



- □ Causes of vaginal discharge include physiological, infective (e.g. bacterial vaginosis, candidiasis, trichomoniasis) and non infective (foreign bodies, cervical ectopy and genital tract malignancy).
- □ Bacterial vaginosis (BV) causes about half the cases and is due to overgrowth of mixed anaerobes that replace normal vaginal lactobacilli. BV arises and remits spontaneously in both sexually active and inactive women. 1
- □ Acute vulvovaginal candidiasis is also very common and in 80% is caused by overgrowth of C. albicans. It is most common in women aged 20-30 and in pregnancy as oestrogens promote its growth. 1,3 BASHH Candidiasis
- □ Some **Sexually transmitted Infections** (STIs) may present with vaginal discharge due to cervicitis. **Chlamydia** and **Gonorrhoea** are the most common bacterial STIs in the UK. ^{4,5} BASHH Chlamydia and Gonorrhoea
- □ Trichomonas vaginalis (TV) is a less common cause and is found in about 3% of women presenting with infective vaginal discharge and is almost exclusively sexually transmitted.² BASHH Trichomoniasis

DIAGNOSIS OF VAGINAL DISCHARGE IN PATIENTS > 25 YEARS USING SYMPTOMS & SIGNS Vaginal Discharge If at risk of STIs refer to GUM or send **Clinical and Sexual History** vaginal, endocervical swab or urine for chlamydia and gonorrhoea Vaginal pH helps in diagnosis. 3,6-8 Use a swab to collect discharge from the lateral vaginal pH ≤ 4.5 wall and rub it onto narrow range pH paper. (Narrow pH > 4.5range pH paper (range 3.8-5.5) from medical lab suppliers www.Camlab.co.uk * Discharge has other Thin, grey/white ellow, green frothy White curdy No other appearance homogeneous discharge discharge discharge symptoms Fishy/offensive odour coating the vaginal walls Other signs: Fishy/offensive odour +/- pruritis, vaginitis, Vulval itching Not generally sore Dysuria Consider other or soreness causes Erythema/vaginitis Physiological Fissuring Foreign body STIs No further Diagnose Diagnose Streptococcal¹⁰/ investigations **Bacterial Vaginosis Trichomoniasis** Diagnose Staphylococcal needed (most common) (less common) Candida infections Give empirical Send HVS for culture therapy 1,3 Also send: vaginal, Reassure that Give empirical therapy⁹ **Culture** not Refer to GUM endocervical swab or probably Microscopy & culture Send HVS to lab for needed unless physiological urine for chlamydia **NOT** required TV & other STIs recurrent and gonorrhoea

WHEN TO INVESTIGATE IF UNDER 25 YEARS ALWAYS OFFER AN ANNUAL CHLAMYDIA SCREEN¹¹

- Consider Nucleic Acid Amplification tests (NAATs) for Chlamydia +/- Gonorrhoea for women if:11-13
 - < 25 years old

Α

- symptoms indicative of upper reproductive tract infection
- a new sexual partner in the last 12 months
- more than one sexual partner in the last 12 months
- Nomen of reproductive age with vaginal discharge should have a high vaginal swab (HVS) cultured if:3,7,9,14
- postnatal or post miscarriage
- vaginitis without discharge
- pre or post gynaecological surgery
- pre or post termination of pregnancy^{9,14}
- symptoms not characteristic of BV or Candida
- within 3 weeks of intrauterine contraceptive insertion
- recurrent (≥ 4 cases/year)^{7,15}
- previous treatment failed
- Endocervical swab & culture should be reserved for those with signs and symptoms compatible with Gonorrhoea C and/or a positive chlamydia or GC NAAT results, to test for susceptibility and identify resistant strains. BASHH GC
- Consider referral to GUM for further investigation if: С
 - the diagnosis is in doubt

- GC or TV is suspected (TV should always be managed in GUM)
- positive NAAT result. RCGP/BASHH STI symptoms persist

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SENDING SPECIMENS TO THE LABORATORY FOR DIAGNOSIS

C Clinical details: Submitted samples should include the following clinical information to guide laboratory testing: nature of the vaginal discharge, any risk or suspicion of sexually transmitted disease, and associated symptoms.

HOW DO I SAMPLE?

- A- HVS for culture: After introduction of speculum, roll swab anywhere on vaginal wall to obtain discharge. 16
- **Endocervical swab for GC culture:** Clean the cervical os with a large sterile swab and discard. Insert a new swab into the endocervix and rotate 360 degrees. The swab the external os 360 degrees if os stenosed. RCGP/BASHH STI
- **A- NAAT for chlamydia or gonorrhoea:** Submit 15 to 20ml **first void** urine, ¹⁸ self taken vaginal swab or endocervical swab using kit with plastic (not wooden) shafted swab provided by local lab. Do NOT put in charcoal medium. ¹¹

TRANSPORTING SPECIMENS TO THE LAB

- A Transport medium for bacterial culture: Place all swabs in Amies transport medium WITH charcoal. 19
- C Transport of culture swabs to the lab: 19-21
 - ☐ Transport samples to the laboratory as soon as possible.
 - □ Refrigerate swabs at 4°C if NOT immediately sent to the laboratory.
 - □ HVS for suspected Trichomoniasis should arrive in the laboratory within 6 hours
 - □ Other swabs should be received by the laboratory within 48 hours

KEY A B C indicates grade of recommendation

This guidance was developed by the South West GP Microbiology Laboratory Use Group in collaboration with GPs, BIA and experts in the field and is in line with other UK GP guidance including CKS

Grading of guidance recommendations

Study Design	Recommendation Grade
Good recent systematic review of studies	A+
One or more rigorous studies, not combined	A-
One or more prospective studies	B+
One or more retrospective studies	B-
Formal combination of expert opinion	C
Information opinion, other information	D

Medline searches: 2010 Medline searches using key words from 1960 (a) candida and vulvovaginitis or vaginal discharge (b) high vaginal swab (c) chlamydia trachomatis and symptoms & signs (d) vaginal discharge and swab (c) from 2006 vaginal discharge

LOCAL ADAPTATION:

- We would discourage major changes to the guidance but the Word format allows minor changes to suit local service delivery and sampling protocols.
- To create ownership agreement on the guidance locally, dissemination should be taken forward in close collaboration between primary care clinicians, laboratories and secondary care providers.

*Camlab UK indicator papers CE marked for conformity pH 3.1-8.3 narrow range see http://www.camlab.co.uk/ph-indicator-strips-p14538.aspx for further information (Accessed 25.07.13)



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References and Related Websites

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had the typical bacterial flora of anaerobic (bacterial) vaginosis, 95 (24%) had candidal infection, 32 (8%) chlamydial infection, 3 (0.75%) trichomonas infection, and 1 (0.25%) gonorrhoea. Postoperative follow-up of 30 of the women with chlamydial infection showed that pelvic infection developed in 19 (63%), of whom 7 were readmitted to hospital.(14)

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We welcome, in fact encourage, opinions on the advice given and future topics we should cover. We would be most appreciative if you could email any evidence or references that support your requests for change so that we may consider them at our annual review. Comments should be submitted to Dr Cliodna McNulty, Head of PHE Primary Care Unit, Microbiology Laboratory, Gloucestershire Royal Hospital, Great Western Road, Gloucester GL1 3NN. Email: cliodna.mcnulty@phe.gov.uk or katherine.butler@phe.gov.uk

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