

BACTERIAL VAGINOSIS

What's New ...

Tinidazole no longer available

Delaquinium chloride is a licensed 2nd line option

Note IUSTI guideline advice that BV commoner in women with an IUCD

Bacterial Vaginosis is the most common microbiological cause of abnormal vaginal discharge. It is caused by an overgrowth of anaerobic organisms.

Clinical features

- Thin, offensive smelling vaginal discharge
- Vaginal odour
- Frequently recurs

NB: Not typically associated with itch, soreness or irritation

Signs

- Thin, white homogenous discharge coating introitus and vaginal walls, it may look slightly frothy. A characteristic odour is often noted

NB: vulval inflammation is not typical in BV

Diagnosis

In genitourinary settings two approaches to the diagnosis of BV are widely used: Amsel's criteria and the Hay/Ison criteria ¹: Both require microscopy to be available, which is not always the case in sexual health clinics. Where available, microscopy can be used, but syndromic management is supported by national guidelines ^{1,2}

The Hay/Ison criteria (used in the NaSH microscopy page) are:

Grade 0 no bacteria seen

Grade 1 (Normal): Lactobacillus morphotypes predominate

Grade 2 (Intermediate): Mixed flora with some Lactobacilli present, but Gardnerella or Mobiluncus morphotypes also present

Grade 3 (BV): Predominantly Gardnerella and/or Mobiluncus morphotypes. Few or absent Lactobacilli.

Grade 4 Gram positive cocci predominate (consider aerobic vaginitis)

Amsel's criteria are at least three out of:

- (1) Thin, white, homogeneous discharge
- (2) Clue cells on microscopy of wet mount
- (3) pH of vaginal fluid >4.5
- (4) Release of a fishy odour on adding alkali (10% KOH).

History

Diagnosis can be made on the basis of

- history of offensive, non-itchy discharge
- absence of pelvic/vulval pain and abnormal bleeding
- Patient is not pregnant, post-partum or post-gynaecological instrumentation
- Vaginal pH >4.5

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West of Scotland Guideline

Approved May 2021

It is important to take a sexual history to consider the risk of STI and offer STI testing as appropriate as Chlamydia and Gonorrhoea can co-exist. A cervical screening history should be taken as cervical cancer is a differential diagnosis of a smelly discharge. Also consider if a tampon could have been retained.

Examination

If possible undertake vulval and speculum examination to visualise any discharge. Inspect the cervix to exclude any abnormality as a cause of offensive discharge.

Tests options

- Vaginal pH: collect a specimen of the discharge from the vaginal walls with a loop or swab and apply to narrow gauge pH 4-7 testing strip paper. e.g. from Whatman www.whatman.com. Normal vaginal pH is <4.5 and a pH above this is seen in BV. NB: Semen, blood and some lubricants are also alkaline.
- Alternatively VISION ph sticks can be used these are available from www.sutherlandhealth.com
- *If available – Microscopy*
 1. Wet mount to look for clue cells
 2. Gram stained slide from vaginal wall. BV suggested if: absent or reduced lactobacilli; predominance of gardnerella/mobiluncus morphotypes (Hay/Ison grade 3)¹

N.B. Slides can be air dried and sent to the lab for staining and microscopy. Check local arrangements

Not recommended:

High vaginal swabs are of limited value in diagnosing BV as organisms such as gardnerella can be present in 30-40% asymptomatic women. A culture reported as normal does not exclude clinical BV. Microscopy and vaginal pH are far more useful and women reporting recurrent symptoms are better to have a microscopy slide taken.

Management

Asymptomatic women do not need treatment (asymptomatic women should not be being diagnosed as without symptoms there is no indication to take a test).

General advice

The best ways of preventing BV are not know but avoiding anything that upsets the natural balance of bacteria in the vagina may help. This includes avoiding:

- Douching
- Frequent washing or bathing
- Bubble baths, scented soaps, antiseptics such as Dettol and feminine washes

Use of emollients as a soap substitute for the genital area (available from any pharmacy) is recommended.

BV is more common in women with an IUCD⁵

If a woman is experiencing recurrent episodes of BV alternative methods can be discussed.

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Medication

1st line

Metronidazole 400mg oral twice daily 5-7 days (slightly lower relapse rate)

1st line in pregnancy

OR

Metronidazole 2g single oral dose (not recommended in pregnancy)

- Other 1st line options intravaginal metronidazole gel (0.75%) per vagina once daily for 5 days OR intravaginal clindamycin 2% cream per vagina once daily for 7 days (nb these vaginal preparations weaken condoms, clindamycin also has a risk of pseudomembranous colitis) These are significantly more expensive than oral metronidazole
- Advise patients to avoid alcohol during and for 48 hours after any metronidazole treatment due to the combination being likely to cause nausea and vomiting, tachycardia, hot flushes and palpitations

2nd Line

Clindamycin 300mg oral twice daily 7 days (risk of pseudomembranous colitis)

Or

Dequalinium chloride 10mg vaginal tablets One 10mg vaginal tablet daily for six days⁶

Insufficient evidence to assess effectiveness but anecdotally useful

Licensed indications:

Treatment of BV in adults

Relactagel® : 5 mL (1 tube) to vagina nightly for 7 nights

Relactagel® is unsuitable for people with an allergy to shellfish as the glycogen is derived from oysters. There may be a potential risk to a partner who is allergic to shellfish if these have been used.

Balance Activ® is not licenced for treatment

BV and Pregnancy

Refer to WOS Pregnancy and STI's Guideline instead

Follow up

Non-pregnant women: Not necessary unless symptomatic

Pregnant women: test of cure after a month¹

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Partner notification

No evidence of benefit in studies of screening and treating male partners
 No studies of treatment in female partners although high incidence in female partners of women with BV. If a female partner is asymptomatic treatment need not be offered routinely.

Symptoms Persist Despite Treatment (i.e. client reports no response)

Consider alternative diagnosis
 Check compliance with treatment
 Try alternative therapy option - longer course of metronidazole may be more effective than single dose

Sporadic Recurrences

Up to 30% of women have a recurrence within 3 months

Examination and investigation should be considered but may not be necessary if a previous episode of the signs and symptoms of BV responded to antibiotic treatment, and there are no grounds to suspect an STI or cervical abnormality.

Frequent Recurrences of Bacterial Vaginosis

This is widely defined as more than four recurrences per year.

Speculum examination should be carried out. The diagnosis should be confirmed with microscopy or HVS.

Negative swabs (or negative dry slide) and persistent symptoms should prompt referral to a sexual health clinic with microscopy available.

Persistent, symptomatic BV may be associated with the presence of an IUD and an alternative method of contraception may need to be considered if there is no response to therapy.

Suppressive/preventive treatment

400mg metronidazole oral twice daily for 3 days at start and/or end of menstruation
 Or
 5g 0.75% metronidazole gel intravaginally twice weekly for 16 weeks¹
 Or
 Relactagel®: 5 mL (1 tube) nightly to vagina for 2–3 nights after menstruation⁵
 or
 Balance Activ RX gel® 5 mL (1 tube) to vagina 1–2 times a week

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3. NHS Clinical Knowledge Summaries, Bacterial Vaginosis last revised 2018 [Bacterial vaginosis | Health topics A to Z | CKS | NICE](#) accessed 14/05/2021
4. https://www.scottishmedicines.org.uk/SMC_Advice/Advice/1194_16_dequalinium_Fluomizin/dequalinium_Fluomizin
5. Sherrard, J., Wilson, J. and Donders G. et al. (2018) 2018 European (IUSTI/WHO) guideline on the management of vaginal discharge. <http://www.iusti.org> accessed 14/05/2021

British National Formulary prices accessed February 2021 NB local contracts may result in different prices

Metronidazole 2g	£1.07*
Metronidazole 400mg b.d. 7 days	£3.50-4.50
Metronidazole gel	£4.31
Clindamycin 2% Cream	£10.86
Clindamycin 300mg b.d. 7 days	£17.84
Relactagel 7 x 5ml tubes	£5.25
Balance Activ 7 x 5ml tubes	£5.25
Delquinium Chloride(Fluomizin)	£6.95

*Not in BNF : local over labelled pack price 2020

Patient information leaflets available at

BV information leaflet

https://www.bashhguidelines.org/media/1124/bv_pil_print_2014.pdf (accessed 14/05/2021)

What do you know about...Vaginal health?

<http://www.healthscotland.com/documents/3419.aspx>

online versions in English, Polish, Chinese, Urdu, Romanian (accessed 14/05/2021)

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