

26 March 2021

Dear Colleagues,

## Changes to vaginal culture swab processing

We have been reviewing our laboratory processes for vaginal culture swabs. The main purpose of this test is to detect bacterial vaginosis (BV) or candidiasis in women with vaginal discharge or other symptoms of vaginitis.

The Gram stain is the gold standard investigation for both BV and candidiasis.<sup>1-3</sup>

- BV diagnosis utilises a validated scoring system based on the presence or absence of different bacterial morphotypes seen on the Gram stain;<sup>3</sup> culture is not required.
- Candidiasis is part of the normal vaginal flora and culture cannot differentiate candida infection from colonization; hence, culture may over-estimate the presence of candidiasis and lead to unnecessary antifungal therapy. Candida infection is indicated on the Gram stain by presence of yeast cells with fungal hyphae and white blood cells (indicating inflammation).<sup>1,2</sup>

Relying on Gram stain diagnosis has the added benefit of improving the test turn-around-time since it does not require 48hrs for culture.

As such, from **April 12<sup>th</sup> 2021** we will perform Gram stain but no longer routinely culture vaginal swabs unless the following clinical details are provided on the request form:

1. Recurrent candidiasis/treatment failure (cultured for non-albicans *Candida* spp +/- antifungal susceptibilities performed)
2. Symptoms post partum, endometritis or post gynaecological surgery (cultured for staphylococci, streptococci, and ESBL-producing Enterobacterales)
3. Rupture of membranes (cultured for Group B streptococcus)
4. Toxic shock (cultured for Group A streptococcus and *Staphylococcus aureus*)

Requesting via the eOrder system will prompt you to provide the appropriate detail.

Please note: BV and candidiasis are not considered to be sexually transmitted infections; requests stating “STI screen” (or similar) without the presence of symptoms do not require a Gram stain and will not be processed. Screening for BV or candidiasis in asymptomatic women, including if pregnant or prior to IUCD insertion, is also not generally recommended (with the exception of pre-TOP screens which will continue to have Gram stain for BV in the usual way).

Processing criteria for pregnancy Group B Streptococcus vaginal/rectal screens and NAAT swabs for chlamydia/gonorrhoeae are **unchanged**.

Clinical details continue to be mandatory for all genital swabs. Please take the time, as always, to provide good quality clinical information with every sample to help ensure appropriate and timely processing. Your help with this is greatly appreciated.

For any questions, comments or other feedback please contact:

Dr Juliet Elvy, Clinical Microbiologist, 0278393726, [Juliet.elvy@medlabsouth.co.nz](mailto:Juliet.elvy@medlabsouth.co.nz)

Dr James Ussher, Clinical Microbiologist, [james.usscher@sclabs.co.nz](mailto:james.usscher@sclabs.co.nz)

**References:**

1. Saxon, C, *et al.* British Association for Sexual Health and HIV national guideline for the management of vulvovaginal candidiasis (2019). *Internat J STD AIDS* 2020; 31:1124–44.
2. Clinical Microbiology Procedures Handbook, 2<sup>nd</sup> Edition vol 1.
3. Nugent RP, *et al.* Reliability of diagnosing bacterial vaginosis is improved by a standardized method of Gram stain interpretation. *J Clin Microbiol* 1991; 29:297-301.