

Vaginitis Updates

October 7, 2026

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NYS Clinical Education Initiative Conference:

Current Trends and Hot Topics in HIV, STIs, HCV, and SUD

Reserve your seat to join CEI **in-person** for an engaging, full-day program to learn the latest clinical updates in HIV, STIs, HCV and SUD!



**REGISTER
TODAY!**

Event Highlights

- 1 Keynote Speaker**
Dr. Demetre Daskalakis will share his experience and expertise
- 2 Engaging Panel Discussion**
Featuring CEI's Medical Directors on converging epidemics
- 3 Insightful Breakouts**
Focused on our areas of expertise
- 4 Connection & Community**
With fellow clinicians and colleagues

 **09 NOVEMBER 2026**

 **8:30 am to 3:30 pm**

 **THE DESMOND HOTEL**
660 Albany Shaker Road
Albany, NY • 12211

 **LUNCH PROVIDED**



CEITRAINING.ORG

CEI Conference

November 9, 2026

Albany, NY



Poll 1: What conferences and/or professional development activities do you attend? *Check all that apply.*

- A. NYS state-based conferences or meetings (e.g. CEI conference, NYS FP provider meeting)
- B. National conferences (e.g. National Reproductive Health Conference)
- C. Webinars
- D. In-house training (e.g. grand rounds)
- E. Other - *please share in chat!*

Congenital Syphilis Elimination Framework



New York State
Congenital Syphilis
Elimination Strategic
Planning Group

1

THE FRAMEWORK

Developed through collaboration with partners across New York State to identify strategies and recommendations for preventing congenital syphilis and improving outcomes for pregnant people and infants.

2

FROM STRATEGY → ACTION

The framework is moving into implementation, with partners engaging as Advocates, Implementers, and Sustainers to help advance recommendations across systems and communities.

3

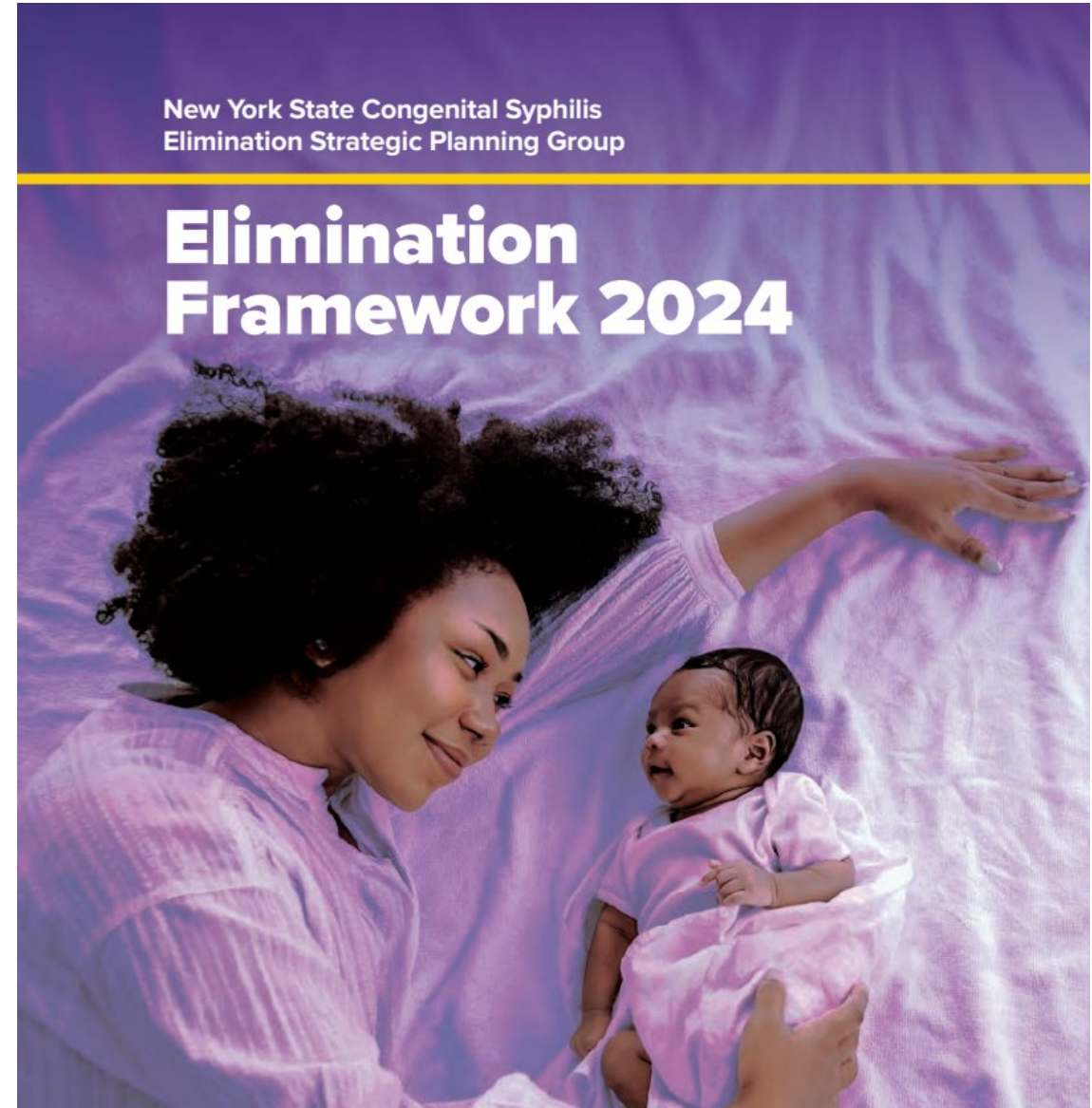
LEARN MORE / GET INVOLVED

Explore the Congenital Syphilis Elimination Framework

Email: csesp@health.ny.gov
Subject: Join the effort

Clinical and reproductive health providers are essential partners in translating the framework into practice.

Congenital Syphilis Elimination Strategic Planning Project



Upcoming NYSFPTC Events:



- Identifying Missed Revenue Opportunities
 - **October 14, 12-1:15 PM.** [Register here](#)



- Health Educator Affinity Group
 - **October 15, 12-1 PM;** [Register here](#)



- Leveraging Telehealth in FP: Updates and Opportunities
 - **November 02, 12-1 PM;** [Register here](#)

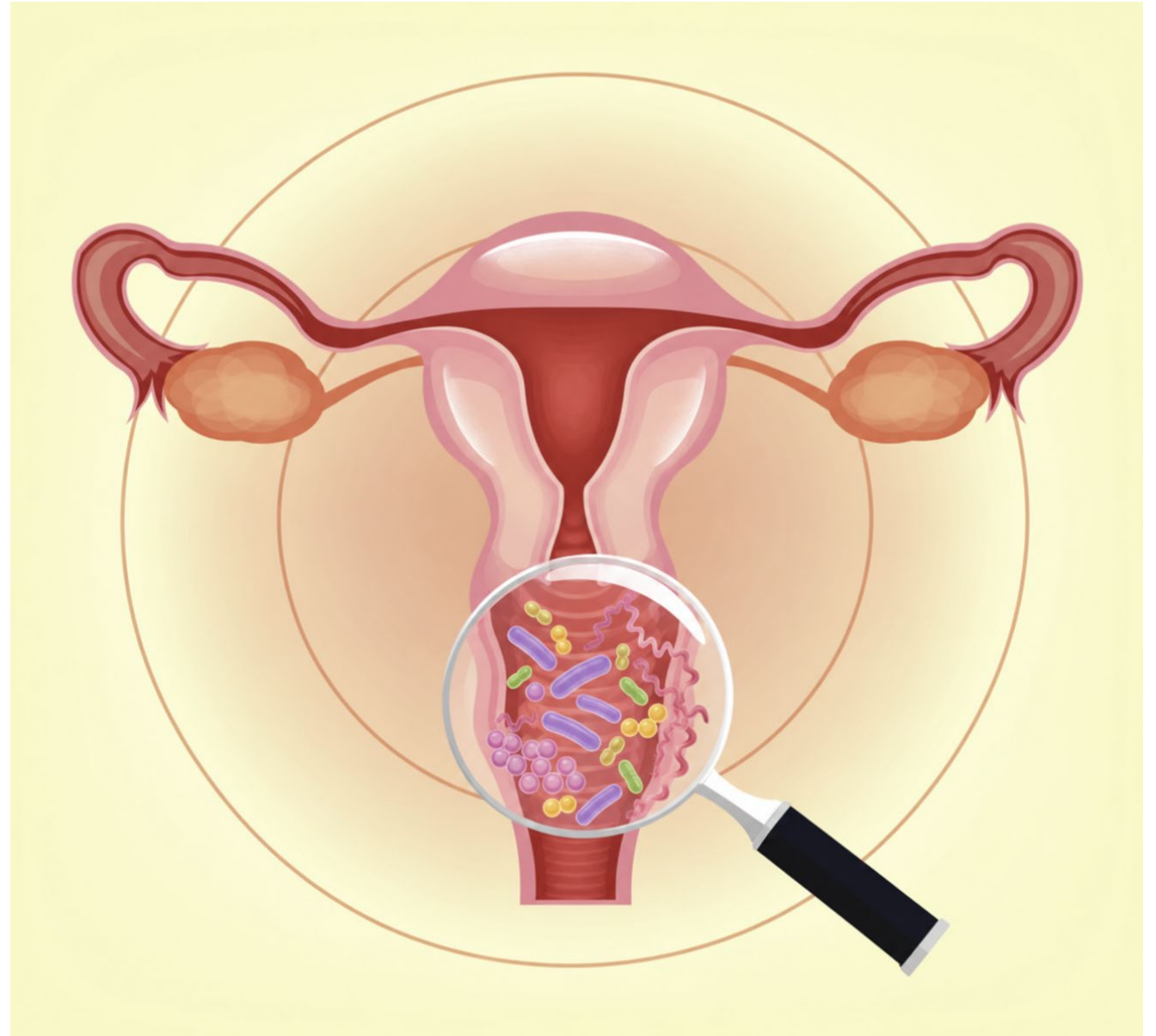
Speaker



Samantha Hill, MD
University of Rochester

Vaginitis: Bacterial Vaginitis, Vulvovaginal Candidiasis, and Trichomonas

Samantha Hill, MD



Objectives

01

Differentiate the major causes of vaginitis using history, examination, pH, microscopy, and molecular testing

02

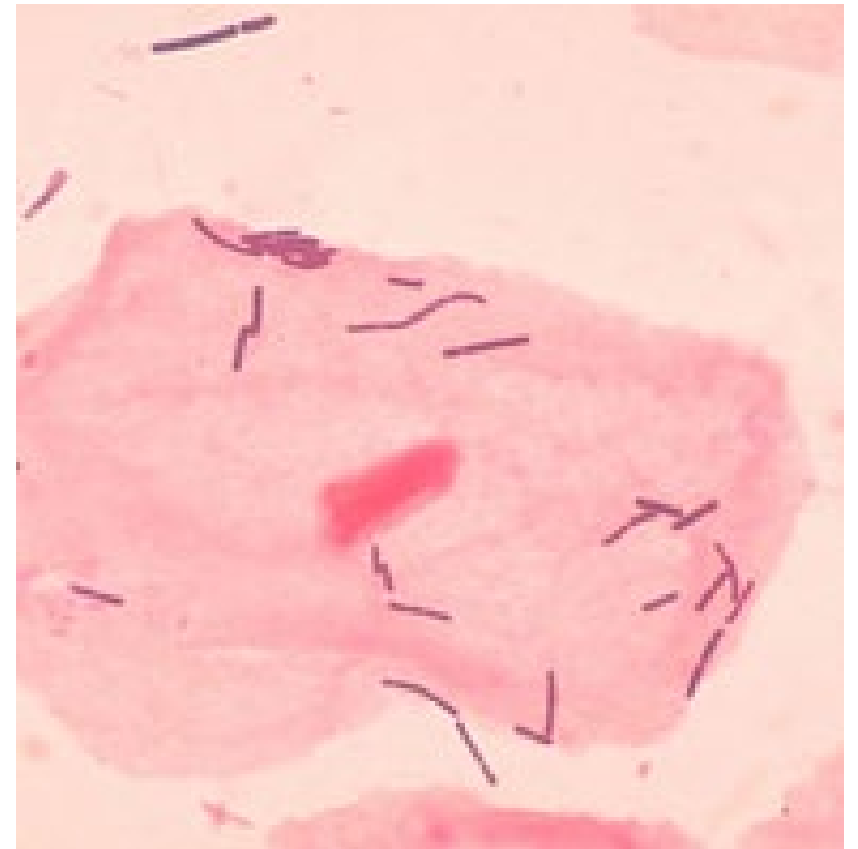
Select appropriate first-line treatment for bacterial vaginosis, vulvovaginal candidiasis, and trichomoniasis

03

Manage recurrent or refractory disease

What is normal?

- Lactobacillus-predominant microbiome
 - Normal vaginal flora is heterogeneous
 - *Gardnerella vaginalis*, *Escherichia coli*, group B streptococci, genital *Mycoplasma* species, and *Candida albicans* are commonly found
- Lactic acid → acidic vaginal environment
 - Normal vaginal pH generally 3.8–4.5
- Hormones, antibiotics, sexual activity, menstruation, pregnancy, and vaginal products can alter the ecosystem



History of Present Illness

Discharge:
amount, color,
consistency

Odor

Itching/burning

Vulvar vs vaginal
symptoms

Dysuria

Dyspareunia

Timing relative to
menses or
intercourse

New sexual
partner(s)

Recent
antibiotics

Pregnancy

Diabetes or
immuno-
suppression

OTC antifungal
treatment

Douching/vaginal
products

Prior/recurrent
episodes

Exam: What am I looking for?

Vulva

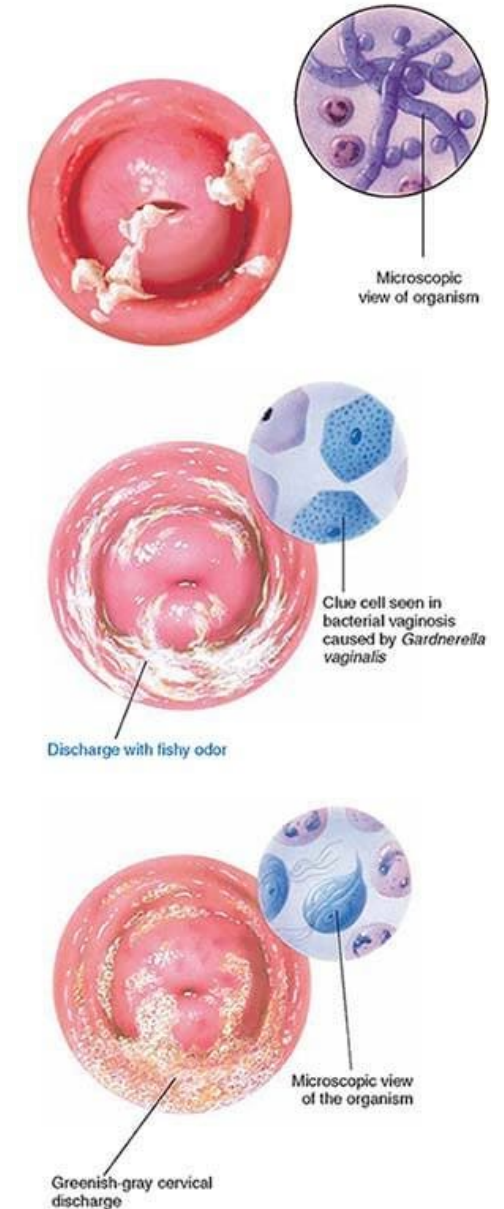
- Erythema
- Edema
- Excoriations
- Fissures
- Dermatoses
- Abscesses

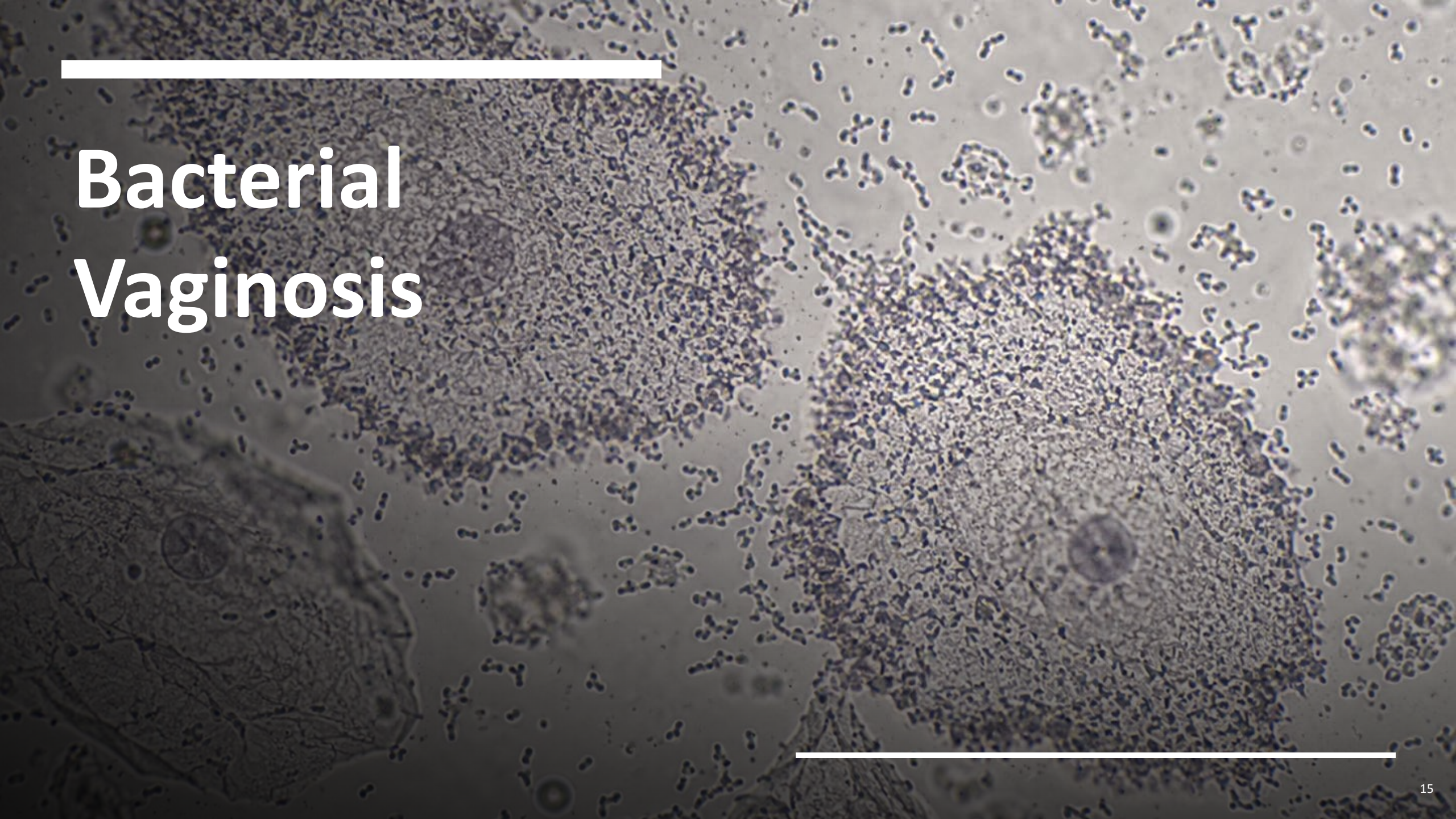
Vagina

- Discharge character
- Vaginal erythema
- Discharge coating the vaginal walls
- Cysts

Cervix

- Cervicitis
- Mucopurulent discharge
- Friability
- “Strawberry cervix”





Bacterial Vaginosis

Poll 2: What bacteria causes bacterial vaginosis?

- A. *Gardernella vaginalis*
- B. *Bacteroides* species
- C. *Fusobacterium* species
- D. *Atopobium vaginae*
- E. A and C
- F. All of the above

Poll 2: What bacteria causes bacterial vaginosis?

- A. *Gardernella vaginalis*
- B. *Bacteroides* species
- C. *Fusobacterium* species
- D. *Atopobium vaginae*
- E. A and C
- F. All of the above**

Bacterial Vaginosis (BV) – What is it?

- Caused by an unhealthy imbalance of microorganisms
 - Replacement of normal hydrogen peroxide and lactobacillus with high concentrations of anaerobic bacteria (*G. vaginalis*, *Prevotella* species, *Mobiluncus* species, *A. vaginae*, and other BV-associated bacteria)
- Polymicrobial biofilm on vaginal epithelial cells
- Most common cause of vaginal discharge worldwide
- Risk factors: multiple sex partners, a new sex partner, lack of condom use, douching, and HSV-2 seropositivity
 - Male circumcision reduces the risk for BV among women
- Increased risk of pelvic inflammatory disease and postprocedural gynecologic infections, and susceptibility to STIs

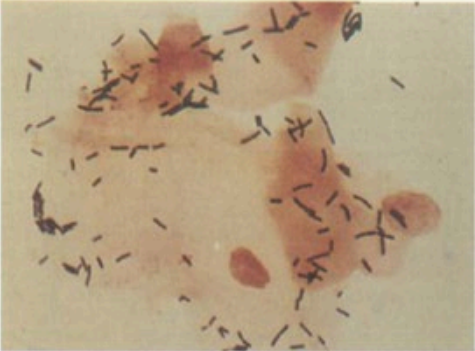
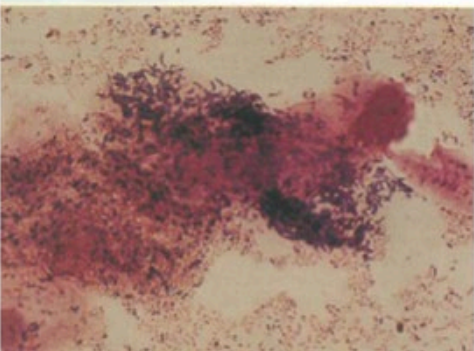
BV: Clinical Presentation

- Thin, homogeneous vaginal discharge
- White/gray discharge
- Fishy odor
- Often more noticeable after intercourse or menses
- Usually minimal inflammation
- Many patients are asymptomatic

BV: Diagnosis - Nugent Score

Vaginal Gram Stain: Reference

- Relative concentration of lactobacilli, small gram-negative and gram-variable rods (i.e., *G. vaginalis* or *Bacteroides*), and curved gram-negative rods
 - 0–3: *Lactobacillus*-predominant vaginal microbiota
 - 4–6: intermediate microbiota (emergence of *G. vaginalis*)
 - 7–10: BV

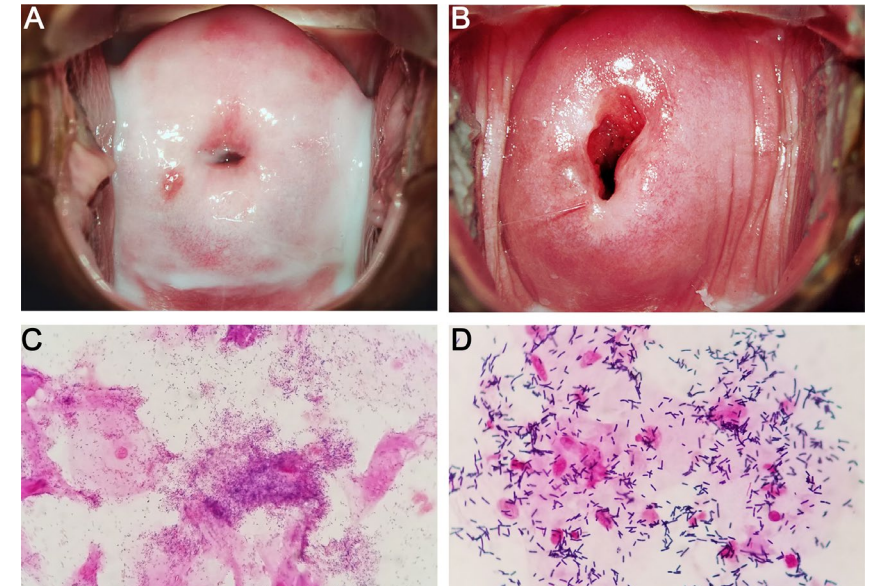
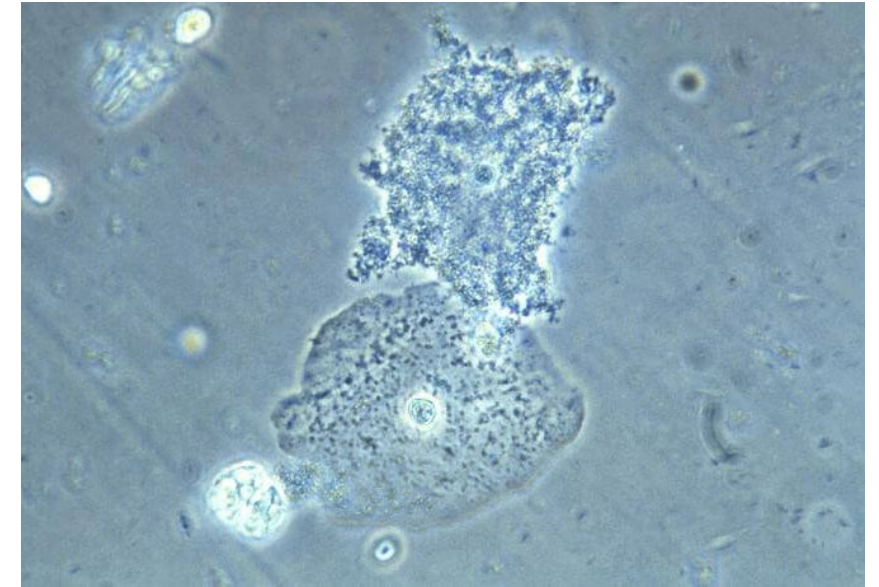
Table 4. Wet Mount - Nugent's Scoring	
Normal	Abnormal
Nugent score = 0 	Nugent score = 10 
• Lactobacilli common • Few to no other organisms	• Polymicrobial preparations • Clue cells • Coccobacilli, Gram variable • Lactobacilli few or absent

BV: Diagnosis – Amsel Criteria

Amsel criteria: requires at least three of the following four symptoms or signs

- Homogeneous, thin discharge that smoothly coats the vaginal walls
- Clue cells (vaginal epithelial cells studded with adherent bacteria) on microscopic examination (20%)
- pH of vaginal fluid >4.5
- A fishy odor of vaginal discharge before or after addition of 10% KOH (i.e., the whiff test)

The sensitivity and specificity of the Amsel criteria are 37%–70% and 94%–99%



BV Diagnosis – Nucleic Acid Amplification Tests

- Detect combinations of BV-associated organisms and protective *Lactobacillus* species
- Clinician- or self-collected vaginal swabs
- FDA-cleared assays:
 - **BD MAX Vaginal Panel:** 90.5% sensitivity / 85.8% specificity
 - **Aptima BV:** 95–97.3% sensitivity / 85.8–89.6% specificity
- Some panels simultaneously test for *Candida* and *T. vaginalis*
- BV NAATs should be used in **symptomatic patients only**.
- Amsel criteria and Nugent scoring remain useful, lower-cost diagnostic approaches.



BV: Point-of-Care / Probe Tests



OSOM BVBLUE

Detects vaginal **sialidase activity**

Produced by *Gardnerella*, *Prevotella*, *Bacteroides*, and *Mobiluncus* species.

Rapid office-based test (10 minutes)



Affirm VP III

DNA probe/hybridization assay

Detects high concentrations of ***G. vaginalis***

Also detects ***Candida* spp.** and ***T. vaginalis***

Sensitivity **90%**, specificity **67-76%** vs Nugent

Limitation: *G. vaginalis* can be present without BV

BV - Treatment

- Treatment for BV is recommended for women with **symptoms**.
 - **Metronidazole 500 mg PO BID × 7 days**
 - **Metronidazole gel 0.75%, 5 g vaginally daily × 5 days**
 - **Clindamycin cream 2%, 5 g vaginally at bedtime × 7 days**
 - Clindamycin cream is oil based and might weaken latex condoms and diaphragms for 5 days after use
- Oral therapy has not been demonstrated to be superior to vaginal therapy
- Routine oral or vaginal probiotics are **not currently recommended by the CDC** as adjunctive or replacement therapy for BV.
 - Evidence for commercially available probiotic formulations remains inconsistent.

BV – Treatment of Reoccurrence

- First recurrence: same regimen or another recommended regimen is reasonable
- ACOG defines recurrent BV at ≥ 3 BV infections in 1 year
 - Metronidazole gel 0.75% twice weekly for >16 weeks
 - Another CDC option:
 - Oral metronidazole/tinidazole $\times 7$ days
 - Then boric acid 600 mg vaginally $\times 21$ days
 - Then metronidazole gel twice weekly $\times 4$ –6 months
 - Emphasize that suppression decreases recurrence **while treatment continues**, but recurrence after discontinuation is common.

BV – What's New? Partner Treatment!

- BV is not classified as an STI, but BV-associated bacteria can be shared between sexual partners
- 2025 StepUp Randomized Trial
 - Women with BV received standard therapy; male partners were randomized to treatment or no treatment.
 - Male partner regimen:
 - **Metronidazole 500 mg PO BID × 7 days PLUS clindamycin 2% cream applied to the glans/upper penile shaft BID × 7 days**
- BV recurrence within 12 weeks:
 - Partner treatment: 35%
 - Standard care: 63%
- Trial stopped early because partner treatment was superior

BV – What's New? Partner Treatment! 2025

ACOG Recommendations

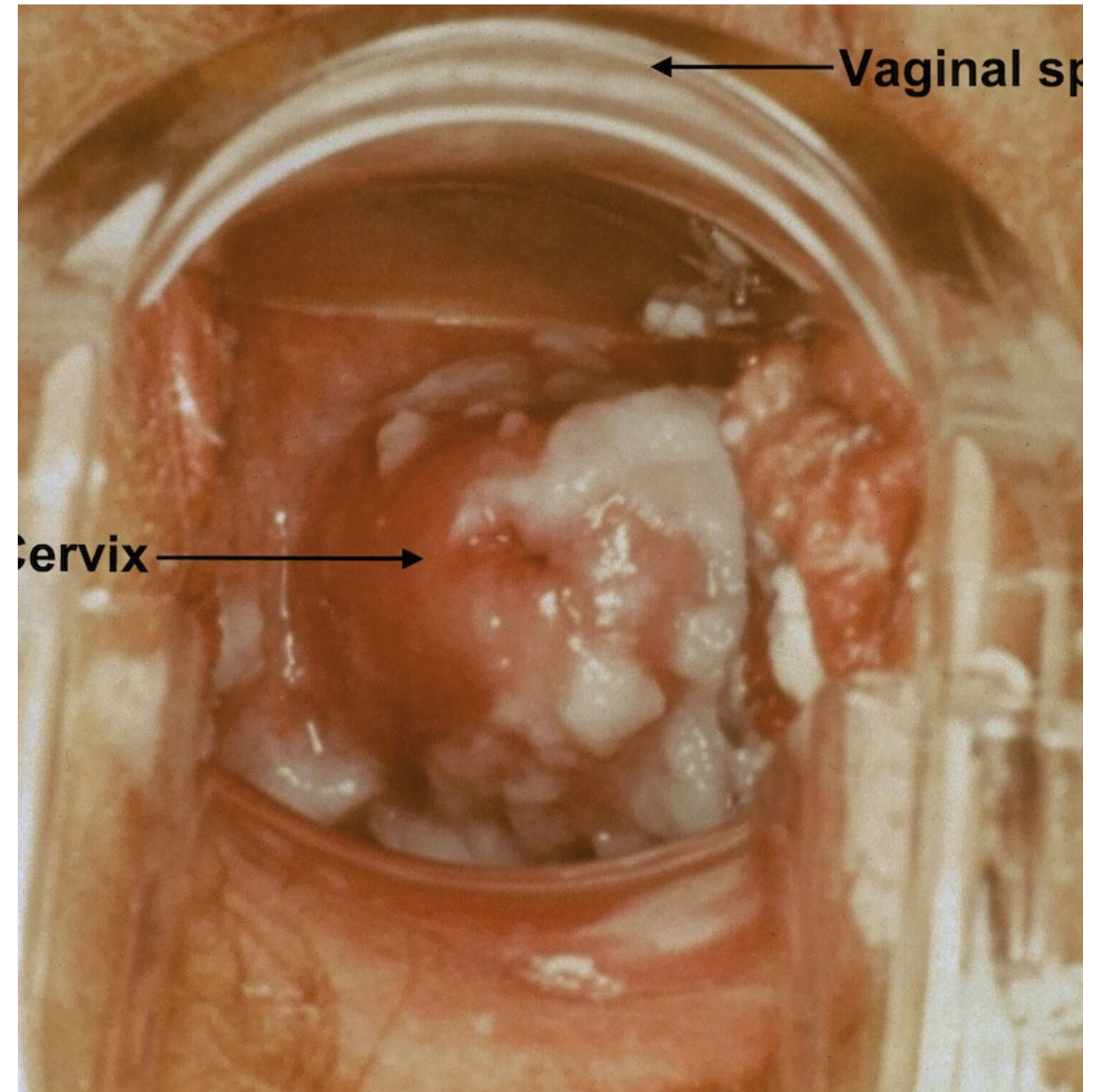
- Consider concurrent partner treatment for:
 - Male sexual partners of adults with recurrent, symptomatic BV
 - Evidence is strongest for ongoing male partners in heterosexual, monogamous relationships
- Shared decision-making recommended for:
 - Recurrent symptomatic BV with same-sex partners
 - First episode of symptomatic BV
- Data remain limited for same-sex partners, multiple/nonmonogamous partners, and asymptomatic BV
- Treat patient and partner concurrently
- Abstain from intercourse until both complete treatment
 - If intercourse occurs, condoms

A microscopic image showing the characteristic morphology of Candida albicans. Long, branching hyphae are visible, with numerous small, round spores attached to them. The spores have a distinct outer membrane and a darker, more granular interior. The background is a light, slightly textured surface, likely a slide or a culture medium.

Vulvovaginal Candidiasis

Candidiasis: Symptoms

- Intense vulvar pruritus
- Burning
- External dysuria
- Vulvar erythema/edema
- Fissures/excoriations
- Thick or clumpy discharge
- 75% of women will have at least one episode of VVC
- 40%–45% will have two or more episodes.



Candidiasis: Diagnosis

- Diagnosis requires signs/symptoms of vaginitis plus one of the following:
 - Wet mount (saline or 10% KOH) showing: Budding yeast, Hyphae, Pseudohyphae
 - 10% KOH improves visualization by dissolving cellular debris that may obscure yeast/pseudohyphae
 - Positive culture or other validated test for *Candida*
- Vaginal pH is typically normal: <4.5



Candidiasis: Diagnosis

If Wet Mount Is Negative

- Persistent symptoms/signs → obtain vaginal culture
- If culture is unavailable → empiric treatment can be considered

Important Clinical Pearls

- Yeast culture remains the reference standard
- A positive culture or NAAT without symptoms does not require treatment
- ~10–20% of women have asymptomatic vaginal *Candida* colonization
- Many yeast PCR assays are not FDA-cleared → know the performance characteristics of the test being used

Candida Diagnosis: Role of NAAT

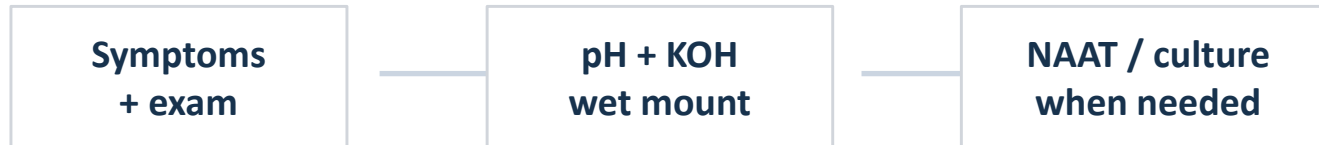
When NAAT is helpful

- Symptomatic patients when wet mount is negative or unavailable
- Multiplex panels can detect Candida species, BV, and Trichomonas
- Useful for non-albicans species that may be missed on microscopy, especially *C. glabrata*

How to interpret results

- NAAT detects organism nucleic acid — not necessarily active disease
- Treat only when results fit symptoms and exam
- Do not treat asymptomatic *Candida* detection; colonization is common (~10–20%)

Practical diagnostic sequence



Culture still matters

- Reference standard for diagnosis
- Needed for broad yeast recovery
- Enables susceptibility testing when treatment fails

Examples: BD MAX Vaginal Panel; Aptima CV/TV. Use performance characteristics of the specific assay used.

Clinical pearl: A positive Candida NAAT does not equal vulvovaginal candidiasis — the result must match symptoms and exam.

Candidiasis: Complicated vs. Uncomplicated Infections

This distinction determines whether a one-time fluconazole dose is enough.

Uncomplicated

- Sporadic/infrequent
- Mild–moderate
- Presumed *C. albicans*
- Immunocompetent

Complicated

- Recurrent
- Severe
- Non-*albicans Candida*
- Diabetes/immunocompromise/immunosuppression

Poll 3: Which of the following is an acceptable treatment option for uncomplicated VVC?

- A. Fluconazole 150 mg orally once
- B. Miconazole 2% cream, 5 g intravaginally daily for 7 days
- C. Clotrimazole 1% cream, 5 g intravaginally daily for 7–14 days
- D. A and B only
- E. All of the above

Poll 3: Which of the following is an acceptable treatment option for uncomplicated VVC?

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- B. Miconazole 2% cream, 5 g intravaginally daily for 7 days
- C. Clotrimazole 1% cream, 5 g intravaginally daily for 7–14 days
- D. A and B only
- E. All of the above**

Uncomplicated Candidiasis - Treatment

- Clinical pearls:
 - Topical creams/suppositories may weaken latex condoms
 - Partner treatment unnecessary
 - Persistent symptoms after OTC therapy require evaluation rather than repeated empiric treatment

Over-the-counter intravaginal agents:

Clotrimazole 1% cream, 5 g intravaginally daily for 7–14 days

or

Clotrimazole 2% cream, 5 g intravaginally daily for 3 days

or

Miconazole 2% cream, 5 g intravaginally daily for 7 days

or

Miconazole 4% cream, 5 g intravaginally daily for 3 days

or

Miconazole, 100-mg vaginal suppository, one suppository daily for 7 days

or

Miconazole, 200-mg vaginal suppository, one suppository for 3 days

or

Miconazole, 1,200-mg vaginal suppository, one suppository for 1 day

or

Tioconazole 6.5% ointment, 5 g intravaginally in a single application

Prescription intravaginal agents:

Butoconazole 2% cream (single-dose bioadhesive product) 5 g intravaginally in a single application

or

Terconazole 0.4% cream, 5 g intravaginally daily for 7 days

or

Terconazole 0.8% cream, 5 g intravaginally daily for 3 days

or

Terconazole, 80-mg vaginal suppository, one suppository daily for 3 days

Oral agent:

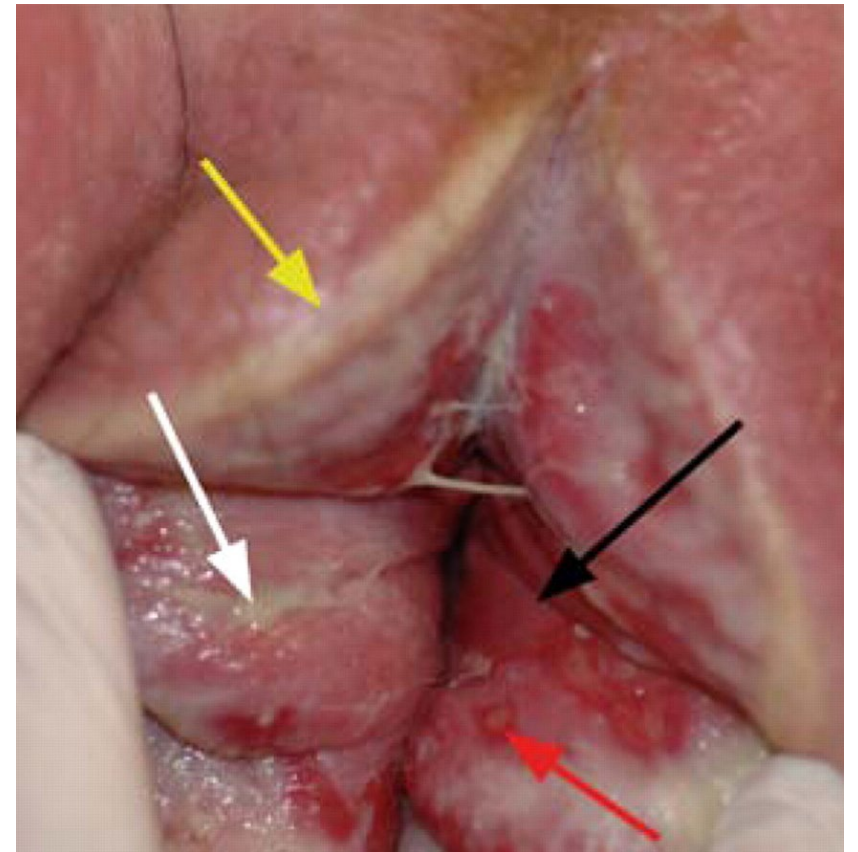
Fluconazole, 150 mg orally in a single dose

Complicated Candidiasis - Treatment

- **Severe VVC:** extensive vulvar erythema, edema, excoriation, and fissure formation
 - 7–14 days topical azole
 - Fluconazole 150 mg x 2-3 doses every **72 hours**
- **Recurrent VVC: ≥ 3 symptomatic episodes within <1 year**
 - Induction:
 - 7–14 days topical azole OR Fluconazole every 72 hours for three doses
 - Maintenance:
 - **Fluconazole weekly $\times$ 6 months**
- Important counseling:
 - Suppression controls disease
 - It is not necessarily curative long-term
 - Idiopathic or secondary (related to frequent antibiotic use, diabetes, or other underlying host factors)

Non-Albicans Candidiasis - Treatment

- Think of this when:
 - Symptoms persist despite standard therapy
 - Microscopy is negative
 - Recurrent infection
 - Culture identifies *C. glabrata* or another species
- Management:
 - Obtain culture/speciation
 - Consider susceptibility testing for persistent disease
 - Non-*albicans* *Candida*—especially ***C. glabrata***—may be intrinsically less susceptible to azoles
 - Initial treatment: 7–14 days of a non-fluconazole azole
 - Recurrent non-albicans VVC: intravaginal 600 mg of boric acid daily for 3 weeks



Candidiasis – What's new?

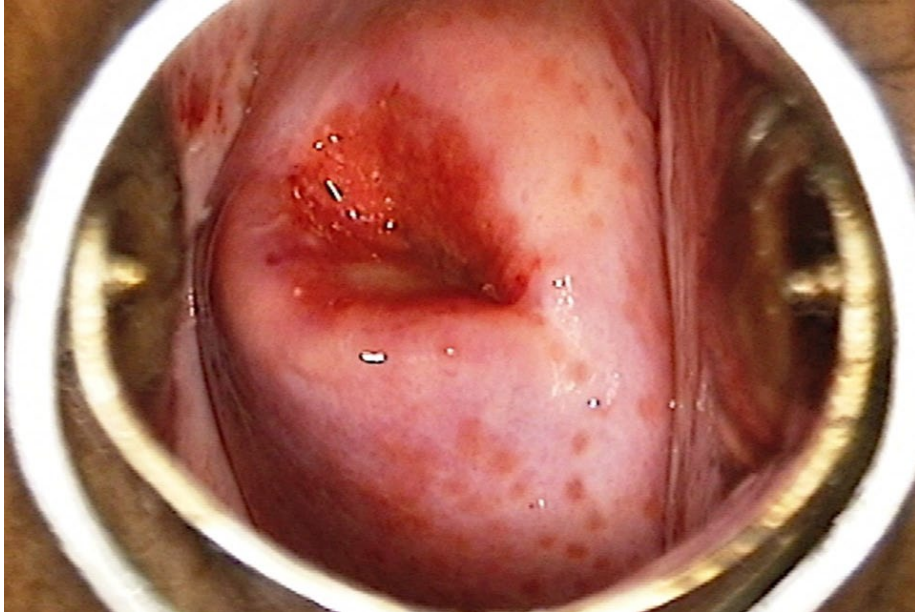
New options for recurrent VVC

- **Oteseconazole (VIVJOA)** – FDA approved for reducing recurrent VVC
 - 600 mg day 1 → 450 mg day 2 → 150 mg weekly ×11 weeks
 - Contraindicated in reproductive age females
- **Ibrexafungerp (BREXAFEMME)** – first-in-class **non-azole** oral antifungal
 - FDA approved for acute VVC and recurrent VVC
 - Acute treatment: **300 mg PO BID**
 - Recurrent VVC regimen: **300 mg BID for 1 day, once monthly × 6 months**
 - 2025 CANDLE trial: no mycologically proven recurrence at 24 weeks in **70.8% vs 58.5% with placebo**
 - **Contraindicated in pregnancy**; pregnancy testing recommended before treatment and before each monthly dose

A microscopic image showing several Trichomonas vaginalis organisms, which are pear-shaped with multiple flagella, and various host cells, including large epithelial cells and smaller leukocytes. The organisms are scattered throughout the field of view.

Trichomoniasis Infection

Trichomoniasis – Symptoms



- Protozoan parasite *Trichomonas vaginalis*
- **Trichomoniasis is an STI** > Most common non-viral STI
- Possible symptoms:
 - Diffuse malodorous discharge
 - Yellow-green discharge
 - Vulvar irritation
 - Dysuria
 - Dyspareunia
 - Cervical petechiae/"strawberry cervix"
- But many infections (70%–85%) are minimally symptomatic or asymptomatic!
 - untreated infections might last from months to years
- Increased risk of PID, post-hysterectomy cuff cellulitis, HIV, and other STIs

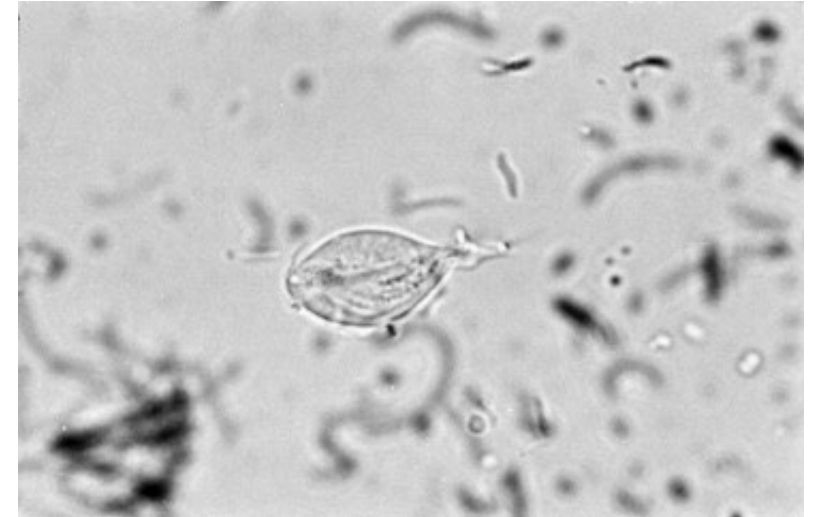
Trichomoniasis – Diagnosis

- **Wet mount**

- Motile trichomonads
- Rapid and inexpensive
- Limited sensitivity (44%–68%)

- **NAAT**

- Several FDA cleared swabs for detection of *T. vaginalis* from symptomatic or asymptomatic females
- Reliable samples include clinician-collected endocervical or vaginal swabs, female urine specimens
- Sensitivity of 95.3%–100% and specificity of 95.2%–100%, compared with wet mount and culture
- Clinical pearl: If your wet mount is negative but suspicion remains, **do not rule out trichomoniasis.**



Poll 4: A 32-year-old woman presents with malodorous vaginal discharge and vulvar irritation. NAAT is positive for *Trichomonas vaginalis*. Which of the following is the preferred treatment?

- A. Metronidazole 2 g PO once
- B. Metronidazole 500 mg PO twice daily for 7 days
- C. Metronidazole gel 0.75% vaginally for 5 days
- D. A or B
- E. All of the above are acceptable

Poll 4: A 32-year-old woman presents with malodorous vaginal discharge and vulvar irritation. NAAT is positive for *Trichomonas vaginalis*. Which of the following is the preferred treatment?

A. Metronidazole 2 g PO once

B. Metronidazole 500 mg PO twice daily for 7 days

C. Metronidazole gel 0.75% vaginally for 5 days

D. A or B

E. All of the above are acceptable

Trichomoniasis – Treatment

- For women:
 - **Metronidazole 500 mg PO BID × 7 days**
- For men:
 - Metronidazole 2 g PO once
- Alternative:
 - Tinidazole 2 g PO once
- **Do not use vaginal metronidazole gel to treat trichomoniasis.**
- Patients who are intolerant or allergic to nitroimidazoles, referral to a specialist should be made for desensitization

Trichomoniasis – Partner Treatment and Follow-up

- Treat **all current sexual partners**
 - Males: Metronidazole 2g x 1
 - Females: Metronidazole 500mg BID x 7 days
- Abstain from intercourse until treatment is completed and symptoms resolve
- Test for other STIs
- Retest sexually active females at approximately **3 months**
- Do not perform NAAT until **≥3 weeks after treatment**, because residual nucleic acid can produce a positive result.

Trichomoniasis – Recurrent Infection

- **Re-exposed to untreated partner → Repeat metronidazole 500 mg BID × 7 days**
- **No re-exposure → Metronidazole OR tinidazole 2 g PO daily × 7 days**
- **Suspected Resistance**
 - Metronidazole resistance: **~4–10%**
 - Tinidazole resistance: **~1%** in available data
 - Persistent infection without re-exposure → request **CDC susceptibility testing**
- **If high-dose 7-day therapy fails:**
 - **Tinidazole 2 g PO daily + intravaginal tinidazole 500 mg BID × 14 days**
 - **If failure persists: Tinidazole 1 g PO TID + intravaginal paromomycin × 14 days**

Trichomoniasis – What's New?

Diagnosis → Moving Toward Molecular Testing

- Wet mount sensitivity only **44–68%**
- **NAAT is substantially more sensitive** and preferred when available

2025: First FDA-authorized OTC at-home molecular test

- Self-collected vaginal swab
- Tests for *T. vaginalis* + GC/CT
- Results in ~30 minutes

Newer FDA-approved Treatment Option:

- **Secnidazole 2 g PO once**
- Potential advantage: single-dose adherence
- FDA-approved, but **not currently included in CDC recommended/alternative regimen table**

When it isn't BV, VVC, or trich

Persistent “recurrent vaginitis” despite appropriate therapy should trigger reconsideration of the diagnosis.

Gonorrhea/chlamydia
cervicitis

Retained foreign body

Irritant/contact
dermatitis

Genitourinary
syndrome of
menopause

Desquamative
Inflammatory
Vaginitis

Vulvar dermatoses

Lichen
sclerosis/lichen
planus

Vulvodynia

Bartholin's gland
cyst/Skenes gland
cyst

Summary Slide

Feature	Bacterial Vaginosis (BV)	Vulvovaginal Candidiasis (VVC)	Trichomoniasis
Organism / process	Vaginal dysbiosis	<i>Candida</i> spp.	<i>Trichomonas vaginalis</i>
STI?	No*	No	Yes
Vaginal pH	>4.5	≤4.5	>4.5
Typical discharge	Thin, homogeneous, gray/white	Thick, white, curdy	Yellow-green, often frothy
Odor	Fishy	Usually absent	May be malodorous
Pruritus / irritation	±	+++	+ / ++
Wet mount	Clue cells	Budding yeast ± pseudohyphae	Motile trichomonads
Other classic finding	Positive whiff test	Vulvar erythema/edema	Strawberry cervix (<i>uncommon</i>)
Typical first-line treatment	Metronidazole	Topical azole or fluconazole†	Metronidazole
Partner treatment	Shared decision making	No	Yes
Routine retesting	No	No	Yes — ~3 months

References

- American College of Obstetricians and Gynecologists. **Vaginitis in Nonpregnant Patients.** *ACOG Practice Bulletin No. 215.* Obstet Gynecol. 2020;135:e1–e17. **Reaffirmed 2025.** [ACOG](#)
- American College of Obstetricians and Gynecologists. **Concurrent Sexual Partner Therapy to Prevent Bacterial Vaginosis Recurrence.** Clinical Practice Update. 2025. [ACOG](#)
- Workowski KA, Bachmann LH, Chan PA, et al. **Sexually Transmitted Infections Treatment Guidelines, 2021.** *MMWR Recomm Rep.* 2021;70(4):1–187. [CDC](#)
- Centers for Disease Control and Prevention. **Bacterial Vaginosis: STI Treatment Guidelines.** [CDC](#)
- Centers for Disease Control and Prevention. **Vulvovaginal Candidiasis: STI Treatment Guidelines.** [CDC](#)
- Centers for Disease Control and Prevention. **Trichomoniasis: STI Treatment Guidelines.**

Q&A

Thank you!

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