

VAGINITIS

What is Vaginitis?

The suffix "*itis*" (Greek) indicates inflammation. *Vaginitis* is inflammation or infection of the vagina, the passage connecting the uterus (womb) to the vulva. Bacterial vaginosis (BV) is a common cause of vaginal symptoms, but as it does not produce inflammation, is not a true vaginitis (see below).

What are the symptoms?

Symptoms of vaginitis may include pain, dryness, itching, burning of the vagina sometimes extending to the outside skin, pain with intercourse or when urinating and increased or abnormal discharge.

What is there to see?

When the vagina is examined, there may be nothing abnormal to see. Some of the abnormal changes that can be seen are vaginal sores, erosions causing loss of superficial skin, swelling, and redness. Discharge may be white, grey, or yellow and pus like. Vaginal tenderness (soreness when the area is examined) is often present. Swelling, cracking, redness and sores may extend to the outer lips of the vulva. It is impossible to make a diagnosis of the specific cause of the vaginitis based on the signs and/or symptoms only.

What is the cause?

There are many causes of vaginitis including infections, immune/autoimmune induced inflammation, hormonal conditions, and contact dermatitis. Causes of vaginitis:

• Infectious diseases - Candida/yeast, Trichomonas vaginalis, Group AStreptococcus (bacteria) and Herpes simplex virus. In all these cases, the condition can be present

without causing active vaginitis and women may experience no symptoms. Trichomonas vaginalis is a sexually transmissible infection and must be treated. Partners must also be traced and treated. The other infections do not need treatment if they are asymptomatic.

- **Immune/autoimmune induced inflammation** some disorders of the immune system and auto immune disease can manifest in the genital area as erosive lichen planus, desquamative inflammatory vaginitis, pemphigus
- **Hormonal conditions** estrogen deficiency (atrophic vaginitis) as seen at the menopause, women using Depo Provera or after childbirth, especially with prolonged breastfeeding.
- **Contact dermatitis** various creams, soaps, intravaginal medications, the use of some sex toys and lubricants can cause inflammation. Allergy to latex (condoms) has also been observed but this is not common. Sometimes the use of condoms, specially if they are poorly lubricated, can cause an irritation and intolerance on the skin but this is not a true allergy.
- **Miscellaneous** trauma, sexual intercourse without proper lubrication, foreign body (for example, retained tampon)

Bacterial vaginosis

BV is not a cause of vaginitis but is frequently mixed with other types of vaginitis because it produces increased abnormal and malodorous vaginal discharge. The cause of bacterial vaginosis is unknown; loss of normal vaginal bacteria named lactobacilli leads to overgrowth of many other vaginal bacteria that lead to the symptoms. Women with bacterial vaginosis may complain of a vaginal discharge, some itchiness and/or a fishy vaginal odor with **NO** pain and **NO** signs of inflammation on examination. BV is usually treated with single dose tinidazole or multiple doses of metronidazole and occasionally with intravaginal clindamycin cream.

How can the diagnosis be confirmed?

Only a systematic approach beginning with a detailed medical history followed by vaginal examination, including pH measurement (acid-base balance) and wet mount (microscopy) and sometimes culture in the laboratory, can lead to the correct diagnosis and appropriate treatment. Most causes of vaginitis can be diagnosed by combining the information from the medical history and physical examination together with the pH and microscope findings. In addition, more complex laboratory tests can be performed by your doctor when the cause of vaginitis is unclear.

What is the treatment?

The treatment is based entirely on the diagnosis. For each one of the conditions above, a different treatment is prescribed.

- Infection usually an antibiotic or antifungal treatment. This may be a cream or ointment to apply, or a tablet to take by mouth.
- Immune/auto-immune induced inflammation this is usually treated with a strong anti-inflammatory steroid ointment but desquamative vaginitis may respond to intravaginal clindamycin cream
- Hormonal treatment with hormone replacement may be offered by your health care provider
- Contact dermatitis treatment begins by first removing what is causing the problem. Anti-inflammatory steroid ointments are often needed as well.
- Miscellaneous the treatment is tailored to the cause of the vaginitis.

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