

## P-GU-001 CERVICAL DISCHARGE SYNDROME (CERVICITIS)

### DEFINITION & EPIDEMIOLOGY

- Cervical discharge syndrome is characterized by inflammation of cervix. The condition can be classified as non-infectious and infectious both with different risk factors.
- Cervicitis is gender specific to females with global incidence of 14 to 15 million cases per years.(1)
- In India numerous cases go unreported, a study published in 2014 states that cervicitis consist of 30 to 45% of Sexually transmitted diseases country wide(2).

### ETIOLOGY

Etiology	Risk factors
<ul style="list-style-type: none"><li>• The most common etiologies of cervicitis are infectious, with sexual transmission of organisms such as with C trachomatis and N gonorrhoeae being the primary means by which it is spread.</li><li>• Other etiologic organisms include Trichomonas vaginalis and herpes simplex virus (HSV), especially primary type 2 HSV.</li><li>• Noninfectious causes of cervicitis include local trauma, radiation, chemical irritation, systemic inflammation, and malignancy.</li></ul>	<ul style="list-style-type: none"><li>• Multiple sex partners</li><li>• Poor personal hygiene</li><li>• Alcohol or drug abuse</li><li>• Unsafe sexual practices</li><li>• Trauma during intercourse</li></ul>

### PATHOPHYSIOLOGY

The cervix secretes most of the mucus and other fluids found in the reproductive tract; in normal circumstances, the secretions help to preserve and transport sperm from the male, and they keep the vagina bathed in fluids. The cervix serves as an excellent warm, secluded spot for bacterial invasion and growth. Vaginal infections can easily spread to the cervix. Poor drainage or blockage of the cervix causes a chronic infection. Irritation can be caused by trauma incurred during abortions or delivery, by medical instruments, cauterization, radiation therapy, or intrauterine contraceptive devices. Cervicitis is most common during the years of active menstruation. When the causative organisms enter cervix they bring about inflammation of endometrium leading to excessive secretion of fluids which leads to excess discharge from cervix.(3)

### Signs & Symptoms (4-6)

Specific symptoms	Common symptoms
Cervicitis frequently is asymptomatic, but some women complain of an abnormal vaginal discharge and intermenstrual vaginal bleeding (e.g. after sexual intercourse).	<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 vulvar or inguinal region</li></ul>

**Menstrual H/o-(R/o out 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 temperatures
- Heart rate: Normal
- Respiratory rate: Normal
- Blood Pressure: Normal

**Patient Examination (4)**

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**

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

- Per speculum examination to differentiate between vaginitis and cervicitis.
- Positive signs for cervicitis include:
  - Erythematous cervix
  - Mucopurulent cervical 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**

- Two major diagnostic signs characterize cervicitis:

- A purulent or mucopurulent endocervical exudate visible in the endocervical canal or on an endocervical swab specimen (commonly referred to as mucopurulent cervicitis or cervicitis).
- Sustained endocervical bleeding easily induced by gentle passage of a cotton swab through the cervical mucosa.
- Either or both signs might be present.
- Diagnosis can be done based on symptoms itself, if possible do speculum examination.
- Lab investigation is an additional option. If available the following can be done; however it is not necessary.
  - Wet mount microscopy of the discharge for *Trichomonas vaginalis*
  - Gram stain of endocervical smear to detect gonococci.
  - Microscopic examination of vaginal fluid - finding of leucorrhoea (>10 WBC per high-power field) has been associated with chlamydial and gonococcal infection of the cervix

## Diagnosis

Cervical Discharge Syndrome (Cervicitis)

## Differential Diagnosis

- Vaginitis
- PID
- Physiological white discharge

## Treatment (4–10)

### Non- pharmacological Management

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

### Pharmacological Management

#### Adults:

#### Antimicrobial

- Tab. Cefixime 400mg orally, single dose **PLUS**
- Tab. Azithromycin 1 gm, 1 hour before food. If vomiting occurs within 1 hour, give anti-emetic and repeat

#### **For Cervicitis and *Trichomonas* infection (*Profuse malodorous frothy, yellowish green discharge*):**

- Treat all sexual partners in the last 30 days with the above regimen **AND**
- Tab. Metronidazole, 400 mg BID for 7 days

#### Special Groups:

**Pregnancy:** Refer to specialist

**Geriatrics:** Similar dose as adult

**Note:** If vaginitis and cervicitis are present together treat for both or if provider is unable to do speculum examination then treat for both vaginitis and cervicitis.

## When to Refer

- Not responding
- Recurrent cases
- Gonococcal arthritis

## References

1. Cervicitis: Background, Etiology, Epidemiology. 2016 Jul 25 [cited 2016 Nov 30]; Available from: <http://emedicine.medscape.com/article/253402-overview>
2. A K Bhirud, T U Bendale Medical Journal September 2015; 2(9): 502-504. A K Bhirud, T U Bendale. Prevalence of cervicitis and outcome: A hospital based study 504. <http://www.medpulse.in> (accessed 06 September 2015). Prevalence of cervicitis and outcome: A hospital based study. MedPulse – International.
3. cervicitis | pathology | Britannica.com [Internet]. [cited 2016 Nov 30]. Available from: <https://www.britannica.com/science/cervicitis>
4. 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%20mslns/National%20RTI%20STI%20technical%20guidelines%20Sep2014.pdf>
5. World Health Organization. Guidelines for the management of sexually transmitted infections. World Health Organization; 2003.
6. Control C for D, Prevention, others. Sexually transmitted diseases treatment guidelines, 2010. Ann Emerg Med. 2011;58(1):67–68.
7. State Health Resource Centre, Chhattisgarh. Standard Treatment Guidelines for Medical Officers. [Internet]. Department of Health & Family Welfare, GoC With Support of Chhattisgarh Basic Health Services Project; 2003 [cited 2016 Jan 2]. Available from: [www.cspsc.in/dic/pdf/cg\\_stg.pdf](http://www.cspsc.in/dic/pdf/cg_stg.pdf)
8. Standard Treatment Guidelines- 2014 [Internet]. Department of Public Health & Family Welfare Madhya Pradesh; 2014 [cited 2016 Jan 13]. Available from: <http://www.health.mp.gov.in/manuals/STG-2014.pdf>.
9. TNHSP Standard Treatment Guidelines, A Manual for Medical Practitioners [Internet]. Tamil Nadu Health Systems Project, Health & Family Welfare Department Government of Tamilnadu; Available from: <http://www.tnhsp.org/handbook-standard-treatment-guidelines>
10. Standard Treatment Guidelines , A Manual for Medical Therapeutics First Edition [Internet]. Gujarat Medical Services Corporation Limited Health & Family Welfare Department Government of Gujarat; 2013. Available from: <http://www.gmscl.gujarat.gov.in/Images/pdf/standard-treatment-guidelines.pdf>