

Vaginitis

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Vaginitis is inflammation of the vagina often causing itching, burning, irritation discharge and discomfort. It is one of the most common reasons a woman seeks medical care. Vaginitis falls into three forms, irritant, hormonal, and infective. All three can cause a woman great discomfort.

Irritant vaginitis can be due to allergic reactions to spermicides, condoms, soaps, douches, perfumes, medications and hot tubs. Other irritants can include abrasions, tampons, and sanitary napkins. A careful history must be obtained to establish an etiology and a period of avoiding the possible irritant to evaluate if symptoms subside.

Hormonal vaginitis is usually due to low levels of circulating estrogens in the body. This causes the lining of the vaginal canal to thin and become atrophic. A thin vaginal lining may predispose a woman to secondary infections. Typically a woman will complain of discharge, dryness, itching or burning. Estrogen is necessary to maintain the homeostasis of the vaginal flora and proper pH of 4.0. The natural acidic environment of the vagina limits the growth of abnormal bacteria and maintains the presence of healthy bacteria. Evaluation includes examining the vaginal canal for pale, thinning tissue and loss of rugal folds. A pH above 4.5 is consistent with low levels of estrogen. A maturation index can be obtained to determine the presence of mature squamous epithelial cells consistent with adequate estrogen. (refer to article on maturation index).

The three most common infections of the vagina are bacterial, candida, and protozoal (trichomonas). Bacterial vaginitis is an infection of the vagina by an overgrowth of anaerobic bacteria, most commonly Gardnerella, and marked by a deficiency of hydrogen peroxide-producing lactobacilli. Up to 50% of women with bacterial vaginitis are asymptomatic. The most frequent symptom is a fishy odor coming from the vagina. The discharge is often thin and grey-white. Diagnosis is made on clinical grounds and wet mount. The wet mount will show clumps of clue cells and a positive whiff test when 10% potassium hydroxide is added to the slide. Also, the pH will be above 4.5.

Candida vaginitis is one of the most common infections of the female genital tract. Candida albicans which is part of the normal flora of about 20% of women is the cause of about 90-95% of cases. When the normal flora of the vagina is disturbed and out of balance C. albicans becomes a pathogen. Normally lactobacilli inhibits growth of yeast in the vagina, but when lactobacilli species declines, Candida overgrows. Women with Candida vaginitis complain of itching, irritation and burning. The vagina and vulva is often very erythematous. Often a thick white discharge is present, but an odor is uncommon. A wet mount with 10% potassium hydroxide will show hyphae or budding yeast. The pH of the vagina will be below 4.5.

Trichomoniasis vaginitis is one of the most common protozoan infection in the U.S. The primary means of transmission is sexual contact. Both men and women can be asymptomatic providing a means of transmission and reinfection. Normally the acidic nature of the vagina renders the environment resistant to trichomonas infection, however when the pH rises the vagina is more susceptible to the growth of the organism. Symptoms present as profuse frothy discharge often bloody, green, yellow or grey. The discharge has an unpleasant odor and vaginal itching, burning and pain may be present.

The wet mount reveals live mobile Trichomonads and increase white blood cells. The pH is between 5 and 7.

Treatment

Treatment of irritant vaginitis involves first identifying the offending agent and then complete avoidance. Consider semen, food, clothing, detergent and soap allergens. Discontinue the use of hot tubs and douches. Evaluate topical medications and natural creams as possible irritants.

Hormonal vaginitis can be treated by replenishing the vaginal tissue with intravaginal estrogen. This will increase lubrication, elasticity, and thickness of the vaginal epithelium as well as restore the vaginal flora. Estriol can be compounded in to a cream or suppositories. A typical regimen would be to insert a 1mg estriol suppository before bed every night for 2 weeks as a loading dose to restore the vaginal tissue. After the loading dose a women could insert one before bed 2-3 times a week as a maintenance dose.

Bacterial, candida, and trichomonas vaginitis treatment centers on looking at the problem holistically instead of giving medications that just kill the organism. Prevention is the first step. Tight clothing and panty hose predispose a women to yeast infections. Safe sex practices using barrier protection may be helpful in preventing recurrent vaginal infections. Adequate nutrition is important for maintaining a healthy immune system. Avoid sugar, refined carbohydrates, and alcohol. Increase the intake of yogurt with live acidophilus cultures to help maintain the ecosystem of the vagina.

Herbal suppositories for the treatment of bacterial vaginitis might include herbs such as echinacea, hydrastis, althea, usnea, geranium and althea. These are anti-microbial and can kill off the overgrowth of bacteria. Suppositories for yeast vaginitis might include boric acid, calendula, and oregon grape root. Tee tree has been shown to be effective in the treatment of Trichomonas infections. A solution of 40% tee tree oil, 40% water-miscible emulsified solution, and 13% isopropyl alcohol can be applied to a tampon and inserted for 24 hours, once a day for a week. (Note; The recommended treatment for Trichomonas is a single dose of Metronidazole, 2 grams). Oral lactobacillus can be supplemented in all conditions to normalize the vaginal flora.

References

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