Vaginal symptoms: a practical approach

ANNA McNULTY MB BS, MM(sexual health), FAChSHM

All sexually active women presenting with vaginal symptoms should undergo a brief sexual health risk assessment as part of the history taking, and be offered STI testing if relevant.

Most young women with vaginal symptoms will have either candidal vulvovaginitis or bacterial vaginosis as the cause. Neither of these conditions is considered to be sexually transmitted. However, it is important as part of the history taking to take a brief sexual health risk assessment and then offer testing for sexually transmitted infections (STIs) if relevant (see the box on this page). This article reviews the approach to a woman with vaginal symptoms and discusses the common causes.

Vaginal discharge

Women who present with a vaginal discharge may find it difficult to describe the characteristics of the discharge in detail. Therefore, it is easiest to check if there are any other genital symptoms and then examine the woman and observe the discharge directly. The other symptoms to check for are odour, genital itch, intermenstrual or postcoital bleeding, dyspareunia and lower abdominal pain.

In women with a vaginal discharge alone, potential causes are a vaginal infection such as bacterial vaginosis or candidal vaginitis or a STI such as chlamydia, gonorrhoea or trichomoniasis. Gonorrhoea and trichomoniasis are uncommon in urban settings in Australia but should be considered in women from areas where these infections are prevalent or in those with a history of sexual contact overseas.[1]

On examination, women with a vaginal infection causing their discharge are likely to have a white vaginal discharge, whereas if there is a yellow discharge at the cervix, infection with chlamydia or gonorrhoea is more likely. However, mixed infections are common and STIs such as chlamydia often present with no abnormal findings on examination; therefore, it is important to test for these organisms if there is any STI risk (see the box below and case scenario 1 on page 64).[2]

Women who mention any abnormal bleeding, lower abdominal pain or dyspareunia must have pelvic inflammatory disease considered as a diagnosis, particularly if pain is present on pelvic examination and risk factors exist for chlamydial or gonococcal infection.

Genital odour

Most women who mention a stronger, often unpleasant or fishy odour as a symptom have also noticed an increased vaginal discharge. Sometimes women are too embarrassed to mention odour as a symptom, and it is only on direct questioning that it is mentioned. The most common cause of an offensive odour is bacterial vaginosis. Another less common reason is a retained foreign body, usually a tampon. For this reason it is important to examine the vagina.

On examination, the odour can often be noted and, if the cause is bacterial vaginosis, there is usually a thin, white, slightly frothy discharge present (Figure). Bacterial vaginosis is a condition caused by an overgrowth in the normal anaerobic bacteria that populate the vagina, along with a reduction in the concentration of lactobacilli. A high vaginal swab will confirm the diagnosis as characteristic changes are seen on microscopy and are reported as 'clue cells'. Bedside vaginal pH indictor strips will demonstrate the change in pH from the normally acid range to a more alkaline pH. If the woman is assessed as having a risk for STIs, or if she requests it, tests for chlamydia and gonorrhoea should also be conducted.

Although treatment of each episode of bacterial vaginosis is straightforward, recurrences are common. As the causative mechanism responsible for the change in vaginal flora is not understood, it is difficult to advise women on how to prevent

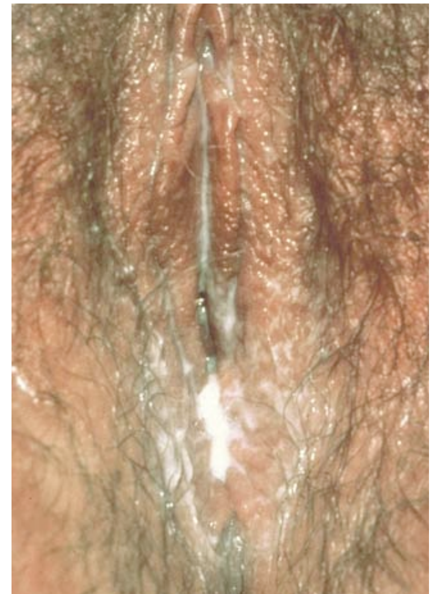

Figure. Thin, white discharge typically seen in bacterial vaginosis.

Checklist for STI risk

In women presenting with vaginal symptoms, test for chlamydia and/or gonorrhoea if any of the following apply:

- Previous bacterial STI
- Age less than 25 years
- A new partner in the last 12 months
- A partner with symptoms
- Patient requested test or expressed concerns

Dr McNulty is Director of the Sydney Sexual Health Centre, Sydney, NSW.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2006.

Case scenario 1. Bacterial vaginosis and chlamydia

A 28-year-old woman presents with intermittent vaginal discharge over the last two months. She has been in her current relationship for four months. On examination, an odour is noted and a white vaginal discharge is present. You do a high vaginal swab and endocervical swab for chlamydia and prescribe treatment for bacterial vaginosis.

Results confirm bacterial vaginosis, and the chlamydia test is positive. You ask the patient to bring her partner to see you for assessment and treatment.

Comments

- The risk assessment helped in determining that the patient had a new sexual partner.
- Chlamydia is usually asymptomatic.
- Mixed infections occur.

Case scenario 2. Candidal vulvovaginitis

A 35-year-old married woman presents for a Pap smear and mentions she has been treating herself for candida infection with vaginal pessaries every two months because of 'thrush'. She asks if there is anything else that can be done. She has no risk factors for STIs but requests a full check.

A high vaginal swab confirms *Candida albicans* infection; all other tests are negative. You discuss management options, including trigger factors and therapeutic options. The patient elects to continue episodic topical therapy but agrees to try a longer course of treatment as this is associated with lower recurrence rates than single dose treatment.

Comments

- Usually there are no precipitating factors for recurrent candida infection.
- Management options for candida infection are limited to suppressive treatment or treatment of each episode.

recurrences. It is known that douching increases the likelihood of a recurrence; however, this is not a common practice in Australia. Generally, patients with recurrences are treated with metronidazole (Flagyl, Metrogyl, Metronide) or tinidazole (Fasigyn, Simplotan); however, a longer course of treatment with metronidazole is more successful at preventing relapse than single dose treatments.[3]

Genital itch

The most common cause of genital itch, with or without vaginal discharge, is candidal vulvovaginitis. Now that treatment is available over-the-counter, many women will self-diagnose this condition and initiate treatment themselves (see Case scenario 2 on this page). Recurrent candidiasis is common and usually there are no precipitating factors. Women often ask about the role of diet, contraceptive method and other contributory factors in recurrent disease. There is no compelling evidence that any lifestyle intervention makes a dramatic difference. In particular, lactobacillus-containing yoghurt, either orally or vaginally, has not been shown to prevent recurrences.

A high vaginal swab should be done to confirm the diagnosis and check to see if one of the less common, and more difficult to treat, non-*Candida albicans* species is the causative organism. It has been shown that a number of women who diagnose and treat themselves for recurrent candida in fact have another condition, most often a genital dermatosis, causing their symptoms.[4] Seek advice from a local sexual health clinic if a patient's recurrent candidiasis is proving difficult to manage.

A far less common cause of genital itch in urban Australia is trichomoniasis. Other causes of genital itch are dermatitis and other genital dermatoses such as lichen sclerosis. Recurrences of genital herpes sometime feature itch as the predominant symptom rather than pain. If itch is localised, it is worthwhile examining the woman for evidence of a herpes lesion.

Summary

Most causes of vaginal symptoms are straightforward and easy to manage, although recurrent bacterial vaginosis and candidiasis can be problematic. However, it is worth remembering that the cause of persistent vaginal symptoms will not be found in 20% of all women referred because of such symptoms.[5] All sexually active women should undergo a brief sexual health risk assessment as part of the history taking and, if necessary, appropriate STI testing should be performed.

For further information on the appropriate tests to perform and treatment options consult the websites of the Melbourne Sexual Health Centre (www.mshc.org.au) and the Royal Adelaide Hospital's Sexually Transmitted Diseases Services Clinic (www.stdservices.on.net/clinic275), or refer to the latest edition of *Therapeutic Guidelines: Antibiotics*.[6] MT

References

1. Bradshaw C. Vaginal symptoms. In: Russell D, Bradford D, Fairley C, eds. Sexual health medicine. 1st ed. Melbourne: IP Communications; 2005. p. 72-86.
2. Chen MY, Hocking J, Fairley CK. Towards a national chlamydia screening program for Australia. Medicine Today 2006; 7(3): 57-58.
3. Donovan B. Management of sexually transmissible infections. Medicine Today 2006; 7(1): 63-65.
4. Sobel J. Vulvovaginal candidiasis. In: Holmes K, Mardh P, Sparling P, et al, eds. Sexually transmitted diseases. 3rd ed. New York: McGraw Hill; 1999. p. 629-639.
5. Landers D, Wiesenfeld H, Heine R, et al. Predictive value of the clinical diagnosis of lower genital tract infection in women. Am J Obstet Gynecol 2004; 190: 1004-1010.
6. Therapeutic guidelines: antibiotics. 13th ed. Melbourne: Therapeutics Guidelines Ltd; 2006.

DECLARATION OF INTEREST: None.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2006.