

FAMILY
MEDICINE
SUMMIT
MARCH 6-8, 2020



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Rimrock Resort Hotel | Banff, AB

*65
Years*



ALBERTA COLLEGE of
FAMILY PHYSICIANS

Cytolytic Vaginosis: A Systematic Scoping Review

Roni Kraut, Suzwant Gill, Sandy Campbell & Fabiola Diaz Carvalho

What's Up Doc? Research Showcase

March 6, 2020



Presenter: Fabiola Diaz Carvalho

Disclosures

- Speakers Bureau/Honoraria: University of Alberta, Canadian Public Health Association
- Consulting Fees: N/A
- Grants/Research Support: N/A
- Patents: N/A
- Other: N/A



CC: vulvovaginitis x 10 years



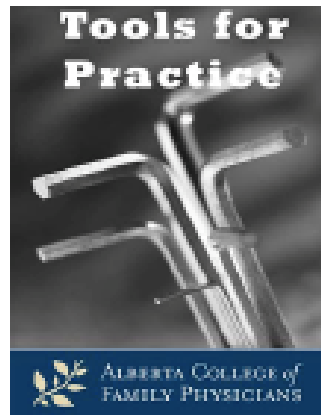
Symptoms:

- **Milky white discharge**
- **Burning and pruritus 7/10**
- **Worse during luteal phase**

Chronic yeast infection?



January 23, 2017



Recurrent Vulvovaginal Candidiasis: Can the yeast be beat?

Clinical Question: What is the most effective management for women with recurrent vulvovaginal candidiasis (four or more episodes within one year)?

Bottom Line: Prophylaxis with six months of azole therapy (like fluconazole) will result in relapse in 9-19% of women compared to 50-64% on placebo (one fewer woman would relapse for every 2-4 treated). Efficacy, however, declines after therapy cessation and clinical cure remains elusive. Limited evidence suggests women may prefer episodic over maintenance therapy.

GENERAL GYNECOLOGY

Individualized decreasing-dose maintenance fluconazole regimen for recurrent vulvovaginal candidiasis (ReCiDiF trial)

Gilbert Donders, MD, PhD; Gert Bellen, RN; Geert Byttebier, MSc; Luc Verguts, MD; Piet Hinoul, MD; Ronald Walckiers, MD; Michel Stalpaert, MSc; Annie Vereecken, MPharm; Johan Van Eldere, MD, PhD

OBJECTIVE: Although many women with recurrent vulvovaginal candidiasis initially benefit from prophylactic intermittent treatment with antimycotics, most of them experience relapse after cessation of therapy, and often they return to the pretreatment recurrence rate. The purpose of this study was to demonstrate the efficacy and safety of an individualized, degressive, prophylactic regimen in 136 women with recurrent vulvovaginal candidiasis.

STUDY DESIGN: After an induction dose of 600 mg fluconazole during the first week, 117 women started maintenance therapy: 200 mg fluconazole weekly for 2 months, followed by 200 mg biweekly for 4 months, and 200 mg monthly for 6 months, according to their individual response to therapy. All women were tested for recurrences monthly with wet mount microscopy and vaginal culture during the first 6 months and bimonthly during the next 6 months. Patients were allowed to move on to the next level of maintenance therapy only if they were symptom free and microscopy and culture negative.

RESULTS: Of the women who were cured successfully after the induction phase, 101 women (90%) were disease-free after 6 months

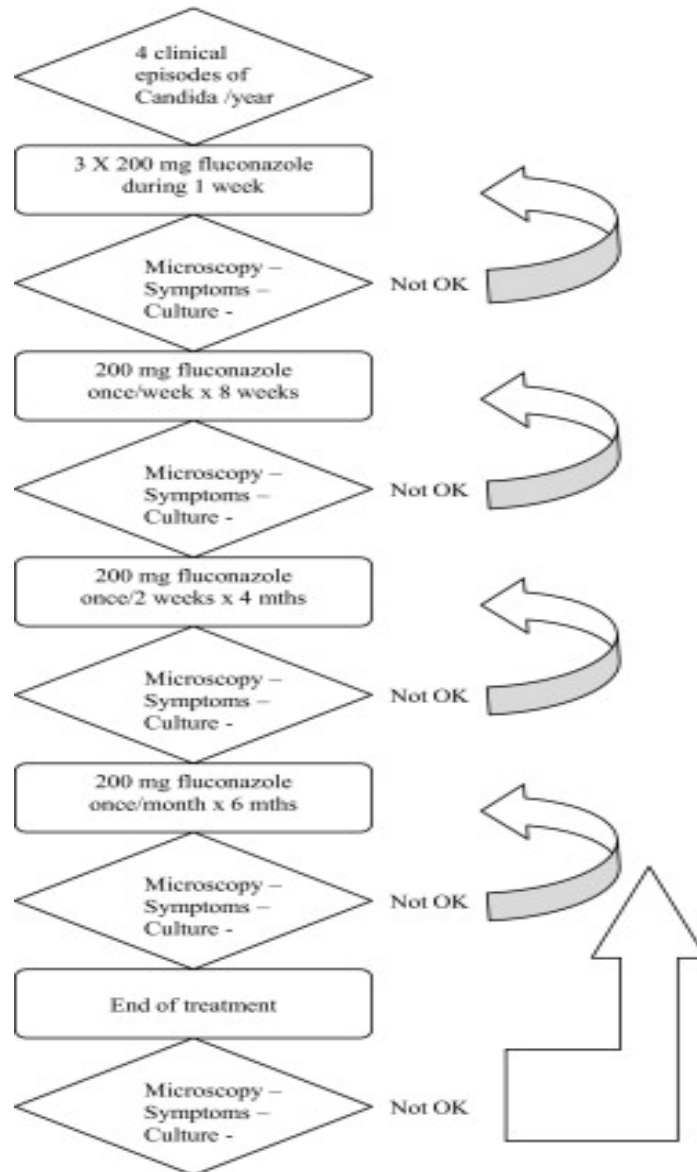
of maintenance therapy with this degressive regimen, and 80 women (77%) were disease-free after 1 year. The weekly incidence of the first clinical relapse was 0.5% during any period of the maintenance phase, and the rate of all new relapses, which included evidence of mycologic or microscopic colonization, was 1% per week. Women who experienced several relapses (poor responders) had experienced more relapses before entering the study compared with the optimal responders (odds ratio, 4.9; 95% CI, 1.8-13.7; $P = .002$), experienced the disease for a longer period of time (6.5 vs 3.7 years; $P = .06$), and harbored significantly more *Candida* non-albicans during maintenance therapy ($P = .001$). No serious side-effects were noted.

CONCLUSION: Individualized, degressive, prophylactic maintenance therapy with oral fluconazole is an efficient treatment regimen to prevent clinical relapses in women with recurrent vulvovaginal candidiasis.

Key words: candidiasis, chronic disease, fluconazole, prophylactic treatment, vaginitis

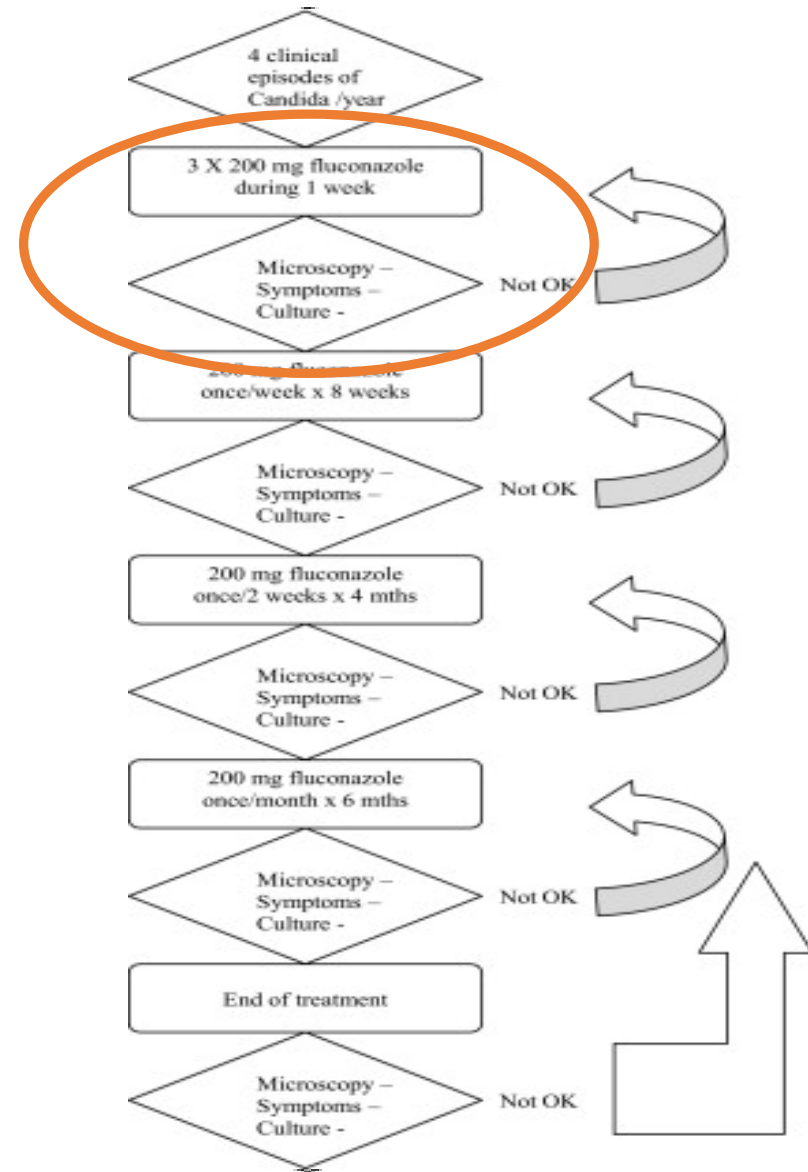


FIGURE 1
ReCiDIF trial schema



Donders. Individualized decreasing-dose maintenance fluconazole regimen for recurrent vulvovaginal candidiasis. Am J Obstet Gynecol 2008.

FIGURE 1
ReCiDIF trial schema



Donders. Individualized decreasing-dose maintenance fluconazole regimen for recurrent vulvovaginal candidiasis. Am J Obstet Gynecol 2008.

What about cytolytic vaginosis?



Cytolytic what???





Time Collected	19-Dec-2018 12:30	Time Received	19-Dec-2018 12:30
Time Reported	31-Dec-2018 14:39	Time Transmitted	22-Dec-2018 13:57
Order Number	[REDACTED]	Ordering Provider	[REDACTED]
Status	Final	Relevant Information Location	DKM

Report Patient Demographics (for verification purposes)
Date of Birth: [REDACTED]
Sex: F

SPECIMEN DESCRIPTION
VAGINAL

INFORMATION/REQUESTS
ATTN TO [REDACTED], EXAMINE FOR CYTOLYTIC VAGINOSIS

DIRECT EXAM
3+ Intact Epithelial cells seen
3+ Fragmented Epithelial cells seen
4+ Gram positive bacilli (lactobacilli)
Smear reviewed [REDACTED] Microbiologist 2
0 NOV 2018

RESULTS
3+ Lactobacillus jensenii ... Susceptibility testing for this organism is not standardized. Results are probable but not definite.
1+ Candida albicans (presumptive)
1+ Genital flora
FURTHER REPORT 31 Dec 2018 at 1439
Updated organism identification.

REPORT STATUS
FINAL
31/Dec/2018

ORGANISM
Lactobacillus jensenii



Objective:

What has been published in the literature on cytolytic vaginosis and where is further research warranted?



PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation

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Scoping reviews, a type of knowledge synthesis, follow a systematic approach to map evidence on a topic and identify main concepts, theories, sources, and knowledge gaps. Although more scoping reviews are being done, their methodological and reporting quality need improvement. This document presents the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) checklist and explanation. The checklist was developed by a 24-member expert panel and 2 research leads following published guidance from the EQUATOR (Enhancing the QUALity and Transparency Of health Research) Network. The final checklist contains 20 es-

sential reporting items and 2 optional items. The authors provide a rationale and an example of good reporting for each item. The intent of the PRISMA-ScR is to help readers (including researchers, publishers, commissioners, policymakers, health care providers, guideline developers, and patients or consumers) develop a greater understanding of relevant terminology, core concepts, and key items to report for scoping reviews.

Ann Intern Med. 2018;169:467-473. doi:10.7326/M18-0850

Annals.org

For author affiliations, see end of text.

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447 studies



49 unique studies



25 unique research papers

Prevalence (n=9):

Cross sectional

2005 (2003 – 09)

0.6 (0.8-1.4)

China, Turkey, Bulgaria,
Sweden, US

Risk factor (n=2):

Cross sectional

2008 (2006-09)

0.7 (0.7-0.7)

Brazil

Micro (n=6):

*Case series, cross
sec., case-control*

2017 (2015-19)

1.6 (1.5 – 2.5)

China, Brazil, Portugal,
Bulgaria

Assoc. (n=8):

*Cross-sec., case
control, cohort*

2012 (2000-15)

1.3 (0.2 – 1.6)

Brazil, Portugal, Sweden,
Czech Republic, Iran



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Asymptomatic women (n=2)

1 – 2%

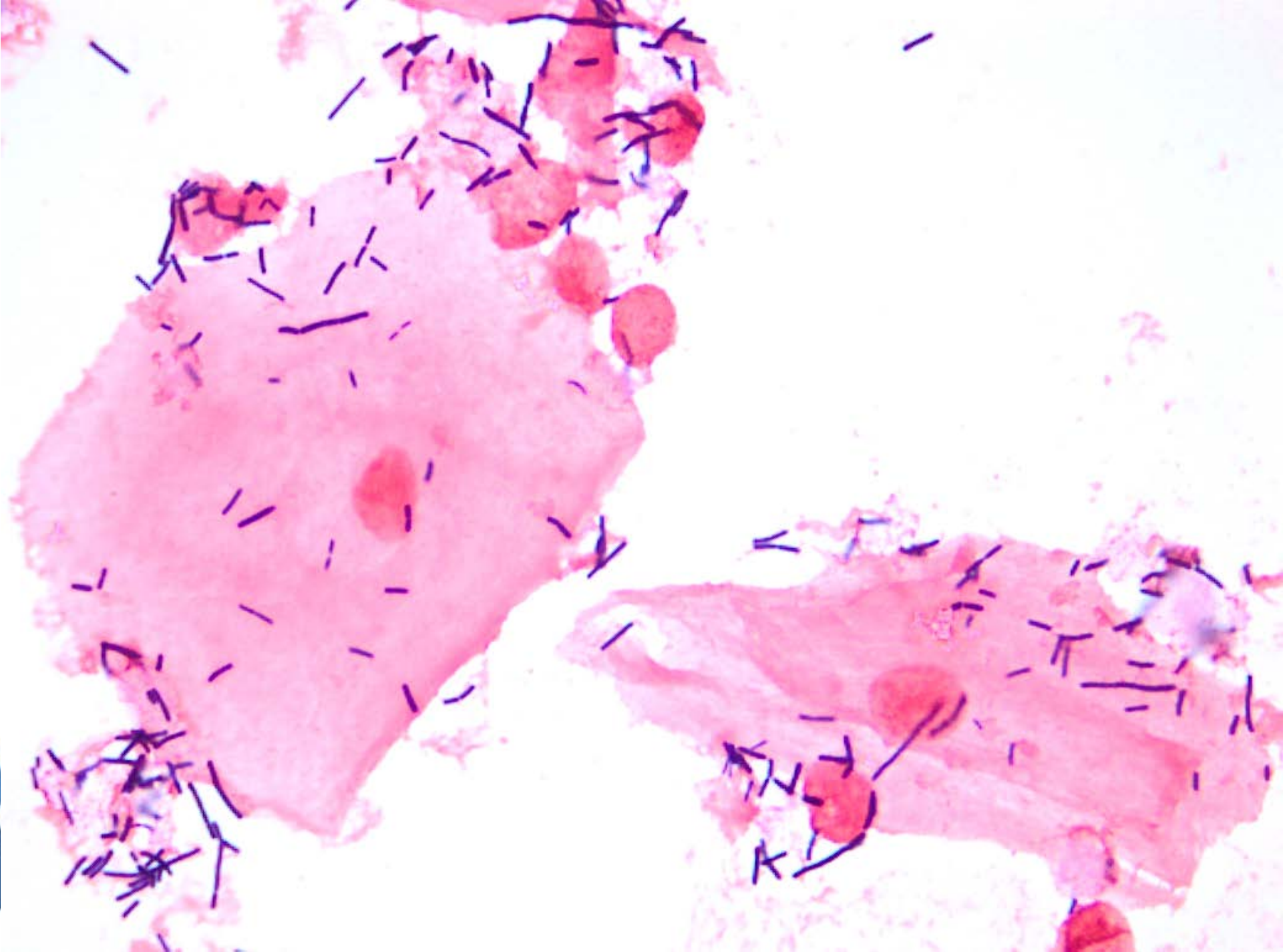
Symptomatic women (n=4)

2 – 15%

Recurrent symptoms (n=1)

27%

Not given (n=2)



Cells (n=2): Epithelial cells fragmented and abundant lactobacilli

Microbiome (n=1): Less diverse

Sampling site (n=1): Best from anterior fornix

Other (n=2): Elevated levels of L lactic acid and increased cellular apoptosis

Conclusion

More studies are needed:

- Prevalence in developed countries?
- How do you best diagnose it?
- How to you best treat it?

What about changing how vaginal swab results are reported...



From...

GENITAL YEAST CULTURE, DIRECT EXAM, GENITAL

Time Collected	08-Dec-2016 19:40	Time Received	08-Dec-2016 19:40
Time Reported	09-Dec-2016 08:47	Time Transmitted	09-Dec-2016 08:48
Order Number	[REDACTED]	Ordering Provider	[REDACTED]
Status	Final	Relevant Information	
		Location	DKM

Report Patient
Demographics (for
verification purposes)
[REDACTED]
Sex: F

SPECIMEN DESCRIPTION
VAGINAL

RESULTS
Smear **NEGATIVE** for Bacterial Vaginosis

REPORT STATUS
FINAL
09/Dec/2016

SPECIMEN DESCRIPTION
VAGINAL

RESULTS
In compliance with Alberta Health Services standardized Provincial guideline for the diagnosis of vulvovaginal candidiasis, yeast cultures are not performed unless there is a clinical history of recurrent vaginal candidiasis and/or treatment failure and/or immunosuppression. PLEASE NOTE: Yeast is routinely reported when seen microscopically in direct smears of vaginal specimens.

REPORT STATUS
FINAL
09/Dec/2016



To...

VAGINAL CULTURE

Time Collected	09-Sep-2019 22:25	Time Received	09-Sep-2019 22:25
Time Reported	11-Sep-2019 21:35	Time Transmitted	11-Sep-2019 21:42
Order Number	[REDACTED]	Ordering Provider	[REDACTED]
Status	Final	Relevant Information	
		Location	DKM

Report Patient [REDACTED]
Demographics (for verification purposes) [REDACTED]
Sex: F

SPECIMEN DESCRIPTION

VAGINAL

INFORMATION/REQUESTS

ATTN [REDACTED]
ONGOING SYMPTOMS
EXAMINE FOR CYTOLYTIC VAGINOSIS
DOING SERIAL SWABS DURING CYCLE
Collection date not indicated.

DIRECT EXAM

1+ WBC seen
4+ fragmented epithelial cells
2+ intact epithelial cells
4+ Gram positive bacilli (lactobacilli)
1+ Other vaginal flora
Yeast seen. Candida species are normal flora in the genital area of 30 to 40 percent of women. The presence of yeast must be correlated with clinical picture.
Smear NEGATIVE for Bacterial Vaginosis
Smear reviewed by [REDACTED] Microbiologist

RESULTS

4+ Candida albicans (presumptive)
4+ Genital flora

REPORT STATUS

FINAL
11/Sep/2019



Questions?

