

MetroGel® V – A metronidazole vaginal preparation

Compiled by Amayeza Drug Information Centre

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Approved indication

MetroGel V is indicated for the treatment of bacterial vaginosis.

Mode of action

Bacterial vaginosis (BV) is not caused by a single organism. It represents a complex change in vaginal flora characterised by a reduction in the prevalence and concentration of lactobacilli and an increase in the prevalence and concentration of *Gardnerella vaginalis*, Mobiluncus species, *Mycoplasma hominis*, aerobic gram-negative rods and bacteroides species.

Metronidazole is a synthetic antibacterial with activity against *Gardnerella vaginalis*, bacteroides species and *Mycoplasma hominis*.

Dosage

One applicatorful (37.5 mg/5 g dose i.e. a 0.75% preparation) is administered per vagina, once daily, at bedtime for five consecutive nights.

Evidence of efficacy

Bacterial vaginosis may be asymptomatic in 50 to 75% of women and resolves spontaneously in up to one-third of women. Treatment is indicated in women with symptomatic infection and may reduce the risk of acquiring other sexually transmitted diseases and HIV.

Metronidazole administered orally or intravaginally results in a high rate of clinical cure (70 to 80 % at four weeks of follow-up). In a clinical trial that compared oral metronidazole (500 mg twice daily for one week), vaginal metronidazole (5 g of a 0.75% vaginal gel administered twice daily for one week) and 2% clindamycin (5 g once daily for one week), all three treatment approaches achieved nearly equivalent cure rates but women using the vaginal products reported being more satisfied with their treatment.¹

In another clinical trial comparing the

efficacy and safety of oral versus intra-vaginal metronidazole for the treatment of bacterial vaginosis, the efficacy of 0.75% metronidazole vaginal gel was similar to that of standard oral metronidazole treatment and was associated with fewer gastrointestinal complaints.²

Precautions

o General

The product is contraindicated in patients with hypersensitivity to metronidazole, other nitroimidazoles or to parabens. Metronidazole should be used with care in patients with hepatic dysfunction, central nervous system disorders and a history of blood dyscrasias.

o Pregnancy & lactation

Metronidazole is contraindicated during pregnancy and lactation.

Major adverse effects

Adverse effects seen with oral metronidazole may also occur with vaginally administered metronidazole. Side effects of metronidazole include a metallic taste, nausea, transient neutropenia, a disulfiram-effect with alcohol and peripheral neuropathy.

Drug interactions

Metronidazole may interact with warfarin resulting in a prolongation of the prothrombin time. Lithium treatment should be tapered or withdrawn prior to administration of metronidazole. Concomitant administration may lead to lithium retention and the possibility of renal damage.

Cost: Single Exit Price

MetroGel V 40 g: R106.18

Patient information

- Vaginal candidiasis may present with more prominent symptoms during treatment with metronidazole vaginal gel and may require treatment with a candidicidal agent.

- Treatment with metronidazole vaginal gel should be undertaken during menses.
- Metronidazole may cause a disulfiram effect with alcohol.

Conclusion

While many patients may prefer the convenience of oral metronidazole treatment for bacterial vaginosis, vaginal administration is as effective and appears to be associated with a lower incidence of adverse effects.

References:

1. Ferris DG, Litaker MS, Woodward L, Mathis D, Hendrich J. Treatment of bacterial vaginosis: a comparison of oral metronidazole, metronidazole vaginal gel and clindamycin vaginal cream. *J Fam Pract* 1995;41(5):443-449.
2. Hanson JM, McGregor JA, Hiller SL, Eschenbach DA, Kreutner AK *et al*. Metronidazole for bacterial vaginosis: A comparison of vaginal gel vs. oral therapy. *J Reprod Med* 2000;45(11):889-896.
3. Sobel JD. Bacterial vaginosis. Uptodate.com
4. Metrogel V Package Insert.