
بنام خداوند جان و خرد

بنام خدا

نحوه برخورد با ترشحات واژینال
در یک خانم 35 ساله از دیدگاه پزشکی خانواده

استاد راهنما سرکار خانم دکتر عشقی نژاد
متخصص و جراح زنان و زایمان
و عضو هیات علمی

ارایه دهنده کورش فرزین دستیار پزشکی خانواده
16 اردیبهشت 1402

- CC – بیمار خانم 35 ساله ایست که با شکایت ترشحات چرکی واژینال از دو هفته پیش مراجعه کرده است سابقه این چنین وضعیتی را از قبل نمیدهد سابقه ای از عفونت ادراری جراحی و دستکاری در رحم و واژن را ذکر نمیکند ترشحات بد بو است بعد از اینترکورس مقداری خونریزی دارد روش جلوگیری از ocp استفاده میکند و بعد از قاعدگی علایم شدید میشود تب سوزش ادرار درد زیرشکم و در هنگام اینترکورس را ذکر نمیکند علایمی از سوزش ادرار و ترشح را در همسرش ذکر نمیکند
- PMH –سابقه بیماری خاصی را ذکر نمیکند سابقه سزارین در 3 سال پیش به علت عدم پیشرفت زایمانی را میدهد در حاملگی سابقه بیماری و مراقبت خاصی را نمیدهد مدت 5 سال است که ازOCP جهت جلوگیری از بارداری اسفاده میکند
- Habitual H – سابقه ای از مصرف سیگار الکل و قلیان را نمیدهد
- Family H – در سن 27 سالگی ازدواج کرده یکسال بعد باردار شده و دارای یک فرزند پسر است نسبت فامیلی با همسر ندارد ایشان کارمند شهرداری است و از مشکل خانوادگی خاصی نیز شکایت ندارد
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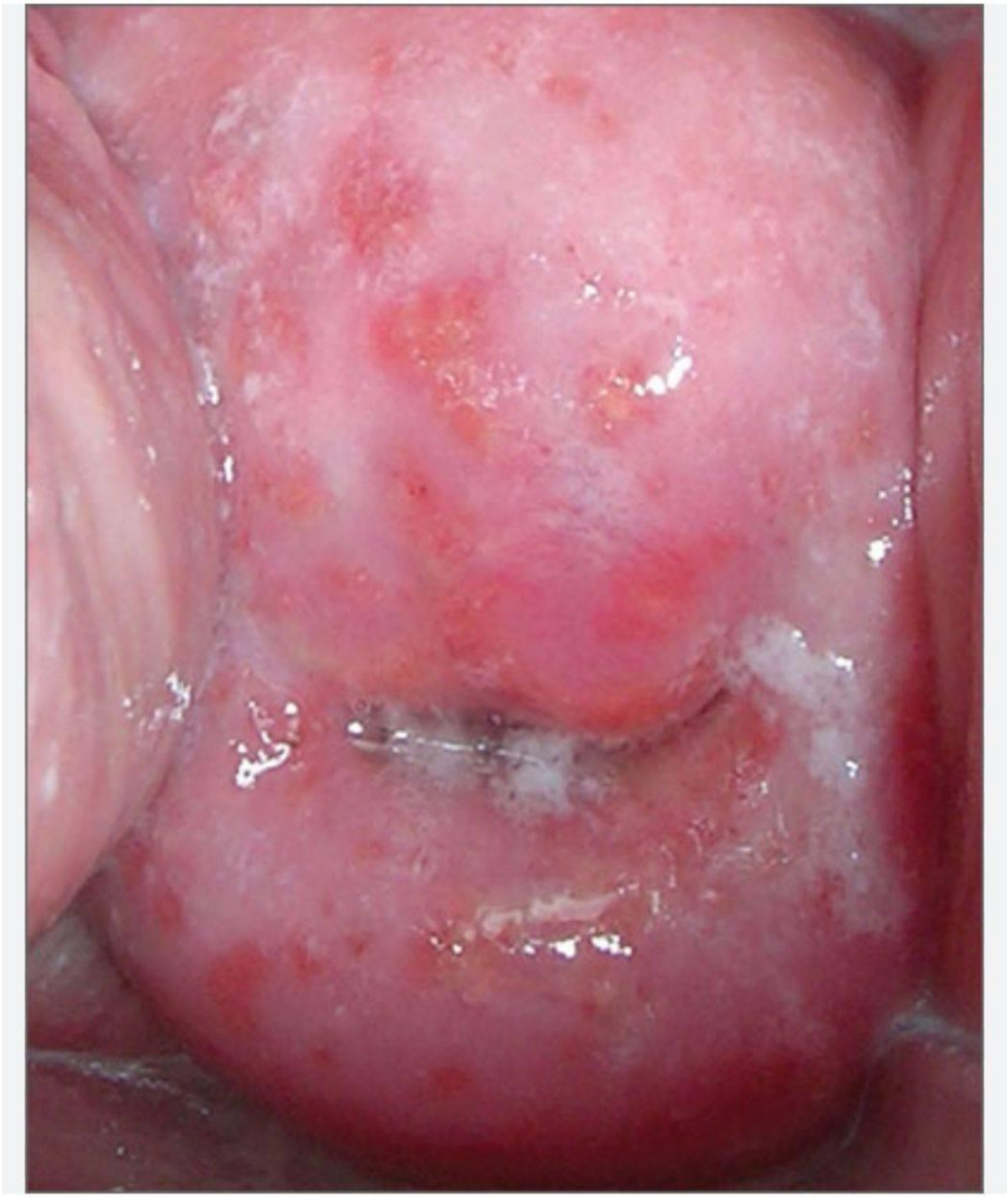
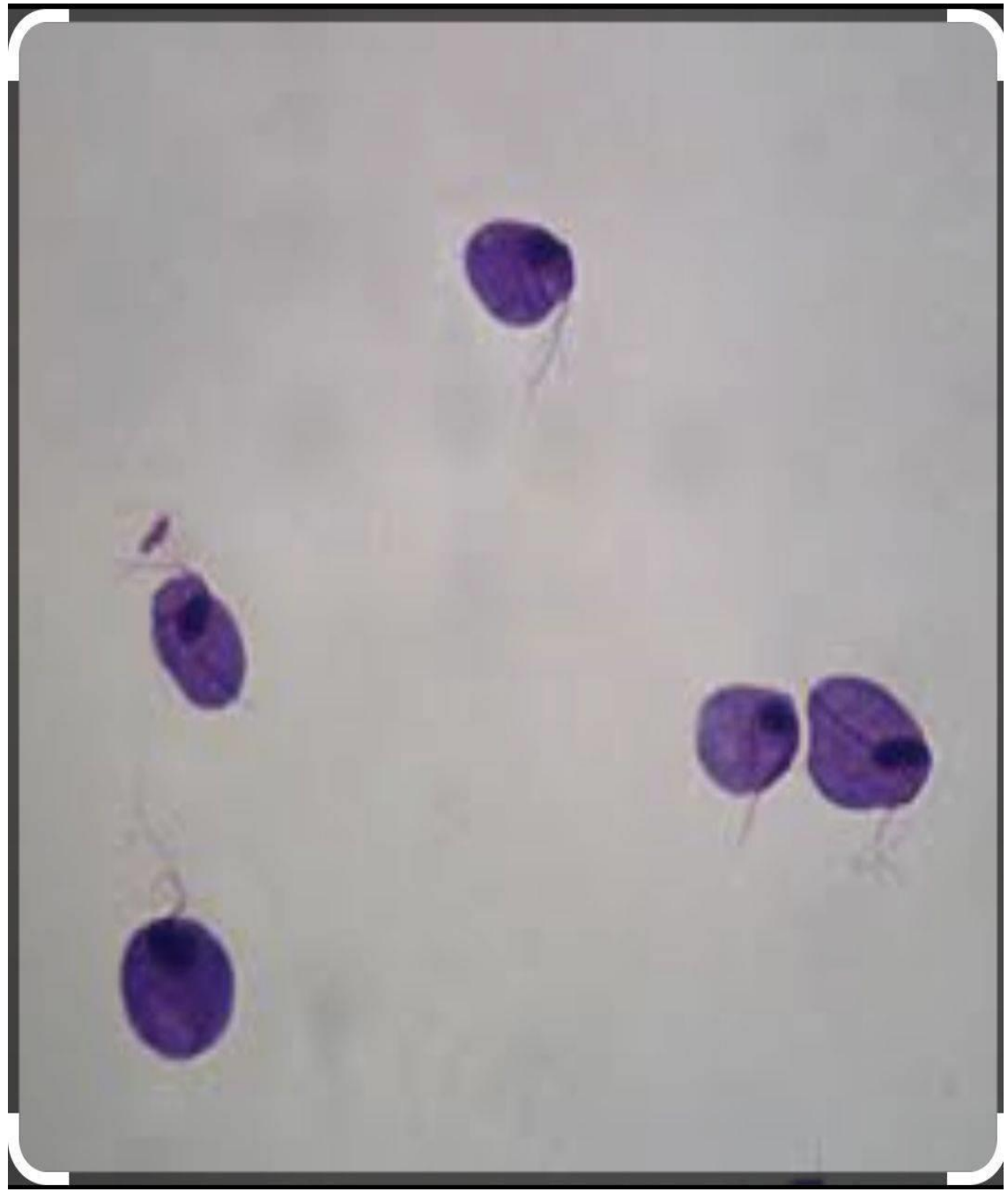
- BP= 120/75 PR= 85 RR= 20 T= 37 Weight= 65 Haight= 155 –Physical Exam BMI=27/1
- در معاینه سرو گردن قفسه سینه ریه و قلب مشکلی نبود در معاینه شکم تندرنس و توده ای لمس نشد در زیرشکم و سوپراپوبیک تندرنس و حساسیتی مشهود نبود اندامها نرمال بدون دفورمیتی و مشکلات وریدی
- در معاینه واژینال : پس از گذاشتن اسپکولوم ترشحات چرکی و اگزودا و ضایعات پتشیال روی سرویکس مشهود بود خروج ترشح از سرویکس نداشت ودر معاینه دو دستی CMT (تندرنس در حرکت دادن سرویکس) نداشت توده ای در آدنکس ها لمس نشد.





Vaginal discharge (vaginitis)

- Vaginitis is the general term for disorders of the vagina caused by:
- Infection
- Inflammation
- Changes in the normal vaginal flora.
- **NORMAL DISCHARGE**
- 1 to 4 mL of fluid (per 24 hours), which is white or transparent, thick or thin, and mostly odorless.
- pH is typically 4.0 to 4.5
- It is not accompanied by pruritus, pain, burning or significant irritation, erythema, local erosions, or cervical or vaginal friability

- **Role of estrogen**
- In the presence of estrogen the nonkeratinized stratified squamous epithelium of the vagina is rich in glycogen
- Glycogen from sloughed cells is the substrate for lactobacilli convert into lactic acid
- acidic vaginal environment inhibits growth of pathogenic organisms(Gardnerella vaginalis, Escherichia coli, group B streptococci, genital mycoplasma species, and Candida albicans)
- lack of estrogen, and glycogen substrate, results in sparse presence of lactobacilli and an elevated vaginal pH (typically >4.5)
- Premenarchal vaginal pH is alkaline
- Postmenopausal increase in vaginal pH (typically > 4.5)
- physiological leukorrhea
- midmenstrual cycle, during pregnancy, estrogen-progestin contraceptives
- Diet, sexual activity, medication, and stress can also affect the volume and character of normal vaginal discharge

- **Common etiologies**
- Infectious: The most common causes vulvovaginal candidiasis, bacterial vaginosis (BV), and trichomoniasis
- Noninfectious: atrophic vaginitis, foreign body, irritants and allergens, dermatoses, some systemic medical disorders (RA, SLE),
- **Clinical features**
- Change in the volume, color, or odor of vaginal discharge
- Pruritus
- Burning
- Irritation
- Erythema
- Dyspareunia
- Spotting
- Dysuria

• INITIAL DIAGNOSTIC EVALUATION

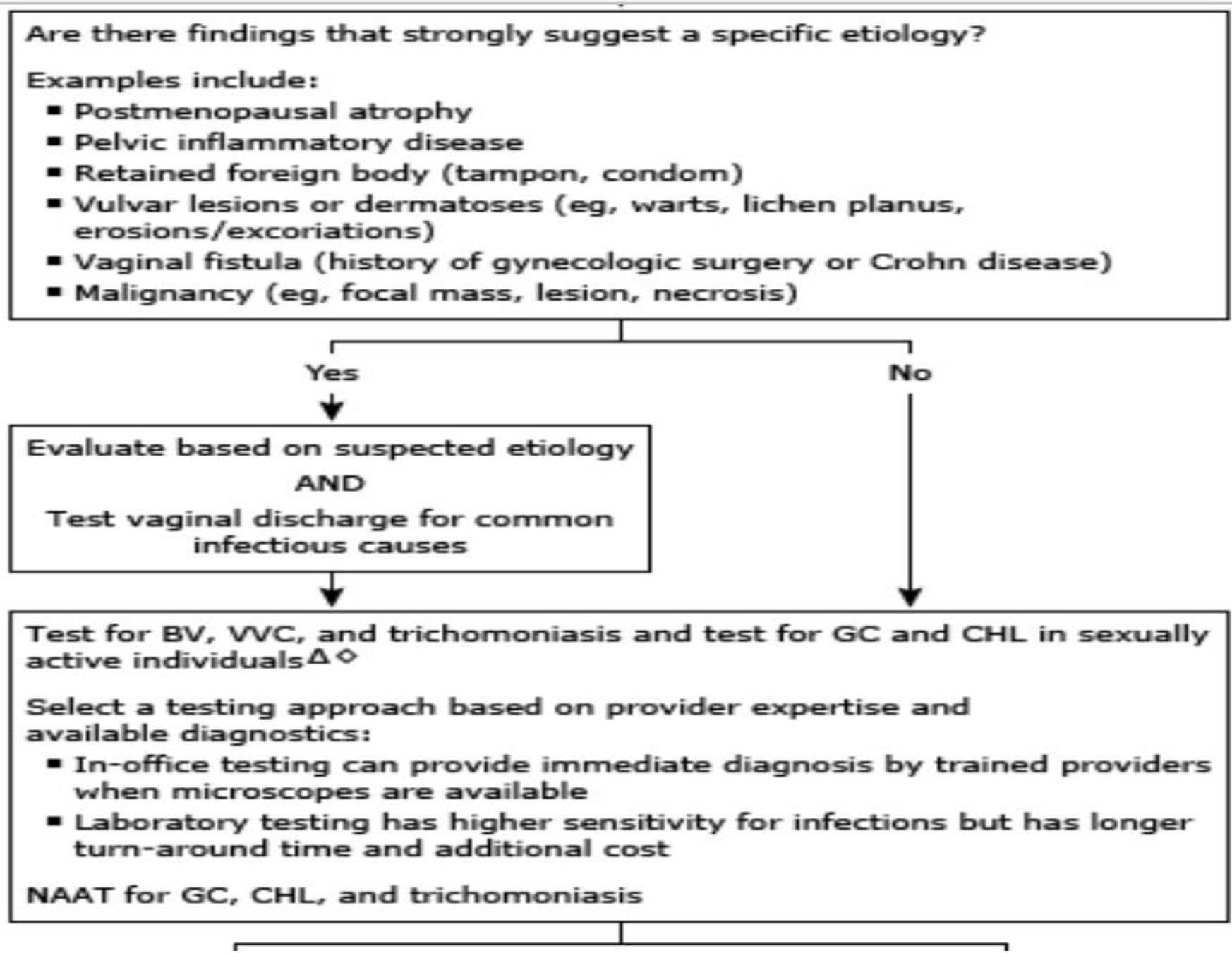
Obtain history

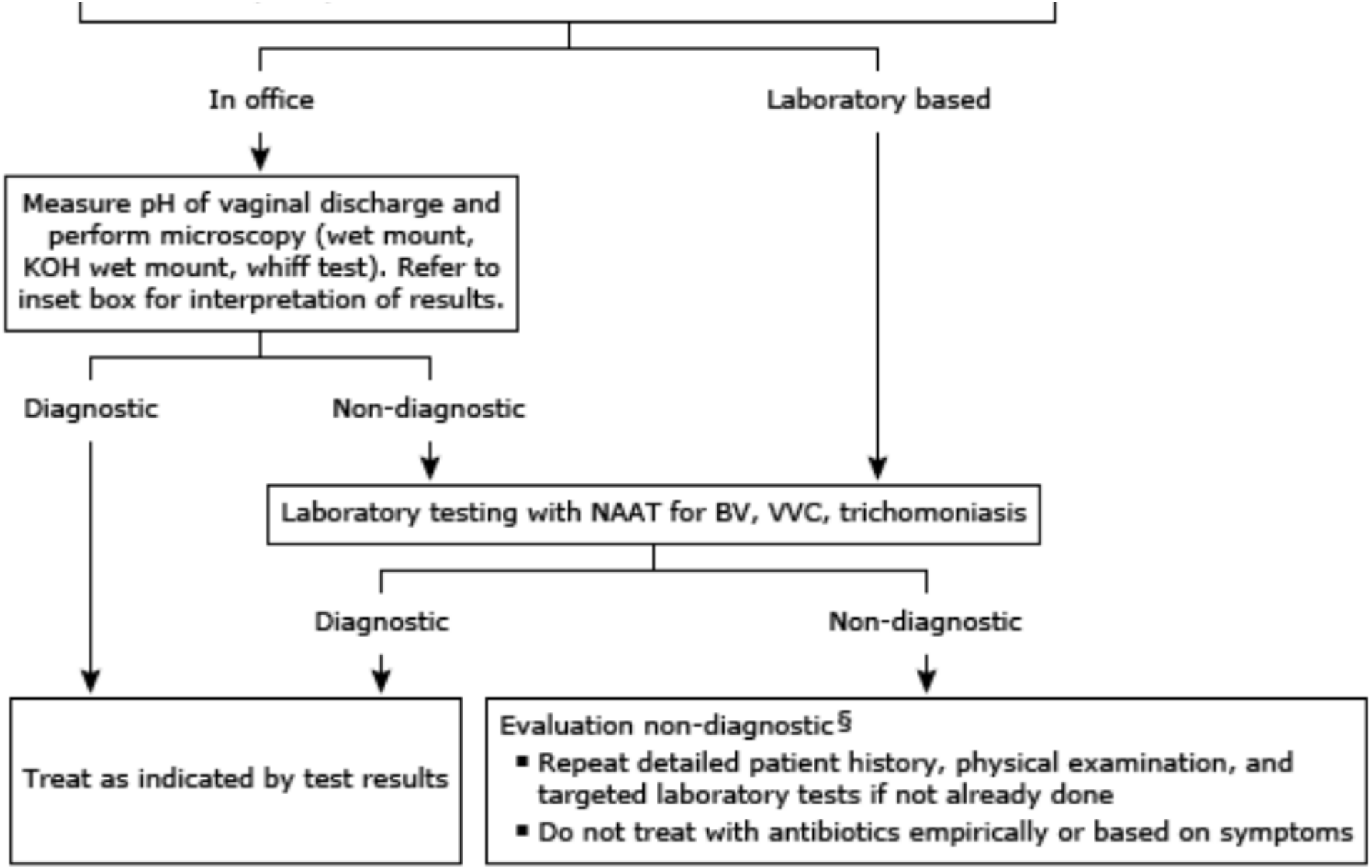
- Nature of vaginal discharge (quality, color, consistency, and odor)
- Additional symptoms (pruritis, burning, pain, vaginal bleeding, and/or dyspareunia)
- Timing of onset and relationship to sexual activity
- Estrogen status (estrogenized or not)
- Sexual activity and practices, including contraceptive use
- Past and recent vaginal or vulvar treatment

↓

Perform physical examination¶

- Visual inspection of external genitalia, from mons pubis to anus (evaluate for evidence of inflammation including erythema and subclitoral and/or labial edema)
- Speculum examination of the vagina and cervix
- Bimanual examination of the pelvis
- Detection of genital malodor


Are there findings that strongly suggest a specific etiology?
Examples include:
Postmenopausal atrophy
Pelvic inflammatory disease
Retained foreign body (tampon, condom)
Vulvar lesions or dermatoses (eg, warts, lichen planus, erosions/excoriations)
Vaginal fistula (history of gynecologic surgery or Crohn disease)
Malignancy (eg, focal mass, lesion, necrosis)
Yes
No
Evaluate based on suspected etiology
AND
Test vaginal discharge for common infectious causes
Test for BV, VVC, and trichomoniasis and test for GC and CHL in sexually active individuals Δ ◇
Select a testing approach based on provider expertise and available diagnostics:
In-office testing can provide immediate diagnosis by trained providers when microscopes are available
Laboratory testing has higher sensitivity for infections but has longer turn-around time and additional cost
NAAT for GC, CHL, and trichomoniasis


In office
Laboratory based
Measure pH of vaginal discharge and perform microscopy (wet mount, KOH wet mount, whiff test). Refer to inset box for interpretation of results.
Diagnostic
Non-diagnostic
Laboratory testing with NAAT for BV, VVC, trichomoniasis
Diagnostic
Non-diagnostic
Treat as indicated by test results
Evaluation non-diagnostic§
Repeat detailed patient history, physical examination, and targeted laboratory tests if not already done
Do not treat with antibiotics empirically or based on symptoms

Interpretation of pH testing and microscopy
(mixed infections, with combinations of microscopy findings, are not uncommon)

Normal vaginal discharge (estrogenized patient)
pH 4.0 to 4.5
Microscopy: Lactobacilli present, white cells absent
Whiff test negative

Vulvovaginal candiasis
pH 4.0 to 4.5
Microscopy: Canadida species (with KOH wet mount-budding yeast, pseudohyphae, hyphae)
Whiff test negative

Bacterial vaginosis
pH >4.5
Microscopy: Clue cells (at least 20% of epithelial cells)
Whiff test positive

Trichomoniasis
pH 5.0 to 6.0
Microscopy: Motile trichomonads
Whiff test often positive but may be negative

- **Bacterial vaginosis (BV) :**
- Typically malodorous, thin, gray (never yellow), and is a prominent complaint, minimal inflammation and minimal irritative symptoms
- **Vaginal candidiasis**
- scant discharge that is thick, white, odorless, and often curd-like. marked inflammatory symptoms (pruritus and soreness)
- **Trichomoniasis**
- purulent, malodorous discharge, which may be accompanied by burning, pruritus, dysuria, frequency, and/or dyspareunia
- Burning and irritation can also be a symptom of noninfectious disorders such as vulvodynia
- **Pruritus**
- Suggestive of a diffuse process such as infection, allergy, or dermatosis. Persistent or chronic focal pruritus is suggestive of a localized process such as neoplasia or malignancy

- **Vaginal bleeding**
- Is not consistent with infectious vaginitis, with the exception of postcoital spotting from cervicitis, erosive causes of vaginitis (eg, erosive lichen planus), and/or a uterine source
- **Pain**
- Inflammatory causes of vaginitis or nonvaginal sources, such as pelvic floor myofascial pain or vulvodynia
- **Dysuria or dyspareunia**
- Inflammatory disorders, such as infection or allergy, as well vulvovaginal atrophy
- **Timing of symptoms**
- Candidal vulvovaginitis often occur in the premenstrual period
- Trichomoniasis and BV often occur during or immediately after the menstrual period
- Symptoms that develop soon after sexual intercourse are suggestive of STIs
- Symptoms that develop after gynecologic surgery such as hysterectomy can suggest a vaginal fistula

Parameter	Vulvovaginal candidiasis
Symptoms	Pruritus, soreness, dyspareunia
Signs	Vulvar erythema and/or edema Discharge may be white and clumpy and may or may not adhere to Vagina
Vaginal pH	4.0 to 4.5
Amine test	Negative
Saline microscopy	PMN:EC ratio <1; rods dominate; squames +++; pseudohyphae (present in approximately 40% of patients); budding yeast for nonalbicans Candida
10% potassium hydroxide microscopy	Pseudohyphae (in approximately 70% of patients)
Other tests	If microscopy nondiagnostic: Culture Nucleic acid amplification test DNA hybridization probe
Differential diagnosis	Contact irritant or allergic vulvar dermatitis, chemical irritation, focal vulvitis (vulvodynia)

Parameter	Bacterial vaginosis
Symptoms	Malodorous discharge, no Dyspareunia
Signs	Off-white/gray thin discharge that coats the Vagina
Vaginal pH	>4.5
Amine test	Positive (in 70 to 80% of patients)
Saline microscopy	PMN:EC <1;loss of rods; increased coccobacilli; clue cells comprise at least 20% of epithelial cells (present in >90% of Patients)
10% potassium hydroxide microscopy	Negative
Other tests	Quantitative microscopy (eg, Nugent criteria, Hay/Ison criteria) Nucleic acid amplification test DNA hybridization probe Culture of no Value
Differential diagnosis	Elevated pH in trichomoniasis, atrophic vaginitis, and desquamative inflammatory vaginitis

Parameter	Trichomoniasis
Symptoms	Malodorous discharge, burning, postcoital bleeding, dyspareunia, dysuria
Signs	Thin green-yellow discharge, vulvovaginal Erythema
Vaginal pH	5.0 to 6.0*
Amine test	Often positive
Saline microscopy	PMN ++++; mixed flora; motile trichomonads (present in approximately 60% of patients)
10% potassium hydroxide microscopy	Negative
Other tests	If microscopy nondiagnostic: Culture Rapid antigen test Nucleic acid amplification test DNA hybridization probe
Differential diagnosis	Purulent vaginitis, desquamative inflammatory vaginitis, atrophic vaginitis, erosive ichen planus

• Candida vulvovaginitis: Treatment

- Treatment is indicated for relief of symptoms.
- Ten to 20 percent are asymptomatic; these individuals do not require therapy

Classification of candidal vaginitis

Variable	Uncomplicated disease*	Complicated disease¶
Symptom severity	Mild or moderate	Severe
Frequency	Sporadic	Recurrent
Organism	*Candida albicans*	Nonalbicans species
Host	Normal	Abnormal (eg, uncontrolled diabetes mellitus, recurrent infections, immunosuppression, pregnancy)

* Patients must have **all** of these features.

¶ Patients may have **any** of these features.

Sporadic, infrequent episodes (≤3 episodes/year)

uncomplicated infection %90 complicated infection %10

درمان در افراد غیر کمپلیکه کپسول فلوکونازول 150 یک دوز خوراکی

تا 72 ساعت در ترشحات واژن وجود دارد درمان شریک جنسی نیز

لازم نیست هیچ کانترااندیکاسیونی مدیکالی برای اینترکورس وجود ندارد

ولی بهتر است تا از بین رفتن التهاب خودداری شود

درمانهای تاپیکال کلوتریمازول 1%شبی یک با برای 5 روز 2%شبی

یک بار 3 روز قرص واژینال 100میلی یک قرص برای 7 روز یا

دوقرص برای 3 روز

کرم واژینال میکونازول 2%شبی یک بار 5 روز و 4%برای 3روز

قرص واژینال 100 شبی 1 بار 7 روز 200 میلی 3 روز

قرص واژینال نیستاتین 100000 واحد شبی یک عدد 14 روز

پماد تیوکونازول 6/5%شبی یک اپلیکاتور دوز واحد

بوتوکنازول 2%شبی یک اپلیکاتور دوز واحد

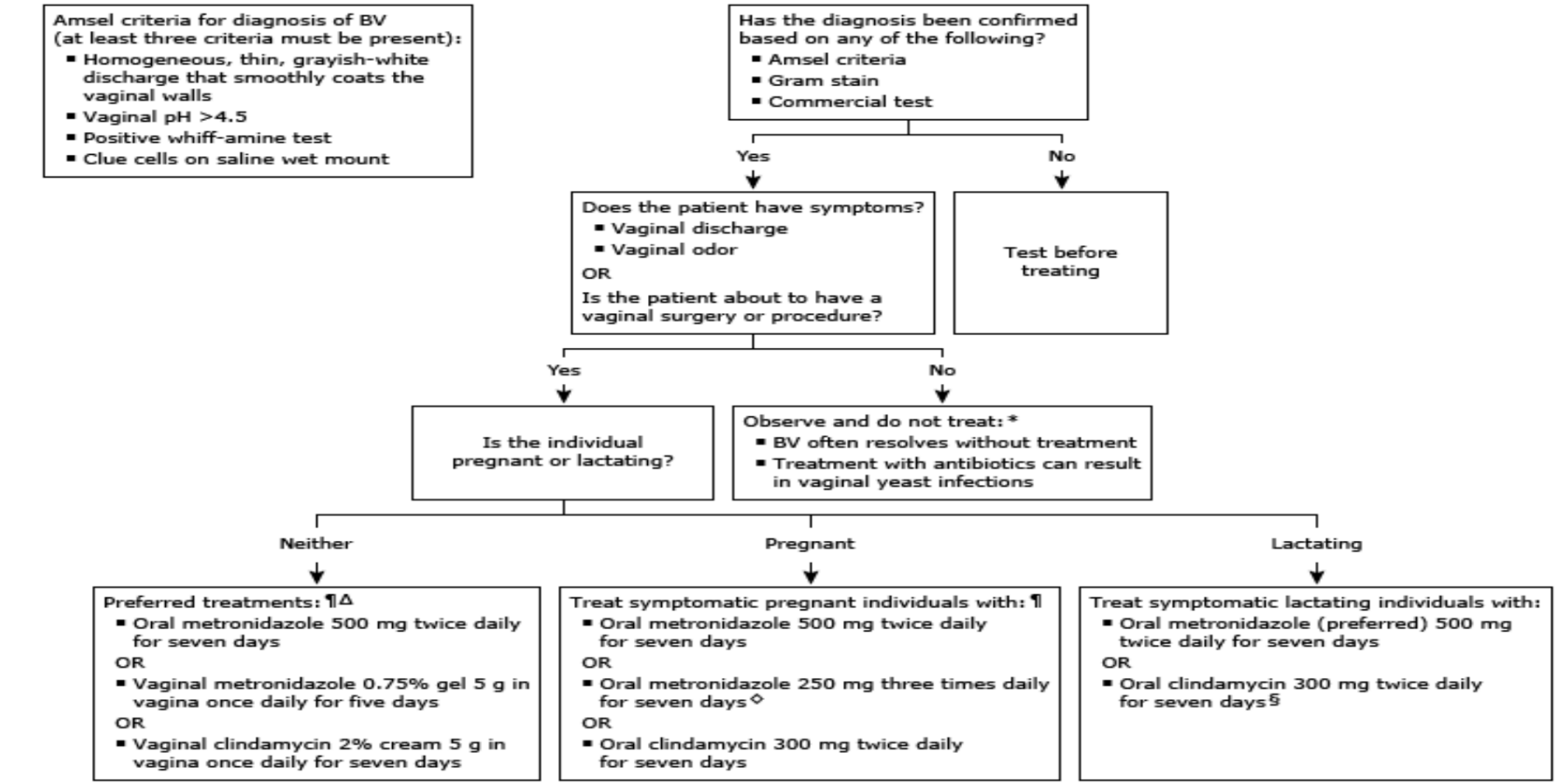
Brexafemme قرص 150 میلی دو قرص هر 12 ساعت یک روز

Treatment of complicated vaginal candidiasis

Severe vaginitis symptoms
Oral fluconazole 150 mg every 72 hours for two or three doses (depending on severity).
OR
Topical azole antifungal therapy daily for 7 to 14 days. A low potency topical corticosteroid can be applied to the vulva for 48 hours to relieve symptoms until the antifungal drug exerts its effect.
Recurrent vulvovaginal candidiasis
Induction with fluconazole 150 mg every 72 hours for three doses, followed by maintenance fluconazole 150 mg once per week for six months.
If fluconazole is not feasible, options include 10 to 14 days of a topical azole or alternate oral azole (eg, itraconazole) followed by topical maintenance therapy for six months (eg, clotrimazole 200 mg [eg, 10 g of 2%] vaginal cream twice weekly or 500 mg vaginal suppository once weekly).
Nonalbicans *Candida* vaginitis
Therapy depends upon species identified:
▪ *C. glabrata*: Intravaginal boric acid* 600 mg daily for 14 days
• If failure occurs: 16% topical flucytosine cream, 5 g nightly for 14 days
▪ *C. krusei*: Intravaginal clotrimazole, miconazole, or terconazole for 7 to 14 days
▪ All other species: Conventional dose fluconazole (150 mg)
Compromised host (eg, poorly controlled diabetes, immunosuppression, debilitation) and *Candida* isolate susceptible to azoles
Oral or topical therapy for 7 to 14 days
Pregnancy
Topical clotrimazole or miconazole for 7 days

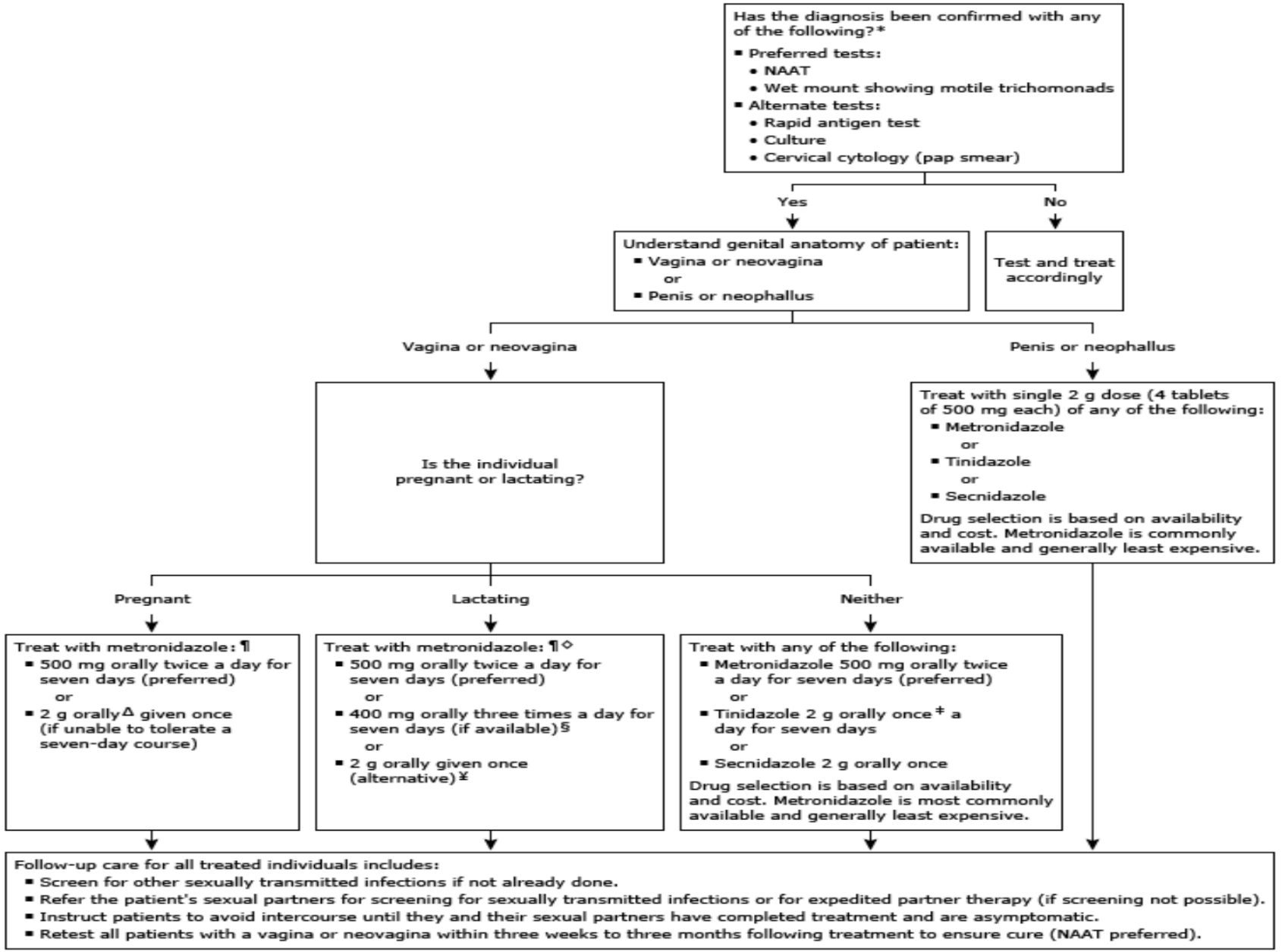
- Severe signs/symptoms
- Candida species other than C. albicans, particularly C. glabrata
- Pregnancy, poorly controlled diabetes, immunosuppression, debilitation
- History of recurrent (≥3/year) culture-verified vulvovaginal candidiasis

Initial treatment of bacterial vaginosis



Sexual partners with a vagina or neovagina are treated if symptomatic. Sexual partners with a penis or neophallus do not require antibiotic treatment.

Initial treatment of trichomoniasis in immunocompetent adults



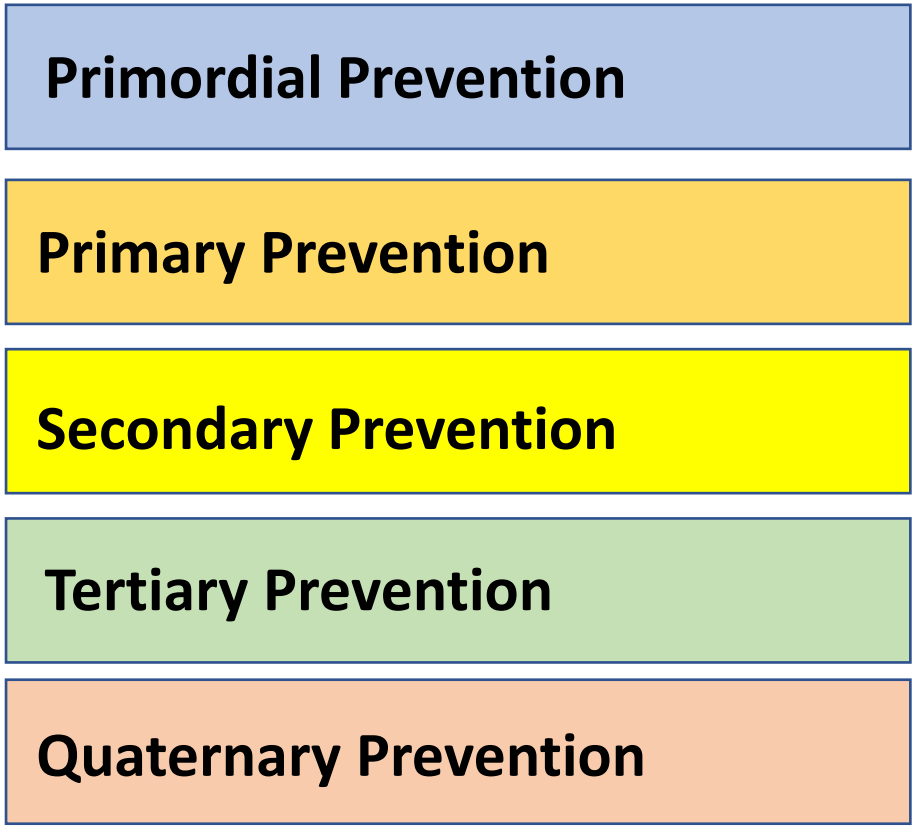
تریکومونیازیس در تمامی افراد با وبدون علامت باید درمان شود درمان خوراکی به موضعی ارجحیت دارد

tinidazole, , metronidazole secnidazole

مترونیدازول در حاملگی و شیردهی ارجحیت دارد درمان سینگل دوز 2 گرم در سه ماهه اول حاملگی اگر امکان دارد مصرف نشود

- **Sex partners**
- All sex partners (female and/or male) are treated concurrently
- Metronidazole 2 g orally in a single dose or 400 to 500 mg, orally twice daily for seven days
- Tinidazole 2 g or Secnidazole 2 g orally in a single dose .
- **REPEAT TESTING AFTER TREATMENT TRICHOMONIASIS**
- Repeat testing is ideally performed with a nucleic acid amplification test (NAAT) three weeks and up to three months after completing treatment
- If NAATs are not available, retesting with the same modality used to make the initial diagnosis
- **PATIENTS WITH PERSISTENT SYMPTOMS**
- The most common cause of continued symptoms and infection is medication misuse or early discontinuation
- Reinfection from untreated or undertreated sexual partners is common
- Oral metronidazole 500 mg twice daily for seven days
- If the patient has persistent trichomonas infection despite multi-dose treatment: Metronidazole or tinidazole 2 g orally once a day for seven days (total dose 14 g)

- برای بیمار و همسرش با تشخیص واژینت تریکومونایی مترونیدازول 2 گرم تک دوز تجویز شد
- پس از یک هفته بیمار به علت عدم بهبود مجددا مراجعه کرد که تحت درمان با مترونیدازول 500 میلیگرم هر دوازده ساعت به مدت یک هفته قرار گرفت.


Primordial Prevention
Primary Prevention
Secondary Prevention
Tertiary Prevention
Quaternary Prevention

Primordial Prevention

- ۱- اقدام در خصوص ترویج سبک زندگی سلام و بهداشت جنسی
- ۲- آموزش در خصوص تشکیل پرونده الکترونیک سلامت جهت تمامی آحاد جمعیت کشور و ارزش و اهمیت انجام مراقبتهای لازم در هر گروه سنی
- ۳- آموزش های لازم در سطح ملی برای آشنایی با علایم بیماری ریسک فاکتورها

Primary Prevention

۱- انجام مراقبتهای دورهای در هرگروه سنی حسب مورد
۲- شناسایی افراد پر خطر و در معرض ریسک جهت توصیه های لازم بهداشتی

Secondary Prevention

1- بیماریابی بموقع در جمعیت در معرض ریسک و انجام اقدامات تشخیصی اولیه

۲- انجام واکسیناسیون HPV در افراد در معرض خطر

۳- غربالگری کوموربیدتی های زمینه ای

Tertiary Prevention

- 1- انجام اقدامات تشخیصی بموقع و بر اساس آخرین راهنماهای بالینی
- 2- دادن اطلاعات لازم به بیمار جهت اطلاع از بیماری و شرکت فعال در انجام اقدامات تشخیصی و درمانی
- 3-پیگیری مستمر بیماران تا تعیین تکلیف نهایی

Quaternary Prevention

- 1- مونیتورینگ دقیق و درمان بموقع جهت جلوگیری از عوارض احتمالی
- 2- عدم انجام اقدامات پاراکلینیکی و دارویی که تاثیر خاصی بر پیش آگهی و عوارض بیماری ندارد