

Journal of Pharmaceutical Advanced Research**(An International Multidisciplinary Peer Review Open Access monthly Journal)**Available online at: www.jpardonline.comR
E
V
I
E
W

A
R
T
I
C
L
E

J
P
A
R

2
0
2
4**Chronic Cervicitis: Recent Update**

Anup Kumar Patra, Biswaranjan Ray, Jasaswi Ray

P.G. Department, College of Pharmaceutical Sciences, Marine Drive Road, Puri, Odisha, India.

Received: 28.07.2023

Revised: 16.08.2024

Accepted: 25.08.2024

Published: 31.08.2024

ABSTRACT:

Chronic cervicitis which is indeed a common condition affecting women's health. Chronic cervicitis refers to inflammation of the cervix that persists over a long period. Symptoms of cervicitis may include abnormal vaginal discharge with odor or unusual coloration, discomfort or pain in the lower abdomen, particularly during sexual intercourse, vaginal bleeding or spotting after intercourse, and between menstrual periods. The Present Review Focus Current management of Chronic Cervicitis.

Corresponding author:

Dr. Biswaranjan Ray
Professor
College of Pharmaceutical Sciences,
Marine Drive Road, Puri, Odisha, India.
Tel: +91-8328888254
E. Mail ID: crabiswa@gmail.com

INTRODUCTION:

Chronic cervicitis which is indeed a common condition affecting women's health. Chronic cervicitis refers to inflammation of the cervix that persists over a long period. It can increase susceptibility to other infections like HPV (human papillomavirus) and potentially HIV, and in the long term, it's considered a risk factor for cervical cancer, which is one of the most prevalent cancers among women worldwide ^[1,2]. Chronic cervicitis presents clinically with persistent greyish malodorous vaginal discharge, dyspareunia, pelvic pressure, perineal heaviness, backache, post-coital bleeding, vaginal burning and itching, and a general sense of weakness ^[3]. Cervicitis, inflammation of the cervix the lower, narrow portion of the uterus opening into the vagina is a prevalent condition affecting numerous women during adulthood ^[4]. Despite limited population-based data available for estimating cervicitis prevalence, it is observed as a highly prevalent condition among women

Keywords: Depression, *Musa paradisiaca* Linn, *Matricaria recutita*, Antidepressant, Natural alternatives, Botanical interventions.

across diverse clinical settings. These epithelial tissues vary not only in the microorganisms they harbor but also in their innate defense mechanisms, responsiveness to hormonal influences, ability to secrete substances, and susceptibility to HIV-1 infection [5]. Globally, approximately 70 % of women, predominantly adults, are affected by cervicitis.

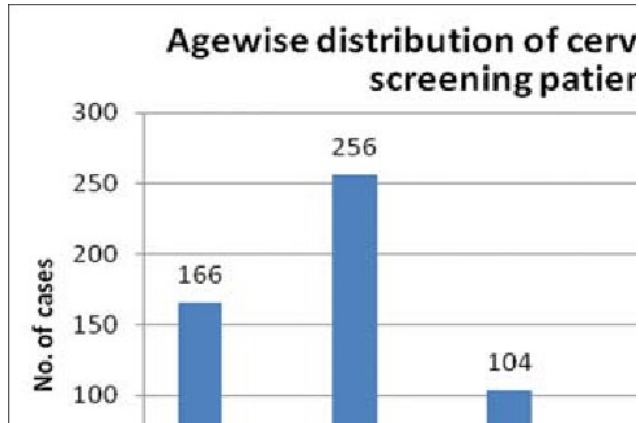


Fig 1. Age wise distribution of cervical pap smear screening patients.

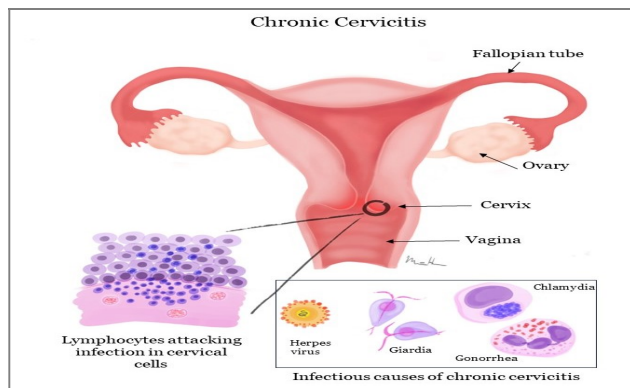


Fig 2. The infectious causes of chronic cervicitis.



Fig 3. The symptomatic infectious form of cervicitis.

Factors affecting cervicitis:
Engaging in unprotected sexual intercourse and having multiple sexual partners heightens the risk of developing vaginitis caused by bacterial vaginosis or trichomoniasis,

as well as cervicitis attributable to gonorrhea, chlamydia, or, less commonly, herpes simplex virus [6].

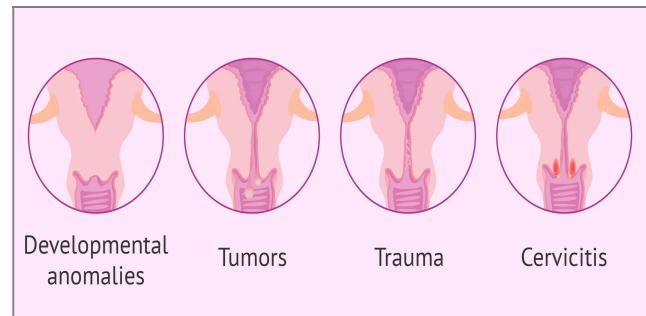


Fig 4. The stepwise development of Cervicitis.

Causes of Cervicitis:

Cervicitis frequently arises from sexually transmitted infections (STIs) such as gonorrhea, chlamydia, trichomoniasis, or herpes simplex virus. Non-sexually transmitted organisms can also contribute to its onset. Additionally, cervicitis can result from reactions or irritations induced by latex, douches, or vaginal creams. Sexually transmitted organisms responsible for cervicitis are transmitted through unprotected oral, vaginal, or anal intercourse. Cervicitis resulting from bacterial or viral infections is managed through the administration of antibiotics or antiviral medications, respectively.

Symptoms of Cervicitis:

Symptoms of cervicitis may include abnormal vaginal discharge with odor or unusual coloration, discomfort or pain in the lower abdomen, particularly during sexual intercourse, vaginal bleeding or spotting after intercourse, and between menstrual periods. Additionally, symptoms may manifest as itching, burning sensations, or painful urination [7].

Complications of Cervicitis:

Cervicitis is caused by pathogens capable of ascending into the uterus and fallopian tubes if left untreated. This can result in pelvic inflammatory disease (PID), which may lead to infertility and peritonitis an infection that poses life-threatening risks. These pathogens can also be transmitted to sexual partners, potentially causing severe complications [8]. Complications of cervicitis include infertility, cervical cancer, and ectopic pregnancy.

Risk factors of Cervicitis:

Risk factors for cervicitis closely align with those for sexually transmitted infections (STIs) and include having multiple sexual partners, engaging in unprotected sex, and being of younger age. Early initiation of sexual

activity and a history of STIs are associated with an increased risk of developing cervicitis [9].

Diagnosis of Cervicitis:

A pelvic examination involves evaluating the pelvic organs for signs of swelling and tenderness. During this procedure, a speculum may be inserted into the vagina to allow visualization of the vaginal walls, cervix, and adjacent structures.

Treatments of Cervicitis:

The treatment of cervicitis varies depending on the underlying etiology and clinical presentation.

- Chlamydia is treated with antibiotics. The recommended treatment is doxycycline taken twice daily for one week. Alternative treatments include azithromycin taken in a single dose or levofloxacin taken once daily for one week.
- Gonorrhea is managed with a 500 mg intramuscular dose of ceftriaxone.
- Trichomoniasis is treated with metronidazole, administered as 500 mg twice daily for seven days in women. An alternative treatment option is a single dose of tinidazole (Tindamax).
- Genital herpes is managed with antiviral medications, including Famvir (Famciclovir), Valtrex (Valacyclovir), or Zovirax (Acyclovir). The treatment duration typically spans seven to ten days. In cases of severe infection, intravenous (IV) acyclovir may be necessary.
- Bacterial vaginosis is treated with antibiotics, with several recommended options. First-line treatments include oral metronidazole or topical antibiotics such as metronidazole gel or clindamycin cream, which are applied directly to the vaginal mucosa. Alternative treatments consist of tinidazole, secnidazole, or oral clindamycin. Additionally, clindamycin ovules, administered intravaginally, are also an option.

Prevention:

Sexually transmitted infections (STIs) can be prevented by abstaining from sexual activity. For sexually active individuals, reducing the risk of cervical infections and other STDs, including HIV, involves engaging in a mutually monogamous relationship with a partner confirmed to be uninfected. In cases where sexual activity occurs outside of such a relationship, the risk of STDs can be mitigated through the following measures:

Consistent Condom Use:

Employing latex condoms or other latex barriers during all forms of sexual activity—vaginal, anal, or oral—can significantly reduce STI risk. Condoms made from "natural" materials, such as lambskin, do not provide protection against STDs, though they do prevent pregnancy. For individuals with latex allergies, polyurethane or other synthetic condoms are recommended.

Partner Limitation:

Reducing the number of sexual partners lowers the risk of STDs. A higher number of partners increases exposure to potential infections.

Avoidance of Alcohol and Drugs:

Steering clear of alcohol and drugs during sexual activity helps maintain the cognitive function necessary to consistently use condoms and safeguard both oneself and one's partners [11].

CONCLUSION:

This type of infection can cause scarring in your uterus, ovaries or fallopian tubes. Scarring can cause complications like pelvic pain, infertility or ectopic pregnancy. Your risk of STIs (including HIV/AIDS) also increases if you have untreated cervicitis.

ACKNOWLEDGEMENT:

The authors wish to thank College of Pharmaceutical Sciences, Puri, for providing all facilities to complete this study.

REFERENCES:

- Lusk MJ, Konecny P. Cervicitis: A review. *Curr Opin Infect Dis*, 2008; 21: 49-55.
- Boccardo E, Lepique AP, Villa LL. The role of inflammation in HPV carcinogenesis. *Carcinogenesis*, 2010; 31(11): 1905-1912.
- Jain M, Jain S. Chronic cervicitis: role of adult autologous stem cells. *Int J Reprod Contracept Obstet Gynecol*, 2017; 6(6): 2202-2206.
- Marrazzo1 JM, Martin DH. Management of Women with Cervicitis. *Clin Infect Dis*, 2007; 44: S102-S110.
- Bradshaw CS, Jensen J, Tabrizi S, *et al.* Azithromycin failure in *Mycoplasma genitalium* urethritis. *Emerg Infect Dis* 2006; 12: 1149-1151.
- Arbyn M, Weiderpass E, Bruni L, de Sanjosé S, Saraiya M, Ferlay J, *et al.* Estimates of Incidence and Mortality of Cervical Cancer in 2018: a

Worldwide Analysis. *Lancet Glob. Health*, 2020; 8(2): e191-e203.

- Fu L, Xia W, Shi W, Cao GX, Ruan YT, Zhao XY, *et al.* Deep Learning Based Cervical Screening by the Cross-Modal Integration of Colposcopy, Cytology, and HPV Test. *Int J Med Inf*, 2022; 159:104675.
- Jain M, Jain S. Chronic cervicitis: role of adult autologous stem cells *Int J Reprod Contracept Obstet Gynecol*, 2017; 6(6): 2202-2206.
- Kogan EA, Fayzullina NM, Demura TA, Sukhikh GT. Reparative Spheroids in HPV-Associated Chronic Cervicitis. *Int J BioMed*, 2013; 3(3): 192-196.
- Mirzaie-Kashani E, Bouzari M, Talebi A, Arbabzadeh-Zavareh F. Detection of human papillomavirus in chronic cervicitis, cervical adenocarcinoma, intraepithelial neoplasia and squamous cell carcinoma. *Jundishapur J Microbiol*, 2014; 7(5): e9930.
- Tabla VO, Gutiérrez F. Cervicitis: Etiology, diagnosis and treatment. *Enfermed Infect Microbiol Clin*, 2019; 37(10): 661-667.

Conflict of Interest: None

Source of Funding: Nil

Paper Citation: Patra AK, Ray B, Ray J. Chronic Cervicitis: Recent Update. *J Pharm Adv Res*, 2024; 7(8): 2351-2354.