivarjana (Elimination of Causative Factors)**

- Avoid **Mithya Ahara-Vihara**
- Restriction of **Santarpanajanya Ahara**
- Avoid unhygienic sexual practices, excessive vaginal washes, and repeated intrauterine procedures

2. Aama Pachana & Deepana

(Initial stage of treatment)

- Use of **Deepana-Pachana Aushadha** to correct **Rasadhatvagni Mandya**.
- **Aampachana** with **Aampachak yog** (ativisha, musta, haritaki, shunthi) each 250mg = 1gm, 2 times.
- **Anupan-koshna jal**
- **Kala - Paschat bhakta**

3. Shodhana Chikitsa

- **Snehapana**- Panchatikta grut
- **Anupan-koshna jal**
- **Kala- Abhakta**
- **Sarvanga Abhyanga & Bashpa peti Sweda**- with **Tila taila**
- **Virechana^[21]**- with **Trivritta-awaleha** 30gms

Anupan-koshna jal

- **Basti-Basti Karma** should be given as **Yoga Basti**

follows –

1 **Anuvasana basti** with **Sacharadi Taila^[22]** then **Niruha Basti** with **Dashmooladi Kwath** next day in morning. It will help to pacifying **Dosha**.

4. Shaman Chikitsa**Table No. 2: Ayurvedic Formulations for PID Management.**

Formulation	Dose & Anupana	Therapeutic Properties
Pushyanuga Churna	10 g twice daily with Tandulodaka (rice-washed water) and honey	Vrana Ropana, Krimighna, Raktashodhaka, Pittaghna, Artava Janana, Shothaghna, Pachana, Vedanasthapana, Rasayana, Garbhashaya Shodhaka, Pradarahara, Balya, Deepana, Jwarahara
Chandraprabha Vati	2 tablets twice daily with lukewarm water	Balya, Vrushya, Sarvarogaprashamana, Tridosaghna
Kanchanara Guggulu	2 tablets twice daily with lukewarm water	Shothahara, Vrana Ropana
Triphala Guggulu	2 tablets twice daily with lukewarm water	Shothahara, Krimighna, Vrana Ropana
Kutaja Ghanavati	2 tablets twice daily	Atisaraghna, Krimighna, Pittashamana, Stambhaka

5. Sthanika Chikitsa**Table No. 3: Yonidhawan with Dashmoola kwatha and Panchvalkala kwatha.**

Formulation	Therapeutic Actions	Clinical Utility
Dashamoola Kwatha	Vata-Pitta Shamana, Vedana Sthapana, Yoni Shodhana, Vrana Ropana	Reduces pain and inflammation, promotes wound healing, and restores pelvic tissue health
Panchavalkala Kwatha	Kapha Shamana, Stambhaka, Kashaya Rasa, Shoshana, Kledahara, Kaphapittahara, Ropana	Reduces vaginal discharge, enhances local immunity, aids wound healing, and helps prevent recurrence, particularly in cervicitis

Table no. 4: Yoni Pichu.

Procedure	Timing & Administration	Instructions / Precautions
Yoni Pichu	Started after cessation of menses; retained for 3 hours or until urge to urinate	Patients advised sexual abstinence for 7 days; thereafter, use barrier contraception for 1 month

Table No. 5: Medicated Oils (Taila) used for Yoni Pichu.

Taila	Properties	Therapeutic Effects
Panchavalkaladi Taila	Contains Kashaya, Madhura, Tikta Rasa; Ruksha, Guru, Laghu Guna; Sheeta Virya; Katu Vipaka	Primarily pacifies Pitta, also balances Vata, strengthens tissues (Brimhana, Balya), reduces inflammation (Stambhana, Vishyandana), and supports local healing
Dashmoola Taila	Composed of Shothaghna, Jwaraghna, Shula Prashamana, Mutrala, Vrana Ropana, Vata Shamana	Alleviates pain, tenderness, and discharge, with antibacterial, antipyretic, spasmolytic, and uterine-stimulating actions

CONCLUSION

Pelvic Inflammatory Disease is an acute or chronic inflammatory condition affecting women of reproductive age and may lead to menstrual, reproductive, and sexual dysfunctions. In Ayurvedic terms, the acute stage of PID can be correlated with Pittala Yonivyapad, while the chronic stage resembles Paripluta Yonivyapad. The common pathogenic factors include vitiation of Apana Vayu with retrograde movement, accumulation of Aama, Rasa dhatu vitiation, and Artava dushti.

Vata dosha is the primary Dosha involved, with secondary involvement of Pitta and Kapha depending on disease severity and chronicity. Central to the pathogenesis are Amarasa formation, Rasadhatvagnimandya, and Artava impairment.

An Ayurvedic management approach emphasizing Vatanulomana, Aamapachana, Shothahara, and Yonishodhana, along with appropriate Ahara, Vihara, internal medications, and Panchakarma procedures such as Yoni Prakshalana and Yoni Pichu/Yoni Varti, appears effective in managing PID and preventing recurrence.

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