



# THE “V” WORD YOU CANNOT SAY ON TV

SHELAGH LARSON, DNP, APRN WHNP, NCMP

© Copyright 2020 Shelagh Larson



Summer's Eve®

HAIL *To* THE *V*™





It was more  
than her face that  
*launched*  
a thousand ships.

A war was fought. A whole city fell. And thousands died. Because of a beautiful face? We think not. Although you'll be hard-pressed to find any mention of her V in any history book, you can bet Helen of Troy knew what was up. And you can bet she knew how to take care of hers too. Just imagine if she'd had Summer's Eve® Cleansing Wash and Cleansing Cloths. pH-balanced, they help get you fresh and keep you fresh all day long. No telling how many ships would have been launched then.



**HAIL TO THE V**  
summerseve.com

Cleopatra  
used sea kelp, goat's milk,  
*and*  
rosemary leaves.

Life's hard even for a beautiful young pharaoh. Famine. Droughts. Marriage with a younger brother. But Cleopatra still found the time to take care of her most precious resource. No, not the Nile. We're talking about her V. You can bet she would have loved to have Summer's Eve® Cleansing Wash and Cleansing Cloths back then. Specially formulated, they help get you fresh and keep you fresh all day long. Now, what queen doesn't love that?



**HAIL TO THE V**  
summerseve.com



## CELEBRITIES CAUGHT IN AWKWARD POSITIONS

# PARTS

## Vulva

vagina is a specific internal structure, whereas the vulva is the whole external genitalia

Gateway to the vagina

is the seat for female sexual pleasure

helps by flushing out the vulvovaginal fluids and usually maintains normal vaginal health

## Vestibule

Secretions of fluid from the vestibule glands lubricate the vaginal orifice during sexual excitement.

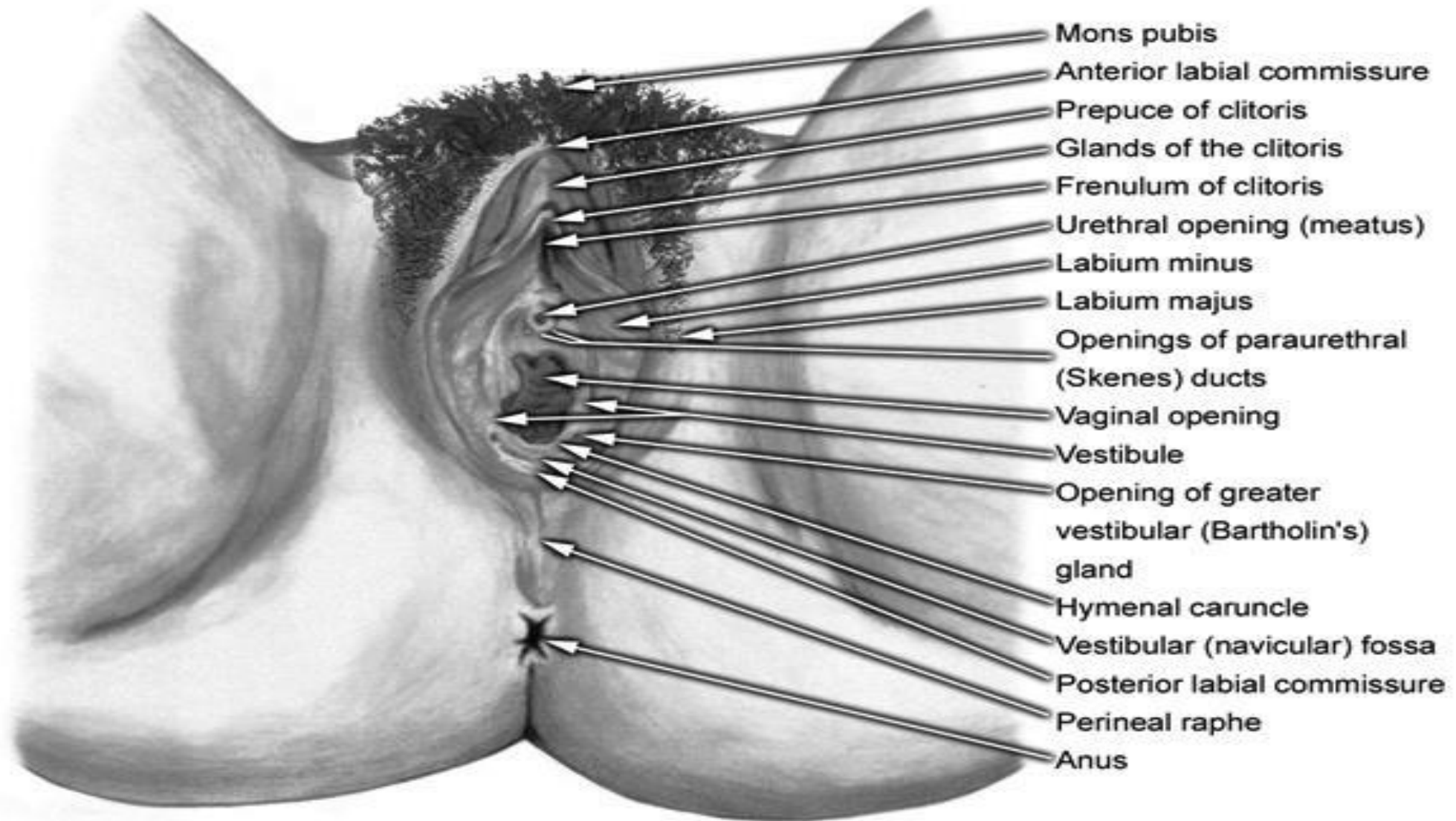
is the **space between** the labia minora and vagina

## Vagina

The inside parts

The hallway to the Uterus





# Vagina Myths



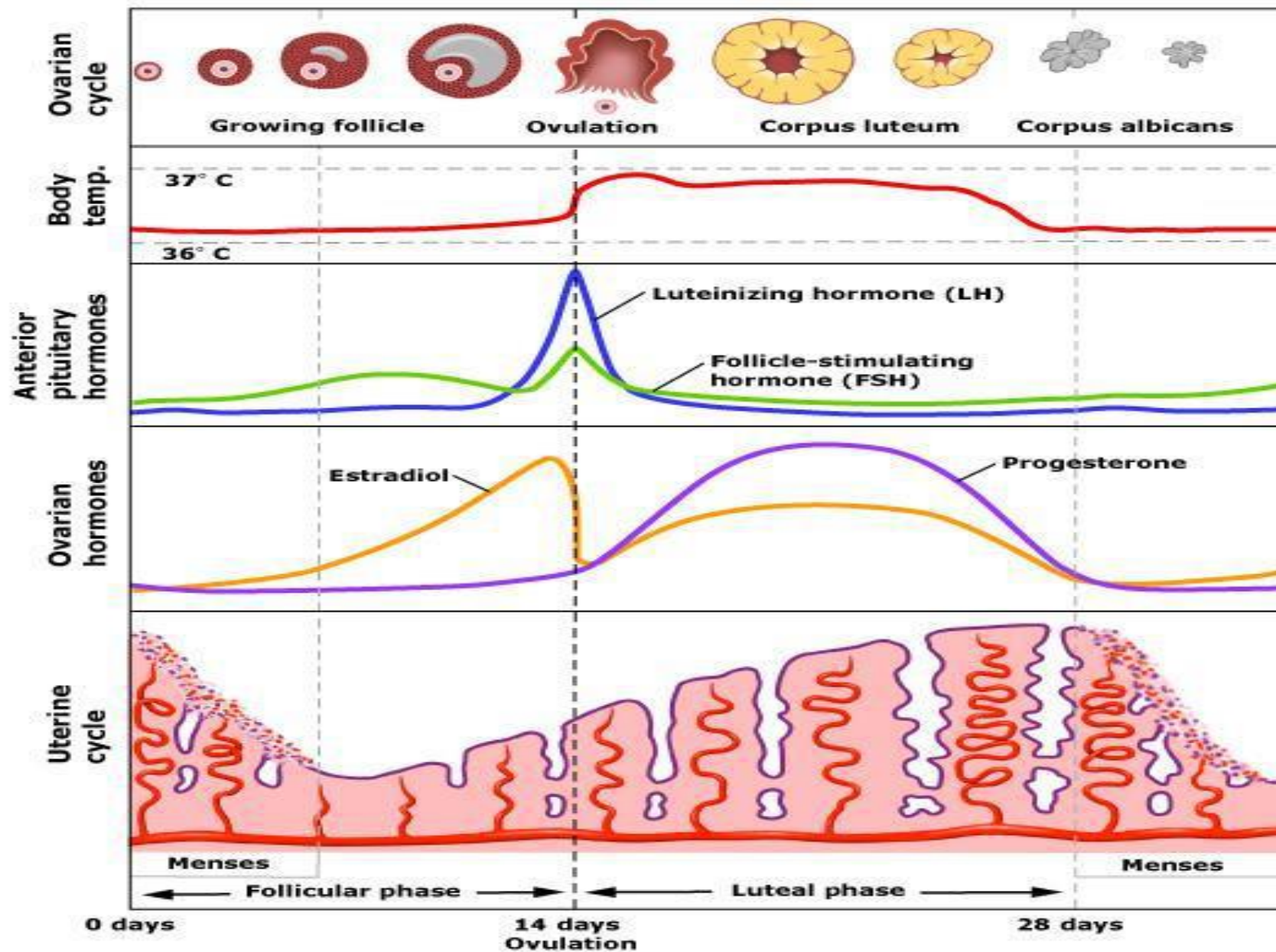
- Vagina Dentata.
- •Period Is Punishment
- •Hysteria
- •You Can't Get Pregnant If It's Legitimate Rape
- Sex With A Virgin Can Cure HIV/AIDS
- You can see someone's vagina if they go commando
- Douching after sex prevents pregnancy
- You can't get STDs from oral sex.
- You can lose something if inserted into the vagina
- You can't get pregnant if you have sex on your period

# The Vagina

- women of reproductive age, *Lactobacillus* is the predominant constituent of normal vaginal flora.
- Colonization by these bacteria keeps vaginal pH in the normal range (3.8 to 4.2),
- High estrogen levels maintain vaginal thickness, bolstering local defenses.
- ***Postmenopause*** a marked decrease in estrogen causes vaginal thinning, increasing vulnerability to infection and inflammation.
- Some treatments (eg, oophorectomy, birth control, pelvic radiation, certain chemotherapy drugs) also result in loss of estrogen.



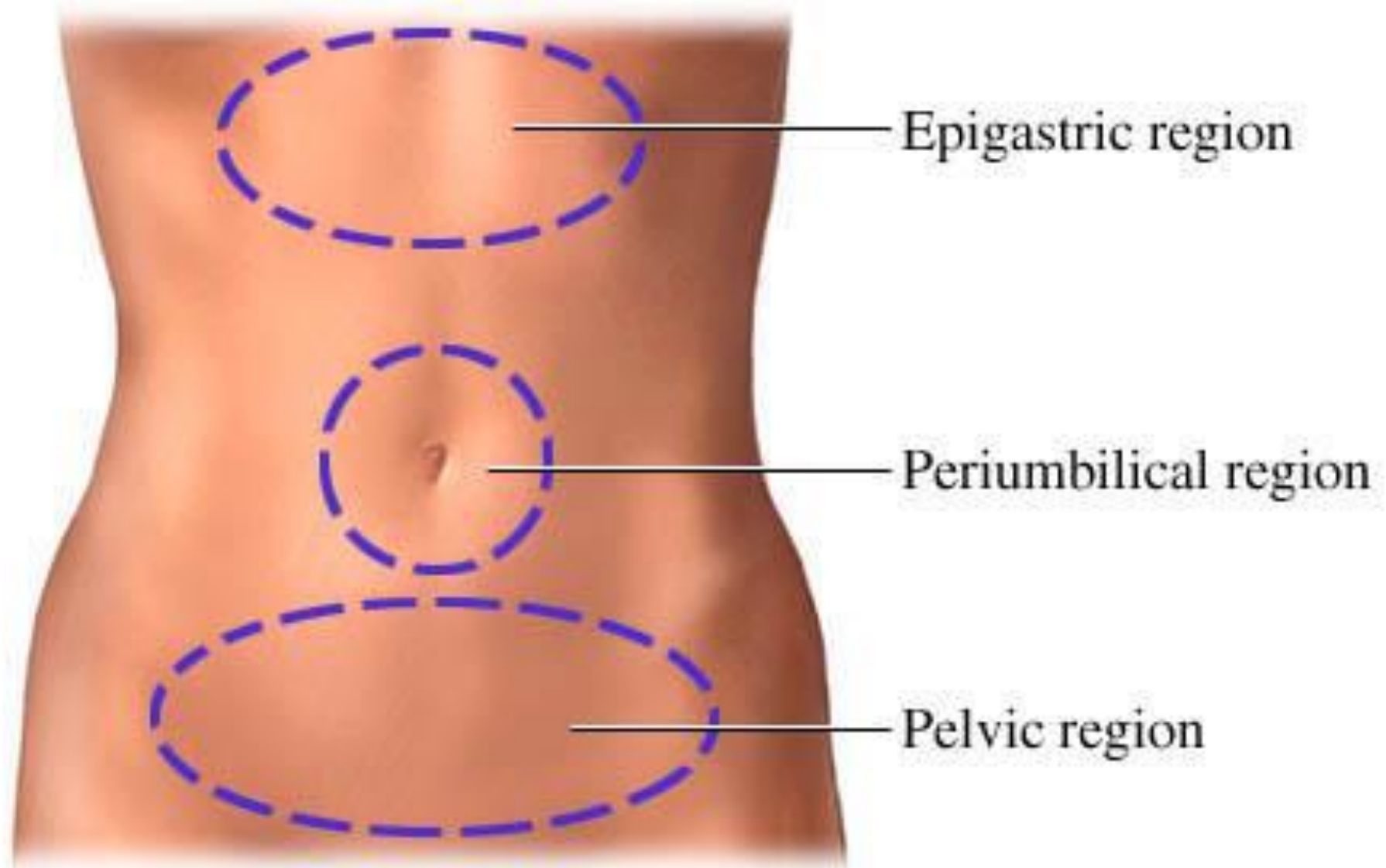




# Hormone Fluctuations During Menstrual Cycle

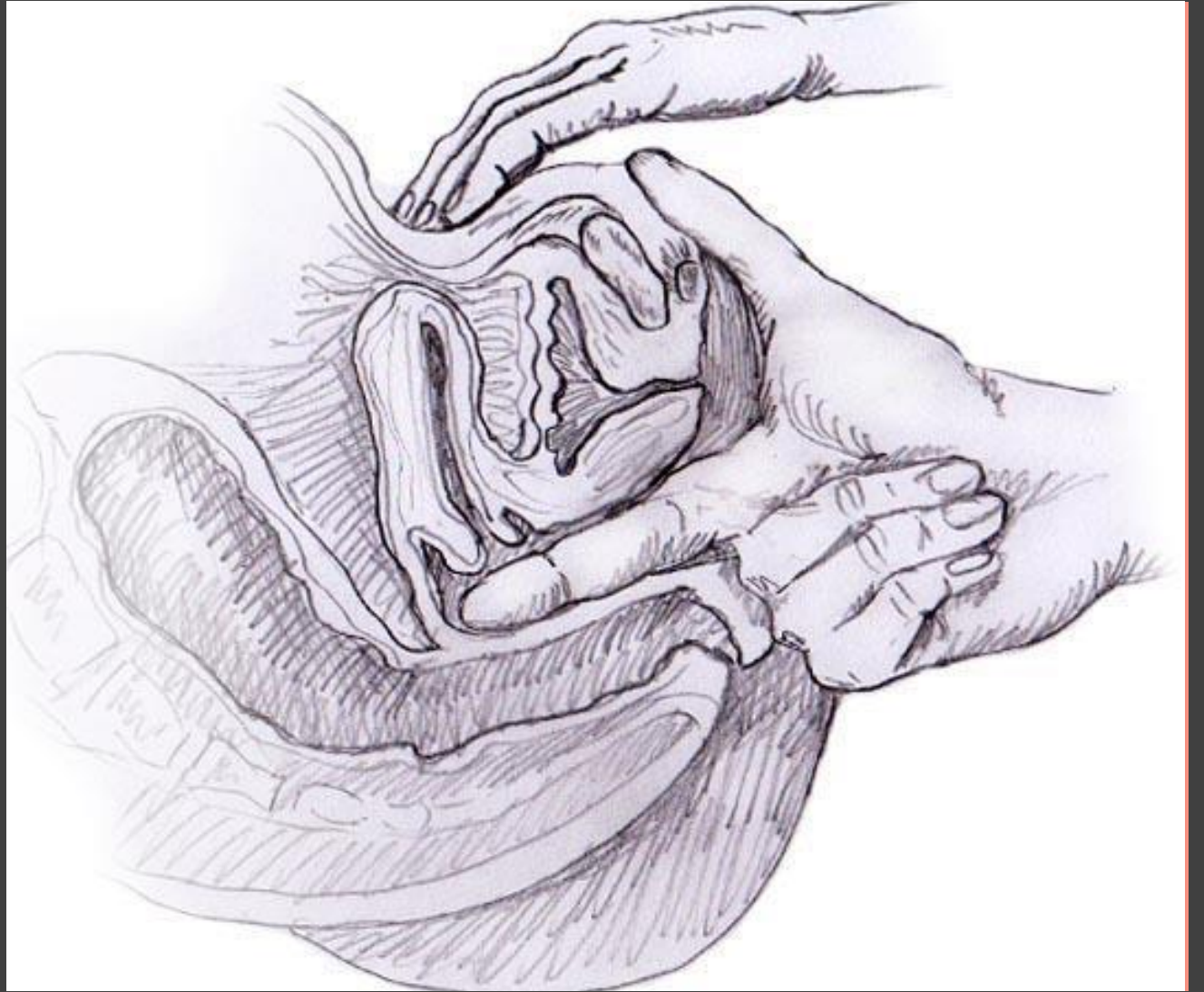


# THE EXAM

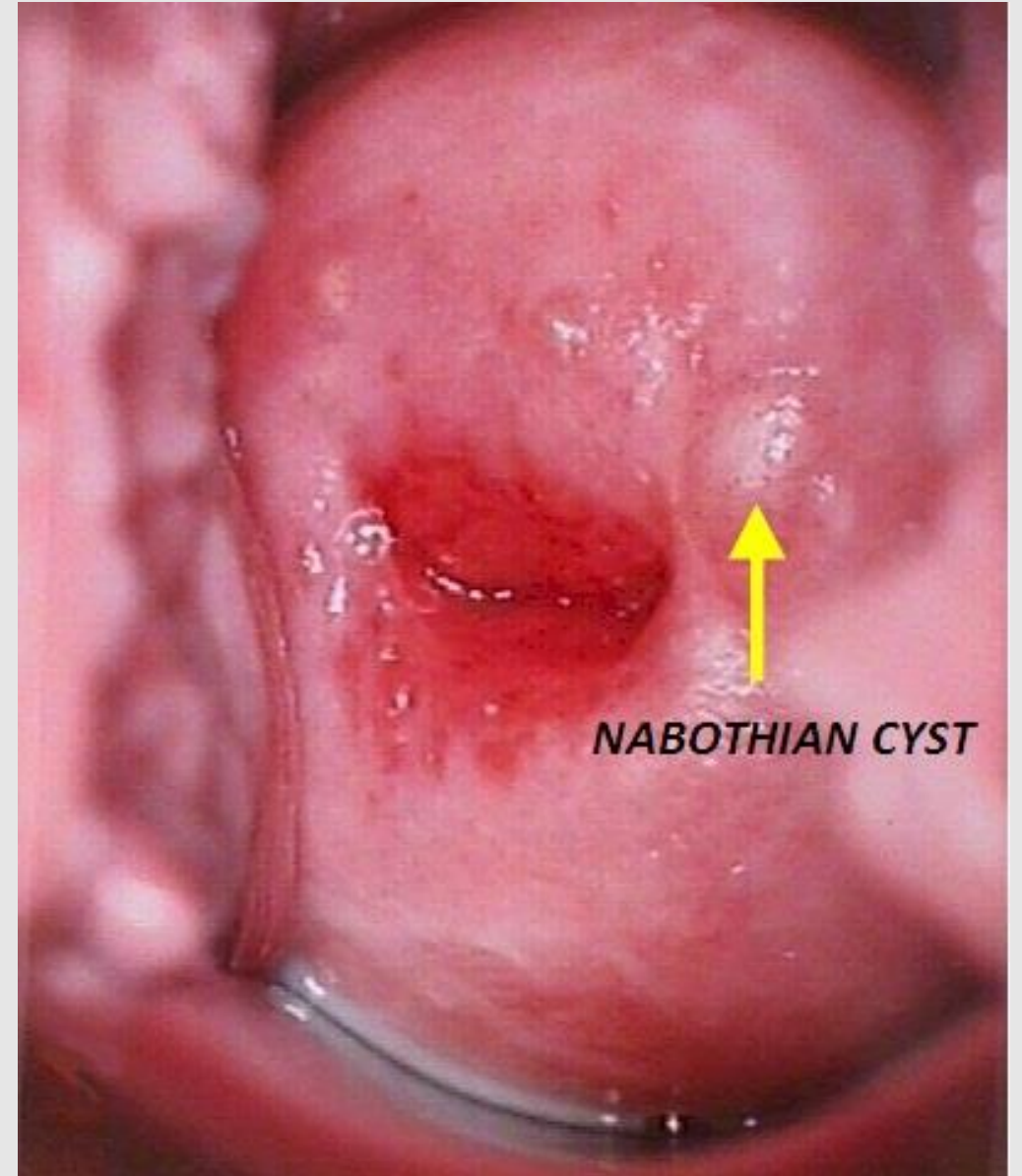




# THE BI-MANUAL



# Nabothian Cyst



# Cervical Polyps

Cervical polyps



As viewed through a speculum



Cut view







VectorStock

VectorStock.com/1142444



# **RULES FOR FEMALE HYGIENE**

	Physiologic	Candida	Chlamydia	Gonorrhea	Trichomonas	Bacterial Vaginosis	HSV
Appearance	White/Gray/Clear/ Mucoid	White, curdlike, plaques	Mucopus at cervix, clear/bloody discharge	Yellow/greenish discharge	Gray/yellow/green, malodorous, frothy	Gray/white/ homogenous, thin	Serous
Vaginal Irritation	None, typically	yes	Not usual	Not usual	yes	rare	yes
pH	<4.5	<4.5	variable	<4.5	>4.5	>4.5	<4.5
Micro	Epithelial cells, lactobacilli, few WBC	WBC's, pseudohyphae with budding yeast	Increased WBC	Greatly increased WBC	Greatly increased WBC, motile trichomonads	Few WBC, but clue cells present	Greatly increased WBC
Clinical Symptoms	none	Itching, dysuria, dyspareunia	Urethritis, PID, perihepatitis	Urethritis, PID, systemic illness, proctitis	Vulvar itching, prominent dysuria, pelvic discomfort	Fish-like odor	LAN, pain

Adapted from Zitelli Atlas of Pediatric Diagnosis

# Causes for Infections

## Hypersensitivity

- hygiene sprays or perfumes,
- menstrual pads,
- laundry soaps/bleaches,
- fabric softeners,
- fabric dyes,
- synthetic fibers,
- bathwater additives,
- toilet tissue,
- spermicides,
- vaginal lubricants/creams,
- latex condoms,
- vaginal contraceptive rings, or diaphragms.

## Physical

- Fistulas between the intestine and genital tract, which allow intestinal flora to seed the genital tract,
- pelvic radiation or tumors,
- Poor hygiene

## Other

- cervicitis
- skin disorders (eg, psoriasis, tineavesicular)
- Lichen Schlerosis



# Culprits

## Bacterial

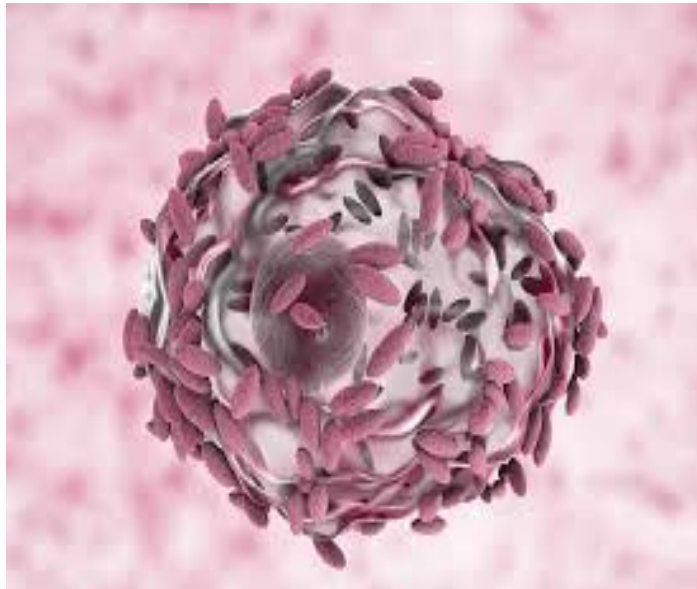
- accounts for 40-50% of vaginitis cases
- The most common vaginal infection in US women of childbearing age,
- incidence ; in blacks (23%), Hispanics(16%), whites(9%) and Asians (6%)
- 85% are asymptomatic
- caused by an overgrowth of *Gardnerella vaginalis*, *Mobiluncus* species, *Mycoplasma hominis*, or *Peptostreptococcus* species.

## Fungal

- accounts for 20-25% vaginitis cases
- In 85-90% of cases is caused by *C albicans*,
- 5-10%, is *C glabrata* or *C parapsilosis*

## Trichomoniasis

- accounts for 15-20% cases;
- 3.7 million cases occur each year
- the most common curable STD
- About 70% of infected people do not have any signs or symptoms



# BV

## Pregnancy

- associated with adverse pregnancy outcomes, including premature rupture of membranes, preterm labor, preterm birth, intra-amniotic infection, and postpartum endometritis,
- Multiple studies and meta-analyses have shown no association of metronidazole use in pregnancy and teratogenic/mutagenic effects in newborns
- pregnant women, oral therapy is preferred because of the possibility of subclinical upper-genital-tract infection.

## Surgery/procedures

- Endometritis
- Post-op infections

# Treatments

## Oral

- seconidazole 2g oral granules is a 5 nitroimidazole single packet. Sprinkle in pudding, yogurt, apple sauce
- Tinidazole 2 g orally QD for 2 days
- Tinidazole 1 g orally QD for 5 days
- Metronidazole 500 mg orally BID for 7 days\*
- Clindamycin 300 mg orally BID for 7 days

## Local

- Clindamycin ovules 100 mg intravaginally HS for 3 days
- Metronidazole gel 0.75%, one full applicator (5 g) intravaginally, HS for 5 days
- Clindamycin cream 2%, one full applicator (5 g) intravaginally HS for 7 days†

The CDC does not recommend treatment of the partners of women with BV because there are no definitive data to support such a recommendation.



# CANDIDIASIS “YEAST”



# Rx Treatments

presence of external dysuria and vulvar pruritus, pain, swelling, and redness.

Signs include vulvar edema, fissures, excoriations, or thick, curdy vaginal discharge.

associated with a normal vaginal pH ( $<4.5$ ), and therefore, pH testing is not a useful diagnostic tool.

## **Diagnosis**

Use of 10% KOH in wet preparations improves the visualization of yeast and mycelia by disrupting cellular material that might obscure the yeast or pseudo hyphae.

## **Treatment**

Short-course topical formulations (i.e., single dose and regimens of 1–3 days)

The topically applied azole drugs are more effective than nystatin.

Treatment with azoles results in relief of symptoms and negative cultures in 80%–90% of patients who complete therapy.

data do not support treatment of sex partners.

# Rx Treatments

- \*\*\*Only topical azole therapies, applied for 7 days, are recommended for use among pregnant women. CDC, 2017
- Butoconazole 2% cream (single dose bioadhesive product), 5 g intravaginally in a single application
  - Terconazole 0.4% cream 5 g intravaginally daily for 7 days
  - Terconazole 0.8% cream 5 g intravaginally daily for 3 days
- Terconazole 80 mg vaginal suppository, one suppository daily for 3 days
- Oral Agent:
  - Fluconazole 150 mg orally in a single dose





# SEXUALLY TRANSMITTED INFECTIONS

# The State of STDs in the United States



**STDs SURGE FOR THE FIFTH  
STRAIGHT YEAR, REACHING  
AN ALL-TIME HIGH.**



**1.8 million**  
**CASES OF CHLAMYDIA**  
19% rate increase since 2014



**583,405**  
**CASES OF GONORRHEA**  
63% rate increase since 2014



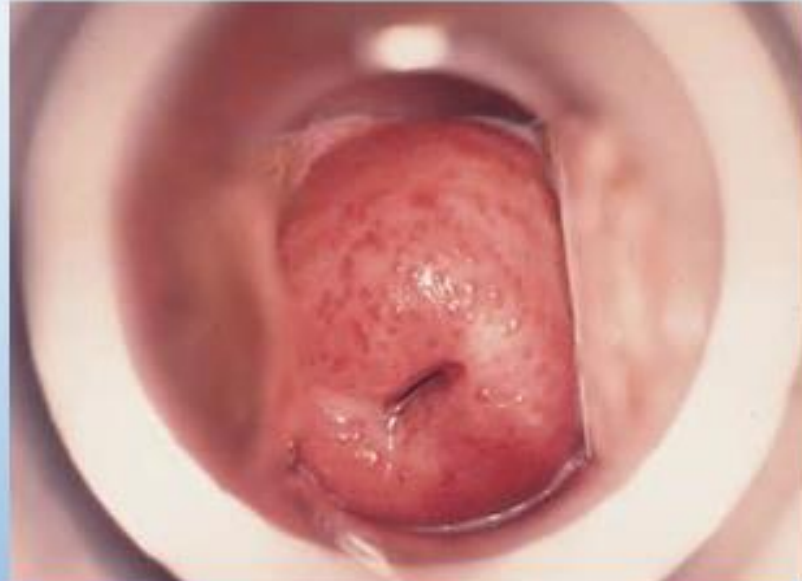
**115,045**  
**CASES OF SYPHILIS**  
71% rate increase of infectious  
syphilis since 2014



**1,306**  
**CASES OF SYPHILIS  
AMONG NEWBORNS**  
185% rate increase since 2014

**LEARN MORE AT: [www.cdc.gov/std/](http://www.cdc.gov/std/)**

# TRICHOMONIASIS





# “Tric or Treat”

- Metronidazole 2 g po in a single dose

- OR

Tinidazole 2 g po in a single dose

- **Alternative: Metronidazole** 500 mg orally twice a day for 7 days\*
- **male partners should be evaluated with 3 swabs and treated** with either Tinidazole in a single dose of 2 g po or Metronidazole twice a day at 500 mg po for 7 days.
- Metronidazole gel is considerably **less** efficacious for the treatment of Trichomoniasis
  - ***rescreening for *T. vaginalis* at 3 months following initial infection***



# Males and Trichomoniasis

- it is important to realize that you can't just do a single swab from one location, get a positive or negative and determine whether the partner has a trichomonas infection.
- Infection may lay in the urine; the coronal sulcus or might be semen
- and to tell a man that he does not have trichomoniasis, you really need to have 3 swabs done which nobody is doing routinely.
- no matter what the partner says or no matter what the partner's doctor says, the partner needs to be treated.

# Chlamydia

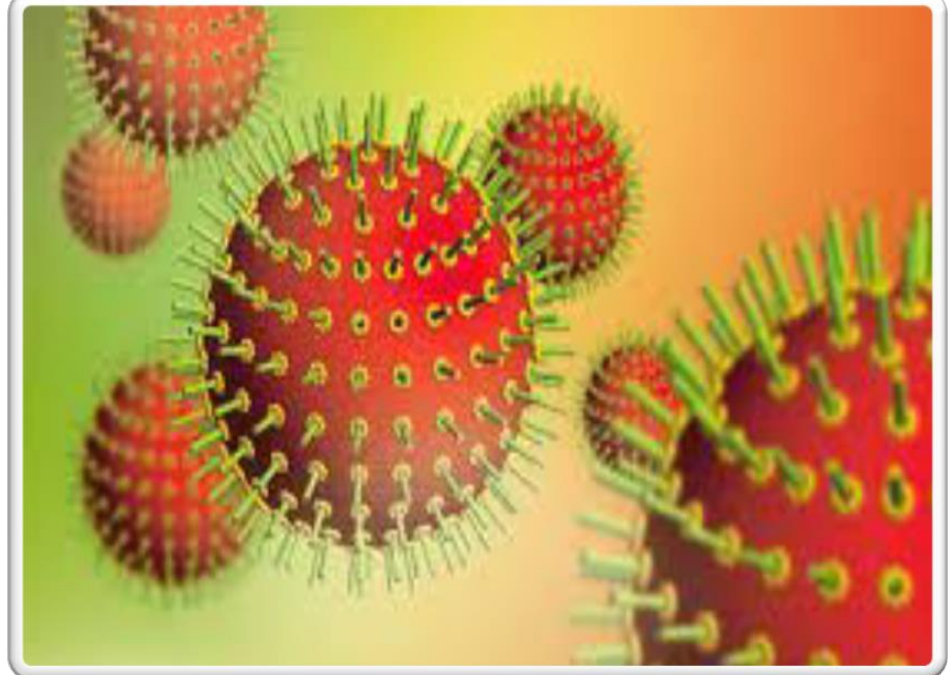
- Usual presentation of Chlamydia are similar to Gonorrhoea
- Chlamydia is also asymptomatic in many patients
- Common presentations of Chlamydia:

In men	In women
• Conjunctivitis	• Conjunctivitis
• Urethritis	• Cervicitis
• Proctitis	• Proctitis
• Epidydmitis	• Urethritis
• Prostatitis	• Endometritis
	• Salpingitis

## Complications of Chlamydia:

- Infertility
- Ectopic pregnancy
- Miscarriage

The most  
commonly  
reported STD in  
the US.

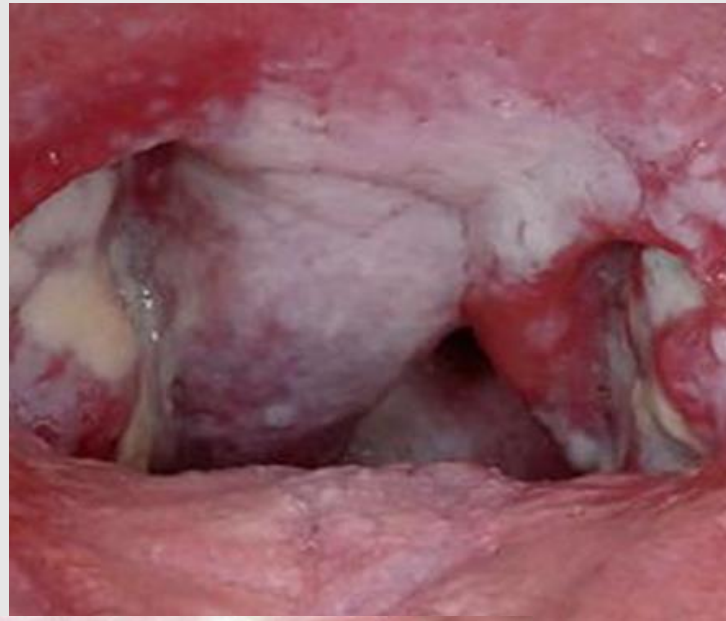






## CHLAMYDIA TESTING IN WOMEN

- SEXUALLY ACTIVE WOMEN UNDER 25 YEARS OF AGE
- SEXUALLY ACTIVE WOMEN AGED 25 YEARS AND OLDER IF AT INCREASED RISK
- RETEST APPROXIMATELY 3 MONTHS AFTER TREATMENT
- **PREGNANT WOMEN**
- ALL PREGNANT WOMEN UNDER 25 YEARS OF AGE
- PREGNANT WOMEN, AGED 25 AND OLDER IF AT INCREASED RISK
- RETEST DURING THE 3RD TRIMESTER FOR WOMEN UNDER 25 YEARS OF AGE OR AT RISK
- **TEST-OF-CURE 3-4 WEEKS AFTER TREATMENT AND BE RETESTED WITHIN 3 MONTHS**
- [HTTPS://WWW.CDC.GOV/STD/TG2015/SPECIALPOPS.HTM](https://www.cdc.gov/std/tg2015/specialpop.htm)



# Chlamydia in the mouth

Painless sores in the mouth

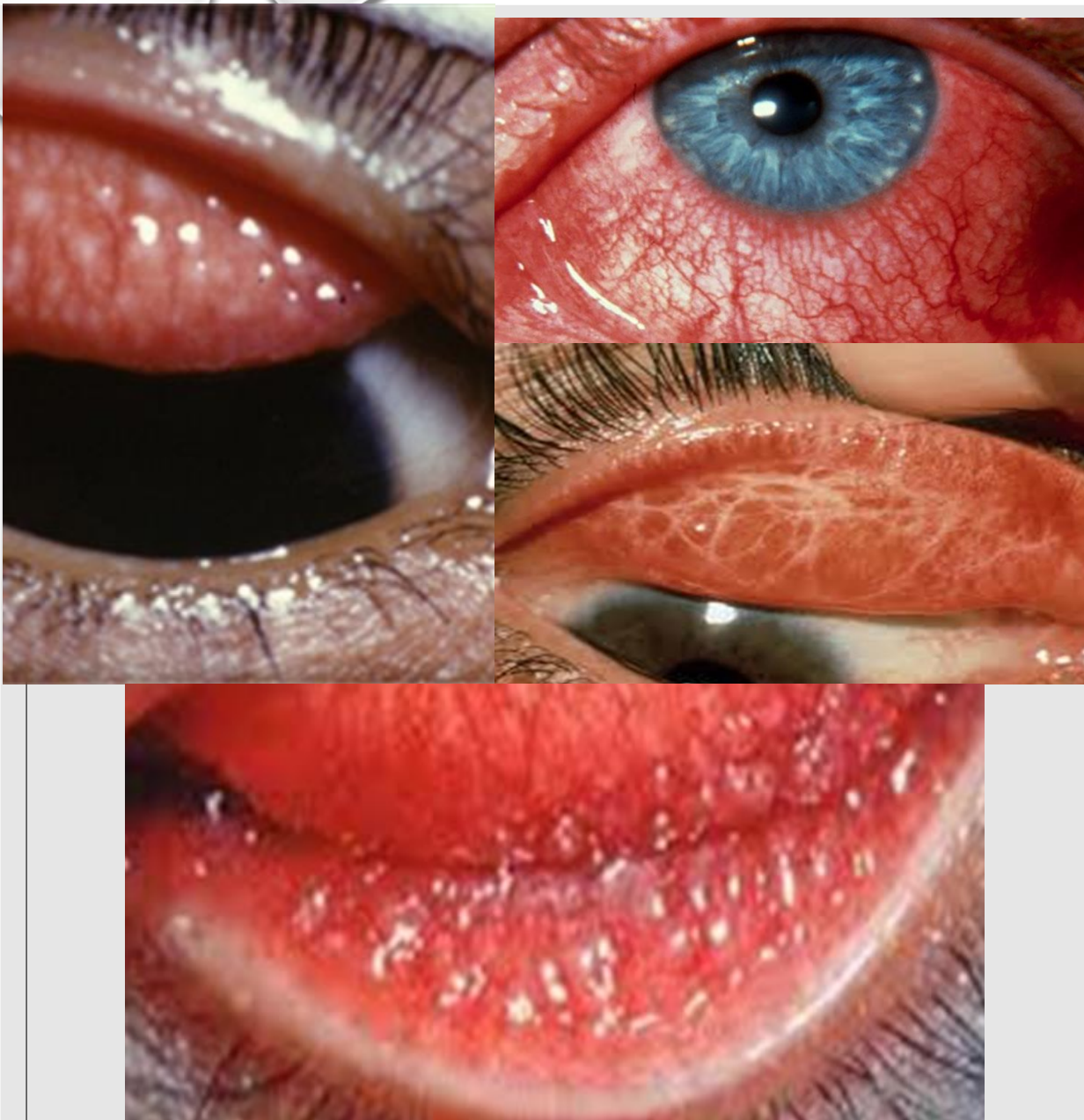
Lesions similar to cold sores around the mouth

Tonsillitis

Redness with white spots resembling strep throat

Scratchy, dry throat





# Chlamydia of the eye

- itching and redness of the eye(s): This may be confined to a single eye only, and present for 2-3 weeks
- Discharge of green or yellow color, pus-like fluid from the eyes with formation of crusts (usually seen in the morning, on waking-up). Sticky eyelids, which are difficult to keep open
- Eye pain and inflammation (usually mild); with gritty feeling of sand-like particles inside the eye
- Blurred vision
- Swollen lymph nodes in front of the ears

Treatment : CZ, and you would be mad!

**Azithromycin 1 g po  
a single dose**

(Doxycycline 100 mg po BID x 7 days)

an oropharyngeal infection should be treated with azithromycin or doxycycline.

For rectal chlamydial infections, some experts prefer using doxycycline rather than azithromycin

**Pregnancy with Azithromycin allergy:**

Amoxicillin 500 mg po TID x 7

#### **Alternative Regimens**

Erythromycin base 500 mg po QID x 7 days

Erythromycin ethyl succinate 800 mg po QID x 7 days

Levofloxacin 500 mg po qD x7 days

Ofloxacin 300 mg PO BID x7 days







# GONORRHEA

# The Clap!



## Gonorrhea

- caused by the bacteria *Neisseria gonorrhoeae*
- When symptoms are present, they can include thick white or yellow/greenish discharge, painful urination, increased urination, sore throat and severe pain in lower abdomen.

# Who gets it?

Any sexually active person can be infected with gonorrhea.

In the United States, the highest reported rates of infection are among sexually active teenagers, young adults, and African Americans

transmitted through sexual contact with the penis, vagina, mouth, or anus of an infected partner.

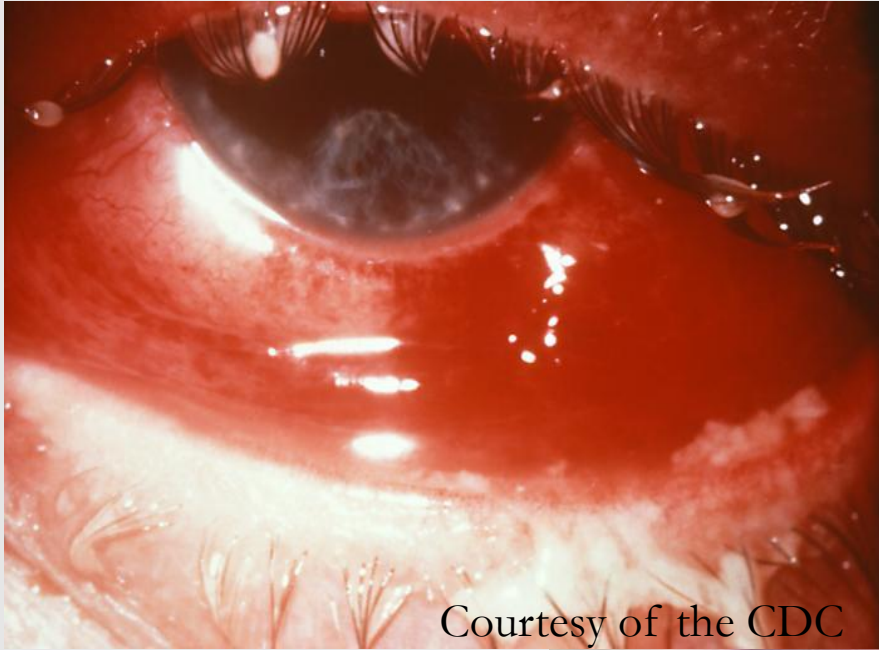
Ejaculation does not have to occur for gonorrhea to be transmitted or acquired.

Gonorrhea can also be spread perinatally from mother to baby during childbirth.

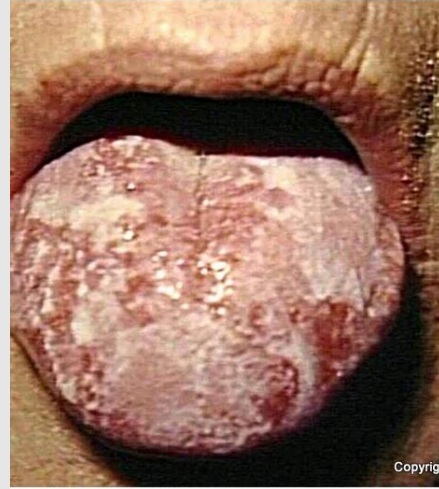
# Symptoms

- Unpleasant smelling and frothy vaginal discharge
- Itching in and around the vaginal area
- Blood spotting in discharge
- Frequent urination accompanied by burning sensation and pain
- Discomfort while having intercourse
- Green, white, yellow or gray vaginal discharge
- Genital swelling or redness
- Low abdominal pain in rare cases
- Groin swelling





Courtesy of the CDC



Copyright



Courtesy of the CDC/Joe Miller



Courtesy of the CDC

# EYES AND MOUTH

Pharyngeal infection may cause a sore throat, but usually is asymptomatic

Consider one-time lavage of the infected eye with saline solution

Culture is available for detection of rectal, oropharyngeal, and conjunctival gonococcal infection, but NAAT is not FDA-cleared for use with these specimens. Yet some have met CLIA regulatory requirements and established performance specifications for using NAAT with rectal and oropharyngeal swab specimens

.

# Gonorrhea: “Happy Hour”



- ***Ceftriaxone 250 mg IM/single dose***  
PLUS

- ***Azithromycin 1g po/single dose***  
on the same day, same time

- safe and effective for tx of uncomplicated gonorrhea at all anatomic sites, curing 99.2% of urogenital and anorectal infections and 98.9% of pharyngeal infections in clinical trial.

## **Conjunctivitis:**

***Ceftriaxone 1 g IM/single dose + Azithromycin 1 g po/ single dose***

- Laws and regulations in all states require clinicians, laboratories, or both to report persons with gonorrhea to public health authorities.

If ceftriaxone is not available  
or  
Expedited Partner Therapy:



- Cefixime 400 mg orally in a single dose  
PLUS
- Azithromycin 1 g orally in a single dose

Laws and regulations in all states require clinicians, laboratories, or both to report persons with gonorrhea to public health authorities.





# THE MATURE VAGINA: GSM



# Sexual Health

Sexual issues generally increase with aging; distressing sexual complaints peak during midlife (ages 45-64) and are lowest from age 65 onward

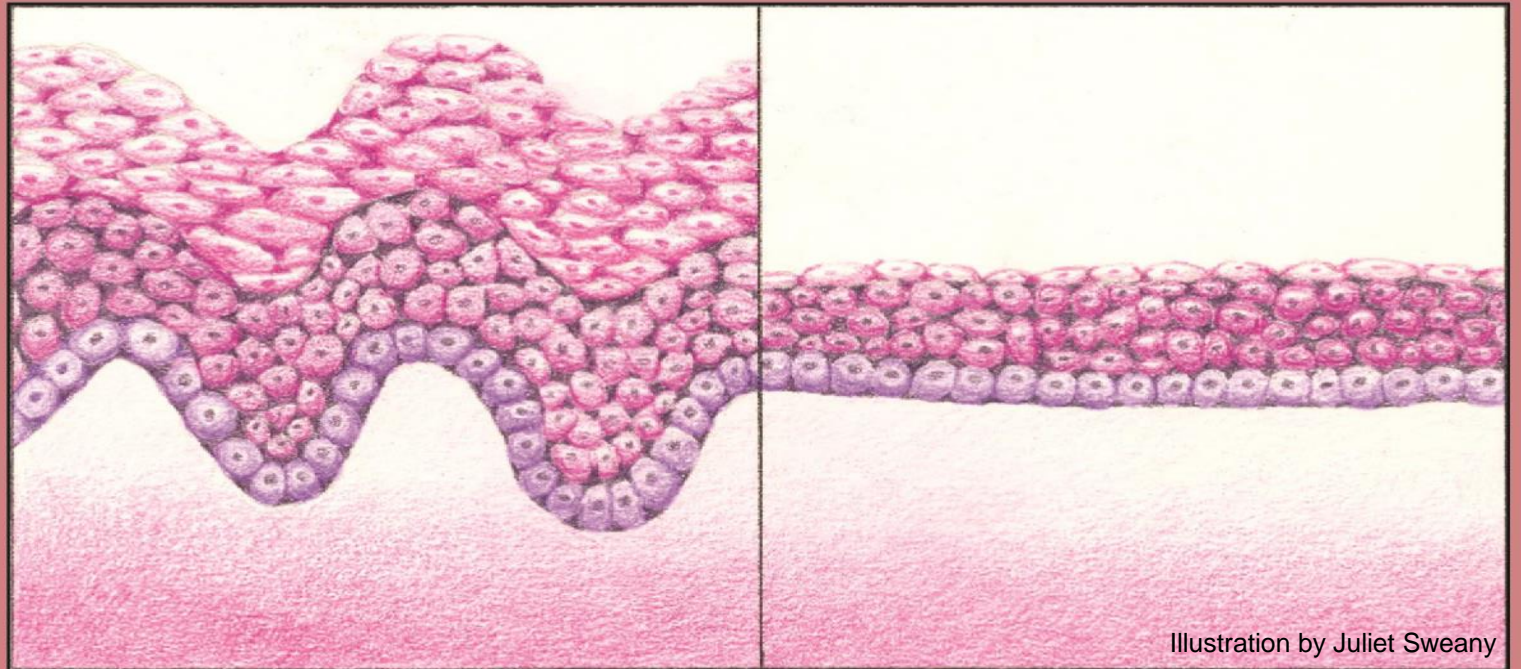
Decreased estrogen causes a decline in vaginal lubrication and elasticity

Decreased testosterone may contribute to a decline in sexual desire and sensation

An active sex life, lubricants and moisturizers, and local vaginal estrogen help maintain vaginal health



# Grape to Raisins



**Well-Estrogenized  
Premenopausal State**

**Low-Estrogen  
Postmenopausal State**



# Vaginal symptoms

- Symptoms such as vaginal dryness, vulvovaginal irritation/itching, and dyspareunia are experienced by an estimated 10% to 40% of postmenopausal women
- Vasomotor symptoms, abate over time, vaginal atrophy is typically progressive and unlikely to resolve on its own
- Treatments include: regular sexual activity, lubricants and moisturizers, and local vaginal estrogen



## Pharmacologic treatments for GSM

Treatment	Product Name	Dose
<i>Vaginal Cream</i>		
17-beta- estradiol cream	<u>Estrace</u> , generic	0.5-1gm daily for 2 weeks then 0.5-1gm 1-3x per week
Conjugated equine estrogens cream	Premarin	0.5-1gm daily for 2 weeks then 0.5-1gm 1-3x per week
<i>Vaginal Inserts</i>		
Estradiol vaginal tablets	<u>Vagifem</u> <sup>®</sup> , <u>Yuvafem</u> <sup>®</sup> ,	10mcg inserts daily for 2 weeks and then 2x per week
Estradiol soft gel capsules	<u>ImVexxy</u> <sup>®</sup>	4, 10 mcg inserts daily for 2 weeks and then 2x per week
DHEA ( <u>prasterone</u> ) inserts	<u>Intrarosa</u> <sup>®</sup>	6.5mg capsules daily
<i>Vaginal Ring</i>		
17-beta-estradiol ring	<u>Estring</u> <sup>®</sup>	1 ring inserted every 3 months
<i>SERM</i>		
Ospemifene oral tablets	<u>Osphena</u> <sup>®</sup>	60mg tablet daily