

A Literature Review on Shweta-Pradara (Leucorrhoea) and Drug Used In Shweta-Pradarain Ayurveda

Pooja Mehra¹, Dr. Pravesh Tomar²

1. PG Scholar, Prasuti Tantra EvumStree Roga Department, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar

2. Professor, Md (Ay.), H.O.D. Prasuti Tantra Evum Stree Roga Department, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar

Submitted: 15-07-2023

Accepted: 25-07-2023

ABSTRACT

Reproductive tract disease is one of the major issues which women deal in their lifecycle. Women are not aware about severity of their own health problems and are unwilling to seek medical help for the disease. Shweta-Pradara i.e. Leucorrhoea could be a side effect, which is found in numerous Yonivyapadas (Gynecological diseases) emerging due to Kapha-Vata Pradhan Tridosh (Atyananda, Karnini, Acharna, Aticharna, Shleshmala, Upapluta and Prasramsini Yonivyapada). The word Shweta-Pradara has not been depicted in Brihatrayee. For unusual white vaginal discharges the word Shweta-Pradara has depicted in Sharangdhar Samhita, Bhava Prakash, Yoga Ratnakar & Commentator Chakrapani has described Shweta Pradara term as 'Pandure Pradara Iti Shweta-Pradara'. Most common causes of leucorrhoea in cutting edge are cervicitis, vaginitis, cervical ectopy and bacterial vaginosis etc. Treatment of Shweta-Pradara is primarily based on the utilization of classical arrangements or drugs which are having dominancy of Kashaya Rasa and along with Tridosha Shamaka and Balya properties. The present study has been designed to validate the Nidana and Samprapti, and various formulations for Shweta-Pradara management. The study also reflect the importance of identification of different types of vaginal discharges their features and clinical management with the help of syndromic approach where physician rely only on the symptoms of abnormal vaginal discharges. This review aimed to synthesize and analyze the diagnostic accuracy and the likelihood of providing correct treatment of the syndromic approach Vaginal Discharge.

Key Words: Shweta-Pradara, Leucorrhoea, Abnormal Vaginal discharges, Pradara, Yonivyapada.

I. INTRODUCTION

Shweta-Pradara is made up of two words: Shweta and Pradara. Shweta implies white or the closest color to white. It is additionally utilized to represent the color of Sphatika'. Pradara implies abundance or expanded degree (which indicates over flow). Thus the term Shweta-Pradara implies overabundance white release per vagina¹.

Leucorrhoea a white release from the vagina may be physiological or pathological. Physiological overabundance of vaginal release may not require particular treatment. However pathological conditions involving infections like Candida, Trichomonas and Bacterial Vaginosis may require its proper management.

A lady amid her life span may have diverse sorts of discharges per vagina. A typical physiological discharge may be white or clear, non-offensive that changes with the menstrual cycle. Normal vaginal vagitation (lactobacilli) colonize the vaginal epithelium and may have a part in defense against infection².

In Ayurveda, leucorrhoea is known as Shweta-Pradara. Yonivyapadas which are caused by Kapha-Vata Pradhan Tridoshas are the most causative components of Shweta-Pradara. The word Shweta-Pradara has not been depicted in Brihatrayee i.e., Charaka Samhita, Sushruta Samhita, Astanga Hridaya and Astanga Sangraha. For white vaginal release, the word Shweta-Pradara has been portrayed in Sharangadhara Samhita, Bhava Prakasha, Yoga Ratnakara and in commentary on Charaka Samhita by Chakrapani.

The women who are over-anxious, introspective or endure from untrue fear of cancer etc. exaggerate this physiological release into something pathological. Pathological vaginal discharges are really indications of distinctive infections. Concurring to their color, consistency, and scent these releases may be Purulent, thick,

foul noticing, mucoid, blood mixed, pinkish, thin or watery vaginal release or leucorrhoea³.

Shweta-Pradara or Leucorrhoea is troublesome vaginal release generally happening in regenerative age and the earlier indication of pathological disease in women that is why it is important to rummage around for its management in early stage with legitimate medications & treatments specified by Acharyas.

AIMS AND OBJECTIVES

- To explore The Ayurvedic Literature of Shweta-Pradara from various articles, journals, pubmed, researchgate & textbooks.
- To explore the Modern review on abnormal vaginal discharges and Leucorrhoea in textbooks.
- To know the different management and different approaches to identify abnormal vaginal releases.
- To know the Ayurvedic management for Shweta-Pradara (Leucorrhoea).

II. MATERIAL AND METHODS

Shwetasrava or Yonisrava words have been utilized for White releases per vaginam. Shweta-Pradara is a condition characterized with white vaginal discharge not related with pain, burning sensation and distress; hence, it appears to be portrayal of leucorrhoea⁴.

Leucorrhoea is a side effect of pouring out of white releases per vaginam⁵.

“A running of white substance” microscopically the release contains mucus, epithelial flotsam and jetsam, organisms of various kinds and, in the second half of the cycle, a few leucocytes⁶.

Vagina serves as a way between the exterior of the body and the internal regenerative organs. Vaginal pH is acidic, which debilitates contaminations from happening. All ladies have a few vaginal releases. Typical release may show up clear, cloudy white, and/or yellowish when dry on clothing. May moreover contain white bits and at times may be thin and stringy changes in typical release can happen for numerous reasons, counting menstrual cycle, emotional stress, dietary status, pregnancy, utilization of medicines- birth control pills, and sexual excitement.

Any alteration in color, quantity and consistency of release may be a sign of vaginal contamination. Like releases accompanied by itching, rash or soreness, persistent release, burning on skin amid urination, white, clumpy release,

grey/white or yellow/green release with a foul odour⁷.

Types of Vaginal Discharges⁸:

1. Physiological discharge
2. Pathological discharge
3. Inflammatory discharge
4. Urinary & Faeculent discharges

1. Physiological Discharges- Slight release regularly seen at vulva and in vagina may be a blend of following:

- Vulvar secretions from Bartholin's sebaceous, sweat & apocrine glands.
- Vaginal discharge
- Cervical secretion
- Uterine secretion
- Fallopian tube secretion
- May also contain a contribution from peritoneal fluid.

Amount of vaginal release regularly expanded in following circumstances:

- At the time of ovulation
- Few days pre-menstrually
- During pregnancy
- During sexual excitement

2. Pathological discharge-

Leucorrhoea- means ‘a discharge of white matter’ is a feature of the normal vaginal releases that are increased in amount, although white or cream when fresh, dries to leave brownish yellow stains on clothes. Microscopically, the discharges contain mucus, epithelial fragments, various bacterias & some leucocytes in the second half of the cycle. Non-pathological leucorrhoea can be classified as cervical and vaginal. Any vaginal discharge that is directly purulent and contains pus cells should be considered a vaginal infection. Leucorrhoea never causes pruritus & is never offensive. It is more problematic pre-menstrually, midcyclically & during pregnancy and can lead to fears of cancer & of STDs.

The causes of leucorrhoea are as follows:

At Birth- newborn babies have mucus in their genital area for 1-10 days. This is because stimulation of the uterus and genitals by placental oestrogens.

Puberty - it is not uncommon for young girls during the few years before & after menarche.

Active or Passive Congestion of the Pelvic Organs Especially of the Cervix- causes a strong secretory activity of the glands. Prolonged ill

health, stress and neuroses, sedentary work and prolonged stay in hot climate may cause leucorrhoea.

Increase in Glandular Components of the Cervix- in cases of cervical erosion or ectopy, leading to a copious & clear discharge.

Vaginal Adenosis- causes excessive discharge.

Oestrogen-progestogen Oral Contraceptives Pill- combined OCPs cause vaginal discharge, usually caused by the development of an ectopy on the cervix.

Regular Douching- clears the natural defenses against lactobacilli and changes the pH, promoting more discharge from the cervix, especially if strong antiseptic solutions are used also predisposes to infection.

3. Inflammatory Discharge- mucopurulent or purulent discharge from disease: varying from cream to yellow/green. Discharge is often offensive and its microscopic characteristic is the presence of pus cells.

The most common diseases causing discharges are:

- **Vulvovaginitis:** caused by infection with the gonococcus, *Trichomonas vaginalis*, *Candida albicans* or bacterial vaginosis.
- **Cervicitis** gonococcal, Chlamydial, anaerobic or puerperal; secondary infection of an erosion
- Secondary infection of wounds, abrasion, burns, chemical injuries and neoplasms, sited in any part of the genital tract.
- **Bacterial vaginosis-** called as nonspecific vaginitis or *Gardnella vaginitis*. It is a change in normal vaginal flora that results in loss of hydrogen peroxide-producing lactobacilli and an overgrowth of most anaerobic bacteria. Lactobacilli are usually absent. Women with BV are at risk for pelvic inflammatory disease (PID). Fishy vaginal odour and vaginal discharges are grey & thinly coat the vaginal walls.

pH of these secretions is higher than 4.5 (usually 4.7 to 5.7).

- **Trichomonal Vaginitis:** infection caused by a flagellated parasite. *T. vaginitis* is associated with a profuse, purulent, foul smelling vaginal discharge that may be greenish yellow in colour. A patchy vaginal erythema and macular vaginitis ("strawberry" cervix) may be seen during examination.
- **Vulvovaginal Candidiasis (Moniliasis):** Vaginal yeast infection is an RTI, not an STI. Caused by gram-positive fungus *Candida albicans*. Candidiasis occurs when the

environment in the vagina changes. This can occur after taking broad-spectrum antibiotics, oral contraceptives or other steroids & in immunological diseases such as diabetes, HIV infection. Often candida causes intense vulval and vaginal itching with profuse curdy discharge. Inflammation of the vulva, especially the labia minora and introitus, with excoriation may be seen during examination. The discharge is thick, white and "cottage cheese" appearance. Vulvar candidiasis can produce erythema and oedema.

- **Inflammatory vaginitis:** Desquamative inflammatory vaginitis is a medical condition caused by diffuse exudative vaginitis, exfoliation of epithelial cell, and a large purulent vaginal discharge. Women with this disease experience purulent vaginal discharge, vulvovaginal burning or irritation, and dyspareunia.
 - **Chronic cervicitis:** Leucorrhoea may be the main symptom in chronic cervicitis. Although it may not look like cervicitis, this discharge may also cause vulvar irritation. The discharge may be purulent and variable in colour, or it may present as thick, tenacious, turbid mucus.
- 4. Urinary & Faeculent discharges:** the causes of urinary incontinence, a condition which can be confused with a vaginal discharge.

Syndromic Approach⁹: Because of the lack of laboratory tests in many areas and the possibility of mistakes when doctors rely solely on the clinical methods, syndromic management is often the best approach in low-resource settings.

The diagnosis is based on the identification of syndromes, which are combinations of the symptoms reported by the patient reports and those seen by physicians. Recommended treatments can be used for any condition that may be causing symptoms. However, syndromic management cannot resolve the common problem of **asymptomatic infections**. The syndromic approaches, has been recommended by World Health Organisation (WHO) for STI patients since 1990, consists of four elements:

- 1) **Syndromic classification:** classify them according to the appearance of the disease produced by the distribution of large organisms.
- 2) **Use of algorithms:** use the workbook to guide the management of syndrome.

- 3) Treatment and counseling: often use more than one type of treatment.
- 4) Treatment of partners: promoting treatment of partners.

The importance of reproductive tract infections (RTIs) in causing disease and chronic disease has been recognized by the WHO, which has recommended the syndromic approach to RTIs at the community level. In general, many different diseases have been found to be present with RTIs; especially in developing countries, have no place to check the truth; therefore, patients do not benefit from timely treatment to prevent sequelae.

The management of patient with vaginal discharge depends on the availability of a speculum or laboratory facilities. If a women complaint of vaginal discharge to a health facility where even a speculum is not available, she & her partner are treated empirically for gonorrhoea, Chlamydia, candidiasis, trichomoniasis and bacterial vaginosis if her partner has a genital ulcer or discharge.

If speculum examination is feasible, treat according to nature of discharge:

- Mucopus- treat for gonorrhoea & Chlamydia
- Profuse discharge- treat for trichomoniasis and bacterial vaginosis
- Lumpy discharge- treats for candidiasis.

If the partner has a lesion, couples are also treated for gonorrhoea and Chlamydia. If a microscope is available, a wet mount examination is carried out to look for trichomoniasis, yeast cells and clue cells, & treatment given accordingly. If the problem persists after this initial treatment, refer the patient to a higher care centre.

The syndromic treatment for vaginal discharge will be in all cases - treat for vaginitis (trichomoniasis and BV plus candidiasis). In some cases- if the risk assessment is positive or discharge from the cervix is detected, give treatment for cervicitis (gonorrhoea & chlamydial infection).

Classification by Syndromes¹⁰: In this approach, STIs are classified according to symptoms. Each condition consists of combination of signs and symptoms that occur during testing. The four main syndromes are:

- Urethral discharge: male
- Lower abdominal pain: female
- Vaginal discharge: female
- Genital ulcer: male or female.

Syndromic management provides a standardized evidence-based approach that uses clinical management systems and schedule that can be consistently used in clinical settings so that on-site clinicians in resource-poor settings may deliver appropriate and effective STI treatment. The treatment is based on the identification of common of symptoms and signs (syndromes), risk assessment, and risk scoring.^{11,12}

The vaginal discharge flowchart leads to three treatment outcomes:

- (i) no medical treatment
- (ii) Treatment for only vaginal infections caused by TV, BV and/or Candida spp.
- (iii) Treatment for vaginal and cervical infections caused by NG and/or CT. In the majority cases, abnormal vaginal discharge is highly indicative of a vaginal infection, thus all women presenting with vaginal discharge receive treatment for TV, BV and Candida spp.¹³

Advantages and Limitations of Syndromic Management-

- Emergency treatment: Clients receive diagnosis and treatment in a one visit.
- Positive Results: Clients receive treatment for infectious diseases. Using a workbook with treatment recommendations will reduce the likelihood of poor treatment.. This approach helps prevent misdiagnoses in a variety of clinical settings. where clinical diagnosis is common.
- Ease of use: It is easy to teach and learn, so it can be used by physicians and facilities of all levels. Requires good training, but not special knowledge about RTIs.
- Low costs: Cost savings based on unused expensive inspection.

III. LIMITATIONS AND CONCERNS:

Limitations in Diagnosing Vaginal Discharge: Vaginal discharge is a unique challenge because it may not be associated with STIs. Women who do not have STIs but STI affecting genital area will be advised to have their partner treated; thus can lead to relationship problems, including violence.

Treatable: Clients are treated for variety of infections, although some of whom have only one disease or no disease at all. This costs too much unnecessary drug use, waste of drugs that could be used to treat other clients, and the ability of

microbes to develop drug resistance. Not effective for asymptomatic disease: This approach is not applicable to patients who have the disease but do not show any signs or symptoms¹⁴.

It is a review article. For the present review detailed literary study was done described in Ayurvedic & modern text books briefly reviewed and research articles were also analyzed and studied.

While searching for historical background of Shweta-Pradara glimpses can be obtained from different periods of history as discussed below.

Vedic period¹⁵- Prevedic and Vedic period has no specific evidence about "Shweta Pradara".

Charaka Samhita¹⁶-Acharaya Charaka does not say that Shweta-Pradara is a specific disease. However "Pandura Asrigdara Chikitsa" is specially mentioned.

Sushruta Samhita¹⁷-describes the Yonivyapads and their Chikitsa, but does not specifically mention Shweta-Pradara and Chikitsa. The Physiological secretions that women secrete during sexual activity, are termed as Shukra-Dhatu in women.

Astanga Hridaya and Ashtanga Samgraha-Acharya Vagbhata described 20 different aspects of Yonivyapada with their remedies¹⁸. Acharya Vagbhata describes Pandura Asrigdara¹⁹ and Shukra Dhatu which is incapable for reproduction described in Uttarasthana.

Bhela Samhita and Harita Samhita- There is no depiction of Shweta-Pradara, but the Yoni Pravaha²⁰ treatment is described in Harita Samhita may be related to the cure of one form of Shweta-Pradara.

Kashyapa Samhita-Acharya Kashyapa speaks about 'Parishruta Jataharini'²¹ the discharge from the genitalia that can consider under Shweta-Pradara.

Sharangadhara Samhita-Acharya Sharangadhara talks about the cure of "Pandura Asrigdara"²².

Bhavaprakasha-Acharya Bhavamishra uses the term Shweta-Pradara while describing the 'Pandura Asrigdara' treatment²³.

Vrinda Madhava-Shweta-Pradara word has been firstly mentioned in Vrinda Madhava. In the context of the recipe described to alleviate Shweta-Pradara²⁴.

Chakrapani Datta-Commentator Chakrapani defines the term Shweta-Pradara as 'Pandure Pradara Iti Shweta Pradara'.²⁵

Gadanigraha-Acharya Shodhaladefines Shweta-Pradara disease²⁶.

Yogaratanakara-Author of Yogaratanakara has also mentions 20 kinds of Yoni Rogas. Also, Shweta-Pradara and its term and Chikitsa are used in Somaroga Chikitsa Adhayaya²⁷.

Vangasen-In Vangasen, Shweta Pradara and its treatment is described in verse of Yoni Roga²⁸.

Rasaratnasammuchchaya-Yonirogais mentioned in the Rasaratnasammuchchaya, including Shweta-Pradara and its Chikitsa²⁹.

Brihat Yoga Tarangini-includes Yoni Rogas, Shweta-Pradara and Chikitsa mentioned In Brihat Yoga Tarangini³⁰.

Vasava Rajiyam-Contains explanation of Pradara, Yonivyapada, Somaroga and their remedies³¹.

ETIOPATHOGENESIS-According to Ayurveda Shweta-Pradara is caused by the vitiation of Kapha Vata Pradhan Tridosha in the body. Shweta-Strava is a symptom, not a disease; therefore the pathogenesis of main disease is also the pathogenesis of Shweta-Pradara.

Regarding the Nidana of Shweta-Pradara the destruction of Kapha takes place by Abhishyandi, Guru, Atisnigdha & Mithya-Ahara Dravyas, destruction of Vata by Rukshadi Dravyas and destruction of Pitta by Ushnadi Dravyas along with Manasika Hetus like Chinta, Shoka etc. Disrupted Doshas causes Manda Jatharagni & eventually creates Ama and fills Amashaya. This Ama harms Rasa Dhatu. This corrupted Rasa Dhatu circulates in the body through Rasavaha Srotas, which leads to Rasavaha Srotas dushti. Artava is Updhatu of Rasa.³² When the main Rasa Dhatu is destroyed, its byproducts i.e the Updhatu of Rasa, Artava is destroyed resulting in Artavaha Srotas dushti. Also Kapha is aggravated by its vitiating factors which vitiate Rasadhatu by things like excessive indulgence in sex, bad lifestyle & diet during Ritukala along with non-cleanliness produces, white and painless vaginal discharges due to dominance of its liquid property³³. Thus, Dushita Yoni causes Yonigata-Srava Dushti and Yonitah Drava Nishyandana due to Doshas influenced by Sthanika etiological factors eventually leads to Shweta-Pradara.

PROBABLE SAMPRAPTI OF SHWETPRADARA

DIFFERENT CORRELATIONS OF SHWETA-PRADARA WITH DISEASES IN AYURVEDA
In Ayurvedic texts, Shweta-Pradara is a symptom of various ailments:

Kaphaja Yoni-Vyapada³⁴- Kapha, aggravated by excessive use of Abhishyandi matters reaches, Yoni and causes Yoni Picchilata, Kandu Yukta, Atishitala, and Alpedana Yukta Yonisrava.

Sannipatika Yonivyapada³⁴- Charaka says there are Daha Shoola Yukta Shweta and Picchila Srava from Yoni. Aggravated Kapha can produce mucoid vaginal discharge.

Karnini Yonivyapad³⁵- Acharya Sushruta says that Kapha and Raktacreated Karnini in Yoni which will cause the vagina to discharge with blood or mucus (Picchilata Kandu Yukta Srava).

Upapluta Yonivyapad³⁶- Charaka says there is Shweta Yoni Srava which is Pandu in Varna and along with Todais due to Vata and Kapha. This Shweta Srava is unique to Garbhini Stree. However, but Vagbhata explains that it can happen to any woman.

Aticharana Yonivyapad^{36,37}- Charaka and Vagbhata describe edema, pain and odour in this area & loss of sensation. Sushruta mentioned about the features like Kandu and Picchila etc. Lakshanas of Kapha.

Acharana Yonivyapad³⁷- According to Charaka, Sushruta Vagbhata and other authors this condition is characterized by itching. Sushruta explains the weakness and irritation of Kapha along with itching and development of Krimis which may be due to infective disorders of reproductive system.

Raktagulma³⁸- In the special treatment of Raktagulma, there is foul smelling vaginal discharge as a symptom.

Parisruta Jataharini²¹- Emaciated woman, having constant and excessive vaginal discharges suffering from Parisruta Jataharini. This disease originates from Jataharini. Because, weight loss and excessive vaginal discharge the only symptoms. Idiopathic fatigue belongs to leucorrhoea.

Guhyaroga includes Phiranga, Upadamsha, Puyameha and other diseases in which patient having the purulent discharge from the genital area³⁹.

SAMPRAPTI GHATAK-

***Dosha**- Kapha-Vata Pradhana Tridoshaja

***Dushya**- Rasa, Rakta, Mamsa

***Srotas**- Rasavaha, Raktavaha, Artavavaha

***Srotodusti Prakara**- Atipravritti

***Agni**- Jatharagnimandya and Rasadhatvagnimandya

***Adhithana**- Yoni, Garbhaya

***Sthana Samshraya**- Yonimarga

***Roga marga**- Abhyantara

***Pratyatmaka lakshana**- Yonitah Atisrava, Pandurasrava, Yonikandu etc.

Prognosis- Usually Shweta-Pradara is Sadhya Vyadhi, but can be considered as Kashta Sadhya Vyadhias Nidana Sevana is there again.

Complications - Shweta-Pradara is a main symptom of many Stree Roga. If not treated properly can lead to Upadrasavas like Kandu, Garbhashaya Mukha Shophya (Hypertrophy of cervix), Garbhashaya Mukhashrita Vrana (Cervical Erosion), Vandhyatva (Infertility), Garbhashaya Greeva-Ashrita Arbuda & carcinoma of cervix.

Treatment- According to various Samhitas, various treatments are described in Ayurvedato control Shweta-Pradara.

Treatment consists of two headings

1. General treatment (line of treatment)
2. Specific treatment

General treatment

- a. Treatment prescribed for Yonisrava under Yonivyapada chapter.
- b. Symptomatic treatment of Yonisrava and Yonipachhilya.
- c. Nidana Parivarjana
- d. Kaphanashaka treatment
- e. Uses of Drugs having Katu and Kashaya Rasa
- f. Balya Chikitsa (use of Rasayana drugs)

ORAL MEDICATIONS-

Pushyanug Churna, Pippalyadi Churna⁴⁰, Rohitak Moola Churna⁴¹, Amalaki Kalka & Churna with sugar and Madhu, Nagkesar Churna⁴², Darvyadi decoction Nyagrodh Gana decoction, powder root of Chakramard⁴³, Bhumyamalaki Churna⁴⁴.

Kukkutand Twak Bhasma⁴⁵, combination of Praval (Coral) Bhasma, Trivang bhasma⁴³ with rice water. Pradarantak Lauha, Pradarantak Rasa, Pradararipu Rasa, Pradarari Rasa, Pradarari Lauha⁴⁶ Ashokarishta, Patrangasava, Lodhrasawa & Nyagrodhadi Ghrita⁴⁷

FOR EXTERNAL OR LOCAL USE-

Yoni Varti- Pippalyadi Varti, Arkadi Varti⁴⁸.

Yoni Prakshalana- Trifala Kwath, Kariradi Kwath⁴⁹, Panchvalkal Kwath⁵⁰.

Yoni Pichu- Udumbaradi Taila, Dhatkyadi Taila⁵¹.

Yoni Dhupana- Dhupa of Sarala, Guggulu & Yava with Ghrita⁵².

Yoni Purana- Use of a bolus of powdered bark of Plaksha mixed with honey after oleating vaginal canal⁵³.

Preventive Measures⁵⁴ -

- Stay healthy by eating well, get enough sleep & drink enough fluids.
- Use condoms & other barrier methods during sexual intercourse.
- Keep the genital area clean and dry to prevent fungal infections.
- Wear cotton undergarments.
- Wipe from front to back after urinating or defecating.
- Do not use deodorant, pads or tampons.
- Don't use petroleum jelly or other oils for lubricants.
- Don't douche.
- Do not have sex until treatment is complete and symptoms disappear.
- Don't scratch the infected or swollen areas; it can cause further irritation & pain.
- During an infection, use pads rather than tampons if menstruation occurs.

IV. RESULT & DISCUSSION-

Shweta-Pradara mentioned in Ayurvedic literature is similar to leucorrhoea mentioned in modern Gynaecology.

In Brihatrayee, Shweta-Pradara is not depicted as a separate disease. Although Shleshmala Yonivyapada or Sannipatik Yonivyapada, Pandura Asrigdara having the features like Shwetpradara (Leucorrhoea). Therefore Yonivyapadas which are caused by Kapha or Kapha-Vata Pradhan Tridosha are the main causal factor of Shweta-Pradara.

Kapha Dosha is the main cause of the disease. When used in a combination each drug has the same disease preventive features. Vaginal discharge is a neglected problem among women especially in country like India. Women do not know much about hygiene. Although Shweta-Pradara (leucorrhoea) is a symptom, it can cause some serious problems if ignored. Women may experience genital infection, infertility, irregular menstrual cycle, low immunity, cervical carcinomas etc. due to negligence of leucorrhoea.

Ayurveda works best in this regard because following Ayurveda principles such as Deepana Pachana, Anuloman Chikitsa, Yoni Prakshalana Shamana Chikitsa, Rasayana and Balya Aushadhi is beneficial for women suffering from this disease. Management depends on causative factors, Prakriti of the patient, involvement of Doshas etc.

V. CONCLUSION-

Shweta-Pradara can be confused with leucorrhoea as different symptoms in everyday medicine. Shweta-Pradara is an independent disease not a symptom of so many diseases & can be considered as Kapha Pradhan Tridosha Ja Vyadhi. Dravyas mentioned in Samhitas for different Yonivyapadas (Gynaecological diseases) and for Yonistrava are much effective in Shweta-Pradara (Leucorrhoea).

Ayurveda prescribes topical (Yoniprakshalana, Yonipurana, Yonivarti, Yonidhupana and Yonipichu) and internal medications (Churna, paste, decoctions) for the treatment of Shweta-Pradara. These preparations contain the properties of Kashaya Rasa, Stambhana, Rsayana, Balya Tridosha-Hara and give good results in Shweta-Pradara (Leucorrhoea).

REFERENCES

- [1]. <http://www.researchgate.net/publication/352366748> Understanding Shweta-Pradara as a separate disease entity.
- [2]. Jeffcoate's principles of Gynaecology 9th edition chapter 44 pg no 761.
- [3]. Tiwari P.V., Ayurvediya Prasuti tantra & Stri Roga, IInd Part, 2nd edition, Varanasi, Chaukhambha Orientalia, 2000, reprint 2005, p. 256-268.
- [4]. Tiwari P.V., Ayurvediya Prasuti tantra & Stri Roga, IInd Part, 2nd edition, Varanasi, Chaukhambha Orientalia, 2000, reprint 2005, p. 266.
- [5]. Majhi Arup Kumar from clinics to care with illustrations bedside clinics in gynecology, 1st edition, Jaypee brothers, revised reprint: 2020, p. 45 chapter 2.
- [6]. Jeffcoate's principles of Gynaecology 7th edition p. 657.
- [7]. Vaginal Discharge, [homepage on the Internet], Cited on 10 Feb 2014, Available from: www.mckinley.illinois.edu/handouts/vaginal_discharge.html.
- [8]. Jeffcoate's principles of Gynaecology 7th edition revised & updated by Pratap kumar, Narendra malhotra 2008, Jaypee Brothers Medical publishers (P) Ltd. Chapter 43.p.no.670.
- [9]. Jeffcoate's principles of Gynaecology 7th edition revised & updated by Pratap kumar, Narendra malhotra 2008, Jaypee Brothers Medical publishers (P) Ltd. Chapter 42.p.no.661.

- [10]. Jeffcoate's principles of Gynaecology 7th edition revised & updated by Pratap kumar , Narendra malhotra 2008, Jypee Brothers Medical publishers (P) Ltd. Chapter 43.p.no.671-672.
- [11]. Mayaud P, Mabey D. Approaches to the control of sexually transmitted infections in developing countries: old problems and modern challenges. Sex Transm Infect. 2004; 80(3):174–82. PMID: 15169997; PubMed Central PMCID: PMC1744836.
- [12]. Pepin J, Deslandes S, Khonde N, Kintin DF, Diakite S, Sylla M, et al. Low prevalence of cervical infections in women with vaginal discharge in west Africa: implications for syndromic management. Sex Transm Infect. 2004; 80(3):230–5. PMID: 15170011; PubMed Central PMCID: PMC1744831.
- [13]. Organization WH. Sexually transmitted and other reproductive tract infections. A guide to essential practice. 2005.
- [14]. Jeffcoate's principles of Gynaecology 7th edition revised & updated by Pratap kumar , Narendra malhotra 2008, Jypee Brothers Medical publishers (P) Ltd. Chapter 43.p.no.673-674.
- [15]. The Hymns of the Rig- veda in the samhita and pada Texts Reprinted from the edition princeps by F. Max Mullar, with the two texts on parallets pages in two volumes,Chaukhamba Sanskrita Samsthan , Edition: 4th 1999, Charu Printer Varanasi.10/97/13
- [16]. Agnivesha , Charaka Samhita, redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta,edited by Vaidya Yadavji Trikamji Acharya,4th edition 2009, Published by Chaukhamba Surabharati Prakashana, Varanasi, uttarPradesh. Cha. Chi. 30/116 Pg. no.639
- [17]. Sushruta, Sushruta samhita redacted by Nagarjuna,with commentaries Nibandha Sangraha of dalhana and Nyayachandrika of Gayadasa , vaidya yadavji Trikamji Acharya, Narayan Rama Acharya, Kavyatirtha ,Reprint edition 2008, Chaukhamba vidyabhavan, Varanasi, Uttar Pradesh. Su. Ut. Chapter-38, Pg. no.668.
- [18]. Vagbhatacharya, Ashtanga Hridaya with commentaries sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri , Edited by pandit Bhishakacharya , Hari Shastri Paradrakra ,Akola ,8th edition 1997, Chaukhamba Surbharati Prakashan ,Varanasi,uttar Pradesh. A H.Ut. 33 and 34 Pg. no. 895
- [19]. Vagbhatacharya , Astanga sangraha with Hindi Vyakhya by Kaviraj Tridev Gupta , Reprint Edition ,1993 Krishnadas Academy ,Varanasi , Uttar Pradesh. A. S. Ut 39/73.
- [20]. Harita, Harita samhita – with Hari Hindi commentary ,edited in hindi by HariPrasad Tripathi , 1st ed. Varanasi , Chaukhamba Krishadas Academy 2005 H.S. Streeroga Pg. no. 334.
- [21]. Vrddhajivaka , Kasyapa samhita or vriddhajivakiya tantra preached by maharshi Marica Kasyapa, reacted by Vatsya , edited translated and commentary by prof. P.V Tewari , Published by Choukhamba vishwabharati , reprint year 2002. Ka. S Revatikalpadhyaya Pg. no.187
- [22]. Sharangadhara , Sharangadhara samhita by sharangadhara , translated in English by prof. K. R. Srikantha Murthy, Publisher Chaukhamba orientalia , reprint edition 2009 Chaukhamba orientalia , Varanasi, Sha. S. Pra. Khanda.7/174-181 Pg. no.4
- [23]. Bhavamishra , Bhavaprakasha with vidyotini Hindi Tika by Bhishakratna Shri Bramhashankara Shastri and shri Roopalal Vaishya,8th edition, 1997, Chaukhamba Sanskrit Bhavan , Varanasi , Uttar Pradesh, Bha. Pra. Chi. 70/47-48 Pg. no.774
- [24]. Shrivijayarakshita and Shrikanthadatta (2009). Shri Madhavakar, Madhava Nidanam with the Vidyotini Hindi Commentery. Varanasi: Charu printer p. 417.
- [25]. Shastri, P. Agnivesha, Charaka Samhita, Dridhbala, Ayurveda-Dipika commentery of Charakapanidutta with Vidyotini Hindi Commentery. Varanasi: Chaukhamba Bharti Academy. Chikitsa Sthana 30/116 p. 768.
- [26]. Sodhala, Gadanigraha of Sri Vaidya Shodhala , with the Vidyotini Hindi commentary , by Sri Indradeva Tripathi , edited by Sri Ganga Sahaya Pandeya, publisher Chaukhamba Sanskrit Samsthana, 3rd edition 2005

- ChaukambhaOrientalia , Varanasi. Ga.Ni. Pradararogadhikara Pg. no.443
- [27]. Anonymous; Yogaratnakara, with Vidyotini Hindi commentary by Vaidya Lakshmiapati Shasstri, 7 th edition ,2009 , Chaukambha Prakashana, Varanasi , uttarpradesh. Y.R. Uttarardha Somarogachikitsadhikara Pg. no. 402
- [28]. Sri Saligrama Vaishy , Vangasena with Hindi commentary by Kavivara Sri Saligrama Vaishy, edited by Sri Vaidya Shankarlalaji Jaina , puublishers and printers – Khemraja Shrikrishnadass , edition December 2003 Shri Venkateshwar press, Mumbai. Yonivyapadchikiitsa Pg. no. 828
- [29]. Sri Vagbhattacharya , Rasaratna samuchchaya , edited with the Suratnojjvala Hindi commentary and notes, introduction , indices, appendices etc., By Kaviiraj Sri Ambikadatta Sastri, Chaukhamba Sanskrita Series officec, 6th edition ,1978, Chaukambha Amarabharti Prakshan Varanasi-1, R.R.S. Yonivyapadchikitsa Pg. no. 467-468.
- [30]. Trimallabhata Virachita, Bruhat yogataragini, Hanumanta Padhye Sashti Sashodhitama cha Hari Narayana Aapte Punyakhayapattne , Aanandasharma Mudranalaye , Iayasaksha Mudrayitva, Trishtabda, 1914 .B.Y.T. 34TH Taranga, Pg. no. 897.
- [31]. Vasaraja, Vasavarajiyama, Bhishta Vidheya Shree Govardhana Changani, Gorakshan Press, Nagpur city, 1987, 16th chapter Pg. no. 245-247.
- [32]. Agnivesha, Charaka Samhita, redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, 4th edition 2009, Published by Chaukhamba Surabharati Prakashana, Varanasi, uttarPradesh. Cha. Chi. 15/17, Pg. no. 514.
- [33]. Premvati Tewari, Ayurvediya Prasutitantra Evam striroga, Part -2, 2nd Edition 2000, Chaukhamba Orientalia, Pg. no. 267
- [34]. Agnivesha, Charaka samhita, By Brahmanand Tripathi , 7th edition 2000, by Chaukambha Surabharati Prakashan, Vol. 2 , Varanasi. Pp-1450, P. 1011
- [35]. Sushruta samhita, 6th edition 1997, Chaukhamba Orientalia, Varanasi, Pp-824, P. no. 669 .
- [36]. Achaya Charaka, Charak Samhita (Uttarardha), Hindi Translation by Pandit Kashinath Nath Shastri and Dr Gorakh Nath Chaturvedi, Varanasi, Chaukhamba Sanskrit Series
- [37]. Vagbhatacharya, Ashtanga Hridaya with commentaries sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri , Edited by pandit Bhishtacharya , Hari Shastri Paradrakra , Akola , 8th edition 1997, Chaukhamba Surbharati Prakashan , Varanasi, uttar Pradesh. A H. Ut. 33 and 34 Pg. no. 895
- [38]. Dr. Nirmala G. Joshi, Ayurvedic concepts in Gynaecology, Chaukhamba Sanskrit Partishthan Delhi, Chapter-9, Pg. no. 116
- [39]. <http://www.researchgate.net/publication/352366748> Understanding Shwetapradara as a separate disease entity.
- [40]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri, edited by Dr. Gangasahaya Pandeya, foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhamba Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha. Chi. 30/90-95, Pp.-854.
- [41]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri, edited by Dr. Gangasahaya Pandeya, foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhamba Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha. Chi. 30//116, Pp.-858
- [42]. Acharya Bhav Mishra, Bhav Prakash Nighantu, Uttarkhanda, Hindi Commentary by Shree Brahma Shankar Mishra, 4th edition, Varanasi, Chaukhamba Vishwabharati, 1988. p. 764.
- [43]. Yoga Ratnakar: Hindi Commentary by Acharya Laxmipati Shastri, Published by chaukhamba Sanskrita Series Office, Varanasi. 2nd Edition, 1973 p. 246.

- [44]. Sri Govindacharya, Bhaisajya Ratnavali with Vidyotini Hindi commentary by Sri Kaviraja Ambikadatta Shastri edited by Acharya Rajeshwaradatta Shastri, 17th edition, Varanasi, Chaukhambha Publications, 2004 p. 853-854.
- [45]. C.B.Jha, Ayurvediya Rasa Shasta, 2nd edition, Varanasi, Chaukhamba Surabharati, 1998 p. 446.
- [46]. Sri Govindacharya, Bhaisajya Ratnavali with Vidyotini Hindi commentary by Sri Kaviraja Ambikadatta Shastri edited by Acharya Rajeshwaradatta Shastri, 17th edition, Varanasi, Chaukhambha Publications, 2004, p. 79-90.
- [47]. Sri Govindacharya, Bhaisajya Ratnavali with Vidyotini Hindi commentary by Sri Kaviraja Ambikadatta Shastri edited by Acharya Rajeshwaradatta Shastri, 17th edition Varanasi, Chaukhambha Publications, 2004 p. 1036,1039.
- [48]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri,edited by Dr. Gangasahaya Pandeya,foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhambha Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha.Chi.30/72 ,Pp.-851.
- [49]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri,edited by Dr. Gangasahaya Pandeya,foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhambha Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha.Chi.30/82,84 ,Pp.-852.
- [50]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri,edited by Dr. Gangasahaya Pandeya,foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhambha Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha.Chi.30/62 ,Pp.-850
- [51]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri,edited by Dr. Gangasahaya Pandeya,foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhambha Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha.Chi.30/73-81 ,Pp.-851-852.
- [52]. Agnivesha , Charaka Samhita , redacted by Charaka and Dridhabala with Ayurveda Dipika commentary by Chakrapanidatta and with vidyotini hindi commentary by Pt. kasinatha Sastri,edited by Dr. Gangasahaya Pandeya,foreword by Vaidya Yadavji Trikamji Acharya, introduction by Acharya Priyavata Sharma Part I, Published by Chaukhambha Bharti Academy, Reprint 2007 , Varanasi, UttarPradesh, Cha.Chi.30/118 ,Pp.-858
- [53]. Tiwari P.V., Ayurvediya Prasuti tantra & Stri Roga, IInd Part, 2nd edition, Varanasi, Chaukhambha Oriantalia, 2000, reprint 2005, p. 266-268.
- [54]. Vaginal Discharge,[homepage on the Internet], Cited on 10 Feb 2014, Available from:
www.mckinley.illinois.edu/handouts/vaginal_discharge.html.