

HISTOLOGICAL CHANGES IN UTERINE EROSION

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Abstract

Cervical ectropion is a non-cancerous condition that occurs when the end cervix (the canal of the cervix) turns outward, exposing the cells that normally reside inside the cervix to the acidic vaginal environment. The averted or inside-out parts of the end cervix appear red, raw, and are often covered with a yellow discharge—this can be visualized by a doctor during a pelvic exam using a speculum. The following article looks into this medical condition in more detail.

Key Words:

Pregnant Woman Cervical Intraepithelial Neoplastic Invasive Disease Columnar Epithelium Colposcopy Examination

Introduction

Cervical erosion, ulceration of the lining of the uterine cervix made evident by bright red or pink spots around its opening. The cervix is the part of the uterus (womb) whose tip projects into the upper region of the vagina. In the earliest stage of erosion, patches of mucous membrane are shed from the cervix. The following stages are usually associated with different degrees of healing. The primary lesion shows an ulcer; its surface lacks mucous membrane, the tissue is granular, and there may be many white blood cells and bacteria associated with it. Soon after the ulcer erupts, the body starts repairs by covering the exposed area with a new epithelial (covering) layer. Erosion may heal completely or partially or may recur. The erosion does not totally heal until the infection and discharge that caused it originally are eradicated.

In the past, it was thought that various types of physical trauma that caused infection might eventually lead to cervical ectropion. Such sources of trauma included sexual intercourse, the use of tampons, the insertion of a speculum, or the insertion of other objects into the vagina.

Materials And Methods

Other assumed causes included sexually transmitted infections (STI) such as herpes or early syphilis. It was also thought that vaginal douches or other chemicals, such as contraceptive creams or foams, might cause cervical erosion.

Today, these theories have lost ground as experts now believe that cervical ectropion is a normal anatomic phenomenon that some women are born. Researchers have also found that it can be caused by hormonal changes, making it more prevalent among adolescent women, pregnant women, or women who are taking an estrogen-containing contraceptive like the pill. The presence of ectropion is also influenced by estrogens and can often be seen in postmenopausal women. The common denominator here is an increase in estrogen levels in the body, which can change or remodel the cervix.

Erosions are most prevalent in women during their menstrual years, in those who have had children, and during cervical or vaginal infections. They are less common in virgins and in older women who have experienced menopause. The erosion itself is relatively insignificant; occasionally, however, it may precede cervical cancer. Extensive erosions can involve part of the surrounding vaginal wall. As the ulcer heals, it acquires patches of pinkish-tan epithelium (covering), which form small islands over the eroded area. The small islands eventually grow together, giving the lesion an uneven contour. There are mucous glands in the cervical tissue that lead to the surface of the epithelium; if these ducts are covered or blocked, the glands fill with retained fluids, causing small cysts. Erosions that bleed on trauma or have an irregular, bumpy (papillae)

surface are generally regarded as of the more hazardous variety. Most smooth, round erosions do not require treatment, for they heal by themselves when the cause is removed. Larger erosions are lightly cauterized in spots to stimulate epithelial growth. Erosions found to be cancerous are usually removed surgically. Removal of part or the entire cervix does not prevent fertilization and childbearing.

Discussions And Results

Cervical ectropion is a benign condition that is regarded as a normal variant found in women of the reproductive age group. In this condition, the glandular cells (the columnar epithelium) that line the end cervix are present on the ectocervix, leading to exposure of the columnar cells to the vaginal milieu. It is also known as cervical ectopic or cervical eversion. This condition has also been referred to as cervical erosion, which is a misleading term because there is no actual erosion of the cervix.

Cervical ectropion is usually found on routine pelvic examination of women in the reproductive age group. It is an asymptomatic variant but has been correlated with chronic cervicitis. It is a common physiological condition amongst adolescents and pregnant women.

Being asymptomatic in most cases, cervical ectropion is diagnosed during a routine pelvic examination or at the time of pap screening. Cervical ectropion is assessed and quantified by a direct and unaided speculum examination that shows a reddish area around the cervical. While there are generally no symptoms associated with cervical ectropion, some women may experience light bleeding that is not part of menstruation, such as bleeding after sexual intercourse. Bleeding after a pelvic exam when a cervical speculum is inserted into the vagina or during a bimanual examination, may also occur. This is because the exposed columnar tissue has blood vessels that are fragile and bleed easily when even lightly touched.

Some women with cervical ectropion also experience a clear or yellowish vaginal discharge that has no odor. This discharge does not resemble pus, which would indicate an infection.

Conclusion

Further investigations are carried out to exclude other possibilities. They include the following:

Nucleic acid amplification tests for chlamydia and gonorrheal cervicitis.

Triple swab. End cervical and high vaginal swabs are taken to rule out cervicitis. It is mainly done when vaginal discharge is purulent.

Differentiating between cervical ectropion and cervical intraepithelial neoplastic and cervical cancer is difficult on macroscopic visualization. Though cervical ectropion is not associated with cervical cancer, in the case of cervical pain or spotting along with a red, inflamed cervix, the following tests can be done to rule out cervicitis, cervical intraepithelial neoplastic (CIN), and cervical cancer:

Pap smear

Colposcopy

Colposcopy with biopsy

A urine beta high qualitative test is carried out as the reproductive hormonal pattern during pregnancy often leads to the development of cervical ectropion.

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