



Bacterial vaginosis and its treatment with a focus on metronidazole gel

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Introduction

Bacterial vaginosis (BV) is a common cause of unusual vaginal discharge. Although the condition is not usually serious and is asymptomatic in approximately 50 to 75% of women, it can lead to complications and increase the risk of contracting other sexually transmitted diseases, such as HIV.

Causes and risk factors

Lactobacilli are bacteria that are normally found in the vagina and that keep the vagina slightly acidic to prevent an overgrowth of other bacteria. When there is an upset of the natural balance of bacteria in the vagina, the patient can develop BV.

Some women may have a greater risk of developing BV and the following factors can increase their risk:

- Smoking
- Multiple sexual partners or a new sexual partner
- Douching (rinsing or washing of the vagina) or using vaginal deodorants
- Using scented soaps, shampoo, shower gel, bubble bath or antiseptic liquids in the bath
- Intrauterine devices (contraceptive devices)

It is recommended to clean the genital area using normal soap and water and having a shower is preferable to having a bath to reduce the risk for contracting BV.

Signs and symptoms

Approximately 50–75% of women do not show any signs or symptoms of BV and BV will often clear without any treatment. However, 25–50% of patients may experience one or more of the following signs and symptoms:

- Off-white, thin discharge
- Discharge may have a “fishy” odour that is more noticeable after sexual activity
- Some patients have burning on urination

Bacterial vaginosis does not usually cause pain or itching.

Complications

Although BV itself is not harmful, it has been associated with some health problems. BV increases the risk of contracting and spreading other sexually transmitted diseases such as genital herpes, gonorrhoea, chlamydia or HIV. Pregnant women with BV are at increased risk of preterm delivery. Untreated BV in women due for surgery such as a hysterectomy or abortion can lead to infection of the surgical site.

Treatment

BV can be treated using either metronidazole or clindamycin, orally or as a vaginal gel or cream. Although oral treatment may be more convenient, it can also cause more side-effects and is only available on prescription from a doctor. Clindamycin cream is also available on prescription only.

Metronidazole vaginal gel is one of the most effective treatments for BV and is available over-the-counter in South Africa as a vaginal gel called MetroGel-V®. One applicatorful should be inserted per vagina for five consecutive nights. If the condition persists, the patient should see a doctor.

How to use Metrogel-V®

- MetroGel-V comes with an applicator that can be attached to the front of the tube after opening.

- Patients should squeeze the tube from the bottom until the applicator stops moving, which will indicate that it is filled with 5 g of the gel.
- Remove the applicator containing the gel from the tube and close the tube with the cap.
- Insert the applicator into the vagina, preferably while lying on the back with the knees bent. The gel should be inserted into the vagina by slowly squeezing the plunger until it stops.
- Discard the applicator immediately after use.

Treatment is not recommended for male partners of patients with BV. However, some experts recommend that male partners use condoms. If a partner is another female, she should be warned to monitor for signs and symptoms in order to get treatment, if necessary.

Contraindications

Metronidazole gel should not be used during menses or in pregnant and breastfeeding patients. The use of metronidazole has not been tested in children and its use is not recommended in this population. Metronidazole should be used with caution in patients with central nervous system diseases since seizures and peripheral neuropathy (tingling sensation in the limb(s)) have been reported with the use of metronidazole.

Possible side-effects

Adverse effects may include vaginal candidiasis, local itching, burning or swelling, abnormal vaginal discharge, increased pelvic pressure, abdominal pain and cramping, nausea, diarrhoea, constipation, metallic (abnormal) taste, reduced appetite, headache, dizziness, temporary lowered blood counts and a generalised rash and itching. The following adverse events have also been reported post-marketing with the use of metronidazole gel: incoordination, vomiting, insomnia, flushing, cystitis and incontinence.

Interactions

Oral use of metronidazole can interact with alcohol and other medication. Use with alcohol can result in flushing, nausea, thirst, palpitations (rapid heartbeat), chest pain, dizziness

and low blood pressure. Oral use of metronidazole can also increase the risk of bleeding in patients taking warfarin or other coumarin anticoagulants and increase the risk of toxicity in patients taking lithium. Although these interactions do not seem to occur with the use of metronidazole gel, the possibility of these interactions cannot be excluded with the use of the vaginal gel.

When to refer

Patients should be referred to a doctor for assessment and treatment if any of the following is present:

- Pain during urination or sex
- Redness, swelling and itching
- Abnormal bleeding
- Recurrent episodes (more than twice in six months)

Conclusion

Bacterial vaginosis is asymptomatic in the majority of cases and often clears by itself. It can, however, increase the risk of contracting other infections and can lead to complications in pregnant women and those scheduled for surgery. Metronidazole vaginal gel is an effective treatment option for BV and is available over-the-counter. Patients who do not respond to initial treatment with Metrogel-V® should consult a doctor.

References

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