

## **P-GU-009 VAGINITIS (VAGINAL DISCHARGE SYNDROME)**

### **DEFINITION & EPIDEMIOLOGY**

- Vaginitis (inflammation of the vagina) is the most commonly encountered gynecologic condition. Discharge flows from the vagina daily as the body's way of maintaining a normal healthy environment. Normal discharge is usually clear or milky with no malodor. A change in the amount, color, or smell, irritation or itching or burning could be due to an imbalance of healthy bacteria in the vagina, leading to vaginitis.(1) The condition is further classified based on the main causative organism Bacterial vaginosis accounts for 40-50% of vaginitis cases, vaginal candidiasis, 20-25% and trichomoniasis 15-20%.(1, 2)
- The condition is gender specific to females with age predilection for females aged between 19 to 45 years.
- The recent study published in India states the incidence of the condition in country is 19% to 21% of all the UTI cases reported to clinicians for the year 2014.(2)

### **ETIOLOGY**

Etiology	Risk factors
Approximately 90% of all cases of vaginitis are thought to be attributable to 3 causes: <i>bacterial vaginosis</i> , <i>vaginal candidiasis</i> , and <i>Trichomonas vaginalis</i> infection.	<ul style="list-style-type: none"> <li>• Reproductive Age</li> <li>• Sexual abuse</li> <li>• Hormonal status</li> <li>• Personal Hygiene</li> <li>• Immunodeficiency</li> <li>• Underlying skin diseases</li> </ul>

### **PATOPHYSIOLOGY (1)**

The normal postmenarchal and premenopausal vaginal pH is 3.8-4.2. At this pH, growth of pathogenic organisms usually is inhibited. Disturbance of the normal vaginal pH can alter the vaginal flora, leading to overgrowth of pathogens. Factors that alter the vaginal environment include feminine hygiene products, contraceptives, vaginal medications, antibiotics, sexually transmitted diseases (STDs), sexual intercourse, and stress. The overgrowth of normally present bacteria, infecting bacteria, or viruses can cause symptoms of vaginitis. Chemical irritation also can be a significant factor.

### **Signs & Symptoms (1-3)**

Specific symptoms	Common symptoms
<ul style="list-style-type: none"> <li>• Vaginal Discharge</li> </ul>	<ul style="list-style-type: none"> <li>• Genital itching</li> <li>• Burning micturition, ↑ frequency, Urgency</li> <li>• Dysuria</li> <li>• Genital complaints in sexual partners</li> <li>• Low backache</li> </ul>

### **History**

H/O Present Illness
<ul style="list-style-type: none"> <li>• Onset of symptoms: when it started</li> <li>• Duration : duration of illness</li> <li>• Character of discharge: Ask about quantity, smell, color, and consistency</li> <li>• Any ulcer, swelling on the vulval or inguinal region</li> </ul>

**Menstrual H/o-(R/o Pregnancy)**

- Cycle - duration, regularity
- Marital status
- Obstetrical H/o

**Past H/o**

- Previous H/o similar illness

**Personal H/o**

- Poor genital hygiene
- H/o Unprotected sexual encounter/s
- H/o Multiple sexual partners
- H/o Recent change in sexual partners

**Vital Signs**

- Body temperature: Possible raised body temperature
- Heart rate: Normal
- Respiratory rate: Normal
- Blood Pressure: Normal

**Patient Examination(3)**

Systems	Inspection	Palpation	Percussion	Auscultation	Positive sign
<b>General examination</b>	None	None	None	None	No specific finding
<b>CVS</b>	None	None	None	Routine CVS	No specific finding
<b>RS</b>	None	None	None	Routine RS-	No specific finding
<b>Abdomen</b>	None	None	None	Bowels sound	No specific finding
<b>Musculoskeletal system</b>	None	None	None	None	No specific finding
<b>CNS</b>	None	None	None	None	No specific finding

**Genital Examination (3)**

*"Before genital examination explain the procedure, make sure proper privacy and get a consent from patient"*

- Per speculum examination to differentiate between vaginitis and cervicitis.
- The classic clinical presentations of the various causes of vaginitis include the following, but may not be distinguishable:
  - Trichomoniasis - greenish frothy discharge
  - Candidiasis- curdy white discharge
  - Bacterial vaginosis -adherent discharge
  - Mixed infections may present with atypical discharge
- Speculum examination followed by bimanual pelvic examination to rule out pelvic inflammatory disease Note: If speculum examination is not possible or client is hesitant, treat both for vaginitis and cervicitis.

## **Diagnostic Test**

- Diagnosis can be done based on symptoms itself, if possible do speculum examination.
- Lab investigation is additional option. If available, the following can be done; it is not necessary.
  - Wet mount microscopy of the discharge for Trichomonas vaginalis
  - 10%KOH preparation for Candida albicans
  - Gram stain of vaginal smear for clue cells seen in bacterial vaginosis
  - RPR test for syphilis

## **Diagnosis**

Vaginal Discharge Syndrome (Vaginitis)

## **Differential Diagnosis**

- Cervicitis
- Physiological white discharge

## **Treatment (1-3)**

### **Non-pharmacological Management**

- Advise sexual abstinence during the course of treatment
- Advise to use Condom

### **Pharmacological Management**

#### **Adults:**

#### **Antimicrobial**

- Tab. Secnidazole 2 gm orally, single dose **OR**
- Tab. Tinidazole 500mg orally, twice daily for 5 days **OR**
- Tab. Metronidazole 400mg, twice daily for 7 days.

#### **Treat for candidiasis (Oedema, erosions, fissures, curdy white discharge),**

- Tab Fluconazole 150 mg orally single dose **AND**
- Local Clotrimazole 500mg vaginal pessary once daily at night for 6 consecutive nights.

#### **Special Groups:**

**Pregnancy:** Refer to specialist

**Geriatrics:** Similar dose as adult

## **When to Refer**

- Not responding
- Recurrent cases

## **References**

1. Vaginitis: Practice Essentials, Pathophysiology, Etiology. 2016 Nov 28 [cited 2016 Dec 1]; Available from: <http://emedicine.medscape.com/article/257141-overview>
2. Rathod SD, Klausner JD, Krupp K, Reingold AL, Madhivanan P. Epidemiologic Features of Vulvovaginal Candidiasis among Reproductive-Age Women in India. Infect Dis Obstet Gynecol [Internet]. 2012 [cited 2016 Dec 1];2012. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3478712/>
3. National AIDS Control Organisation , STI/RTI Division. National Guidelines on Prevention, Management and Control of Reproductive Tract Infections and Sexually Transmitted Infections [Internet]. Department of AIDS Control, Ministry of Health and Family Welfare Government of India; 2014 Jul. Available from:

<http://www.naco.gov.in/upload/2014%20msIns/National%20RTI%20STI%20technical%20guidelines%20Sep2014.pdf>