



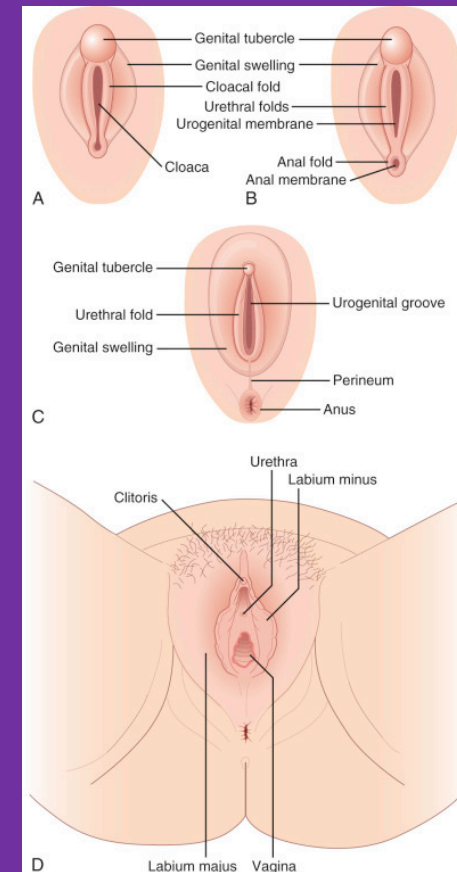
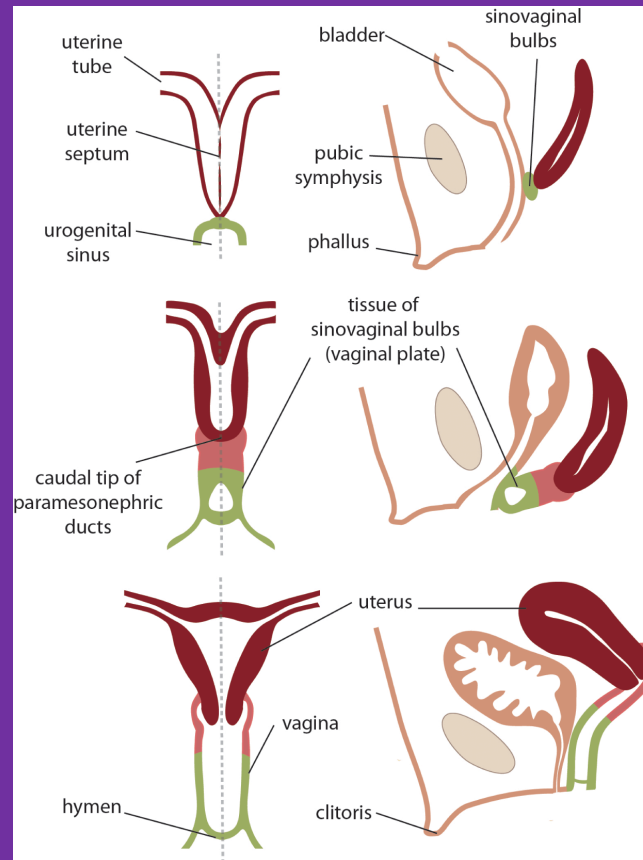
# **ALL “V” THINGS: *VULVA, VESTIBULE, AND VAGINA***

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Urology, Women’s Health, Sexual Medicine  
Skin, Bones, Hearts, and Private Parts 2024**

# BACK TO THE BASICS...

- What is the vulva?
- What is the vestibule?
- What is the vagina?



# PELVIC EXAM BEST PRACTICES

- What might be reasons for a pelvic exam?
- Anyone guess how many pelvic exams are performed each year?
- Components of a pelvic exam
- The exam consists of:
  - Inspection of the external genitalia
  - Monomanual examination
  - Speculum examination of the vagina and cervix
  - Bimanual examination
  - Sometimes rectal or rectovaginal examination

# PELVIC EXAM BEST PRACTICES

- BIG QUESTION = Should we perform routine pelvic examinations in asymptomatic, average risk, adult women or is this unnecessary?
- Several organizations have tried to answer this question:
  - USPSTF – 2017
  - ACP – 2014
  - AAFP – 2014
  - ACOG – 2012 (Reaffirmed in 2016 after USPSTF Draft Recommendation)
- Consensus on many reasons NOT to do a screening/routine pelvic exam in healthy women.

# PELVIC EXAM BEST PRACTICES

- Use this as an opportunity to educate!
- A pelvic exam is NOT required in asymptomatic women for the initiation of systemic hormonal contraceptives
  - Remember – only need medical history and blood pressure measurement to rule out contraindications
- Annual pelvic exam
  - Also an opportunity for...
    - Screening for STI's
    - Screening for cervical cancer
    - Immunizations
    - Blood pressure check
    - Weight measurements
    - Cholesterol measurements
    - Colon cancer screening
    - Risk factor assessment and counseling
  - There is no data indicating that the performance of the routine pelvic examination in asymptomatic average risk women reduces morbidity or mortality from any condition

# PELVIC EXAM BEST PRACTICES

## Are there any harms to a screening pelvic exam?

- False positive work ups and unnecessary surgeries + complications add to the cost
- Opportunity costs:
  - Preparing room and supplies
  - Patient disrobing and putting on a gown
  - Clinician finding a chaperone
  - Chaperone taking time away from other duties
  - Adds at least 10 minutes to an office encounter
- False Reassurance
- Psychological Harms:
  - Approximately 1/3 of women experience pain, discomfort, fear, anxiety and or embarrassment related to the pelvic exam
  - Less likely to return for another visit.
- Delay in Services and Obstruction of efforts to:
  - Increase appropriate cervical cancer screening
  - Reduce unwanted pregnancy
  - Prevent infertility through early treatment of chlamydia infections.

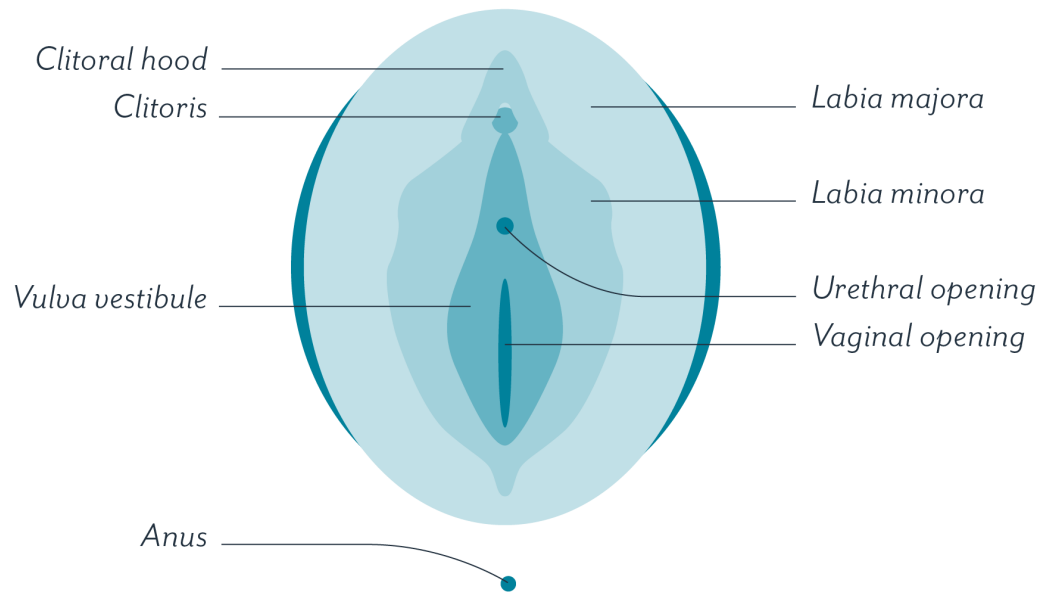
# PELVIC EXAM BEST PRACTICES

## Summary of Guidelines for Screening Pelvic Exam

	Recommendation	Rationale
USPSTF (2017)	Neither for nor against	Not enough evidence
ACP (2014)	Against	No evidence to support and significant harms
AAFP	Against	No evidence to support and low likelihood of benefit and increased risk of harm.
ACOG	Yearly after age 21	Expert Opinion.
APAOG	Yearly after age 21	Expert Opinion.

# VULVAR ANATOMY

*The Vulva*

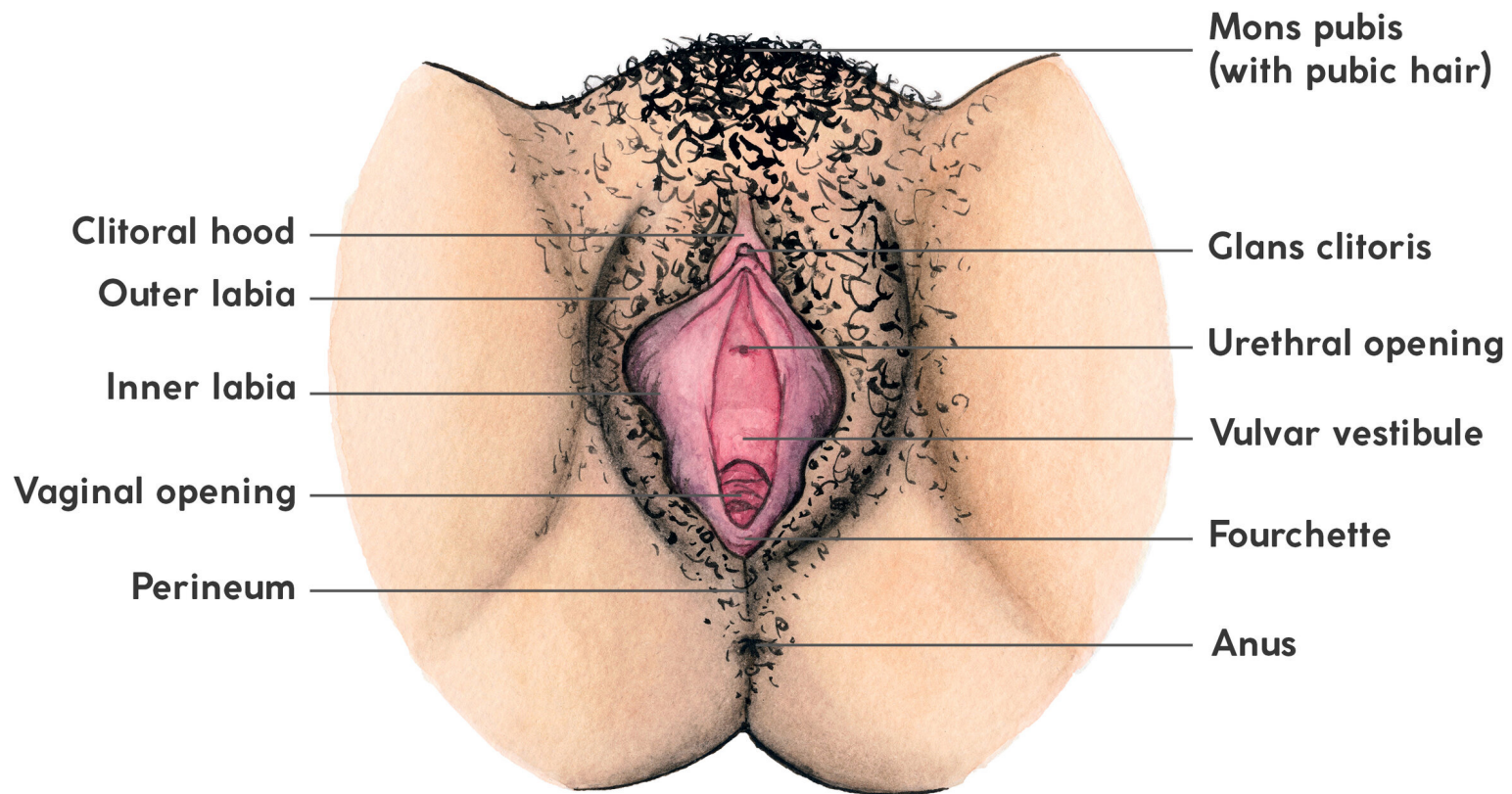


*The Clitoris*



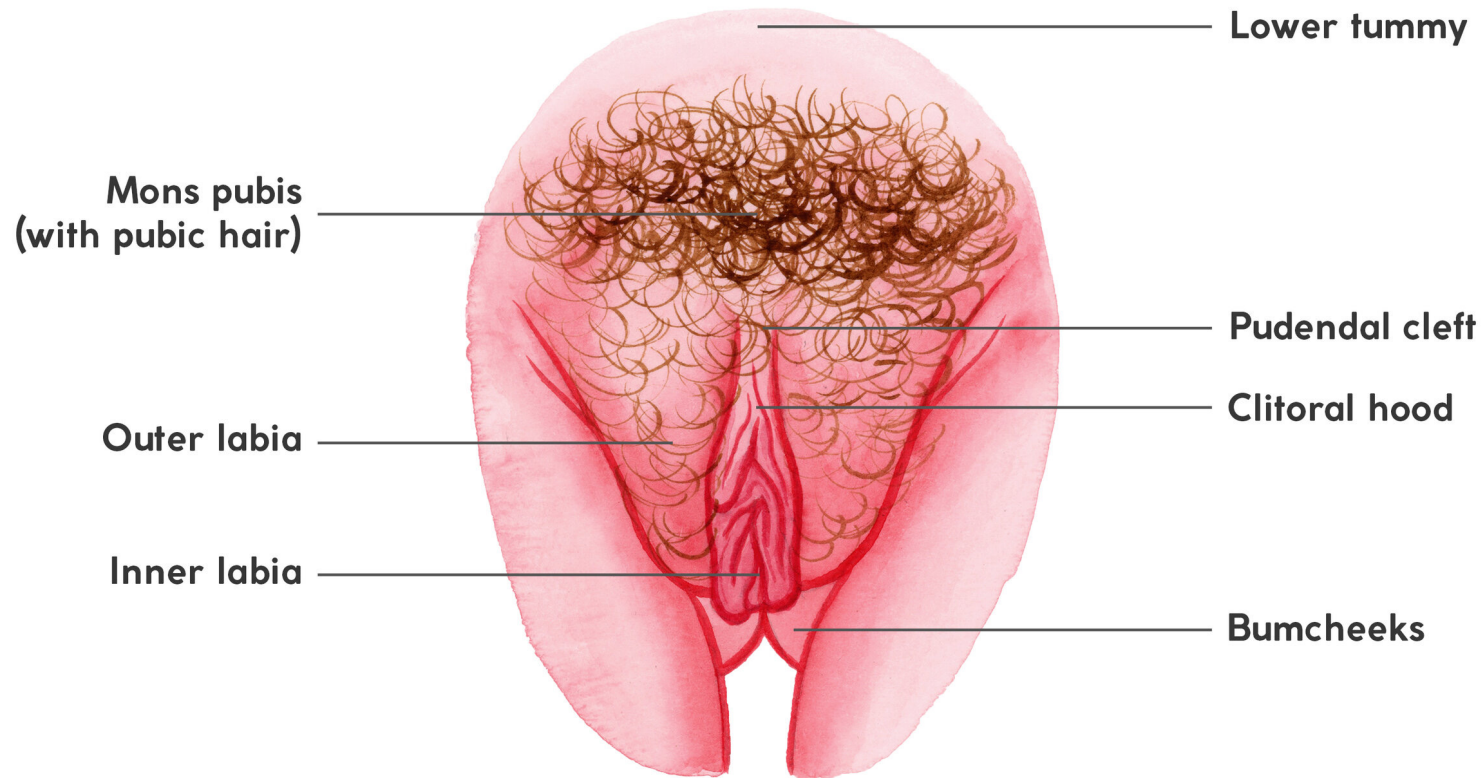


# WHAT IS THE VULVA?



© Illustration by Hilde Atalanta – The Vulva Gallery

# WHAT IS THE MONS PUBIS?



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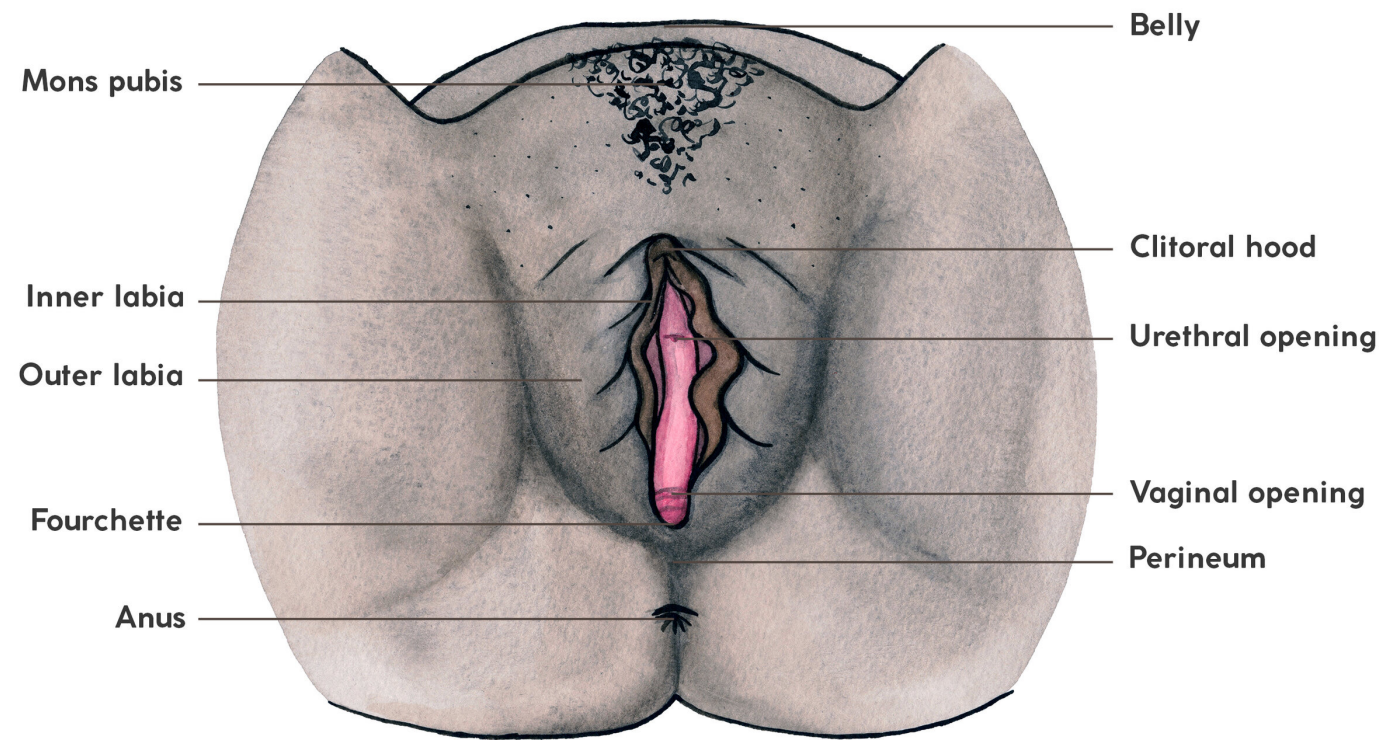
# LET'S TALK PUBIC HAIR!



The Vulva Gallery – Celebrating vulva diversity

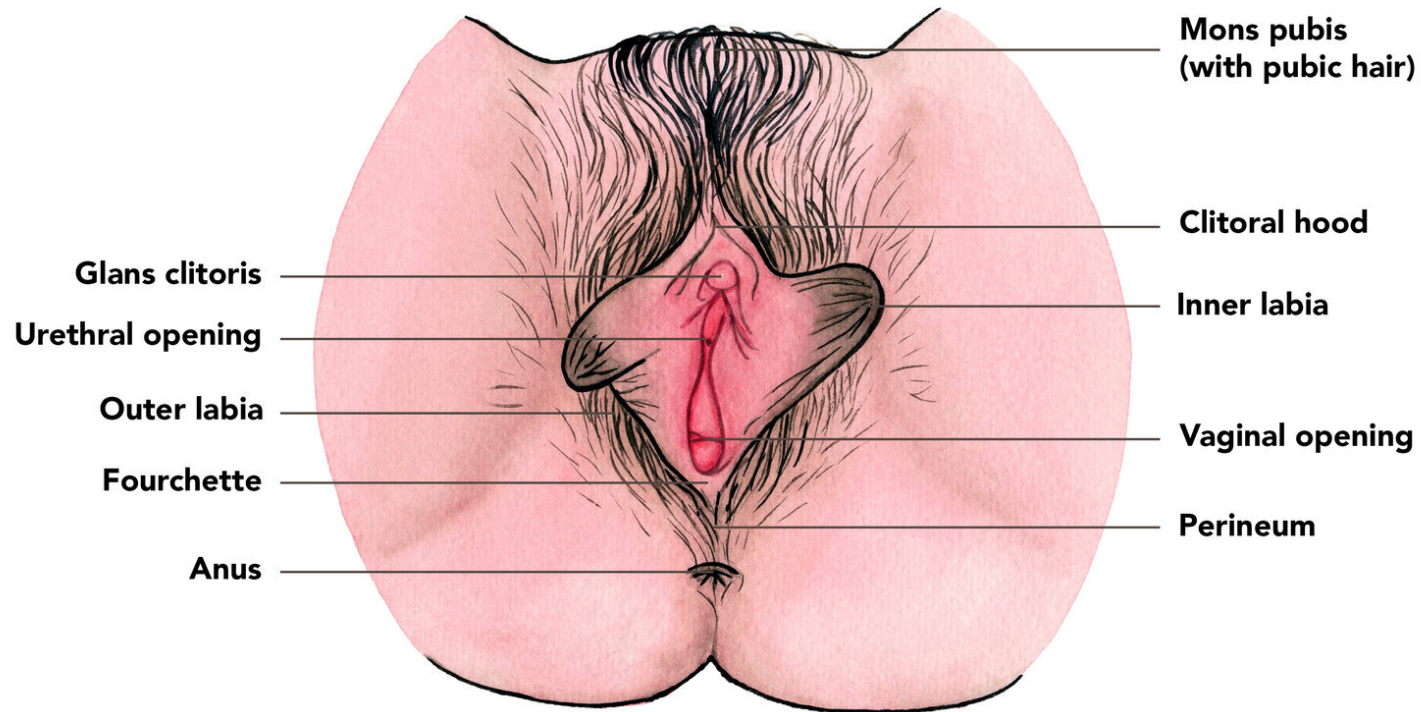
- Sexism vs body empowerment
- Keep things fresh
- Genital grooming
- What about accidents?
- Ingrown hairs
- Pornographic influence
- Always your choice
- Stigmatism

# LABIA MAJORA



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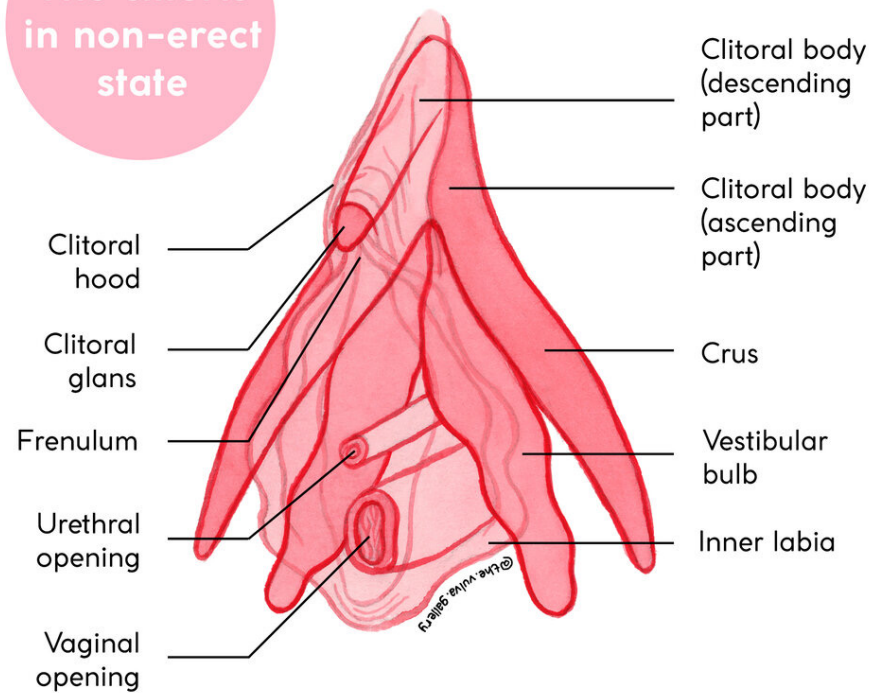
# LABIA MINORA



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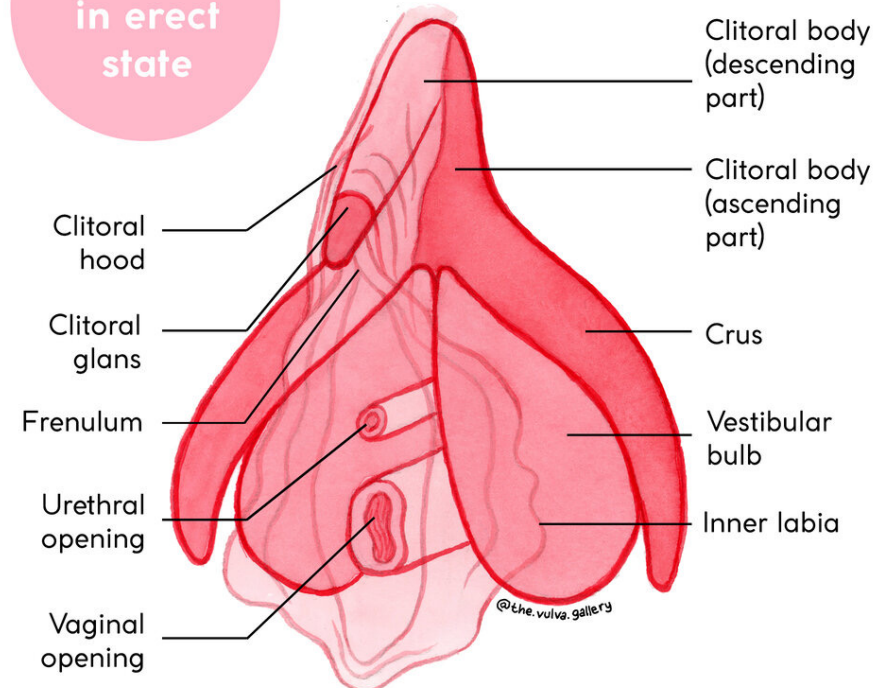
# THE CLITORIS

The clitoris  
in non-erect  
state



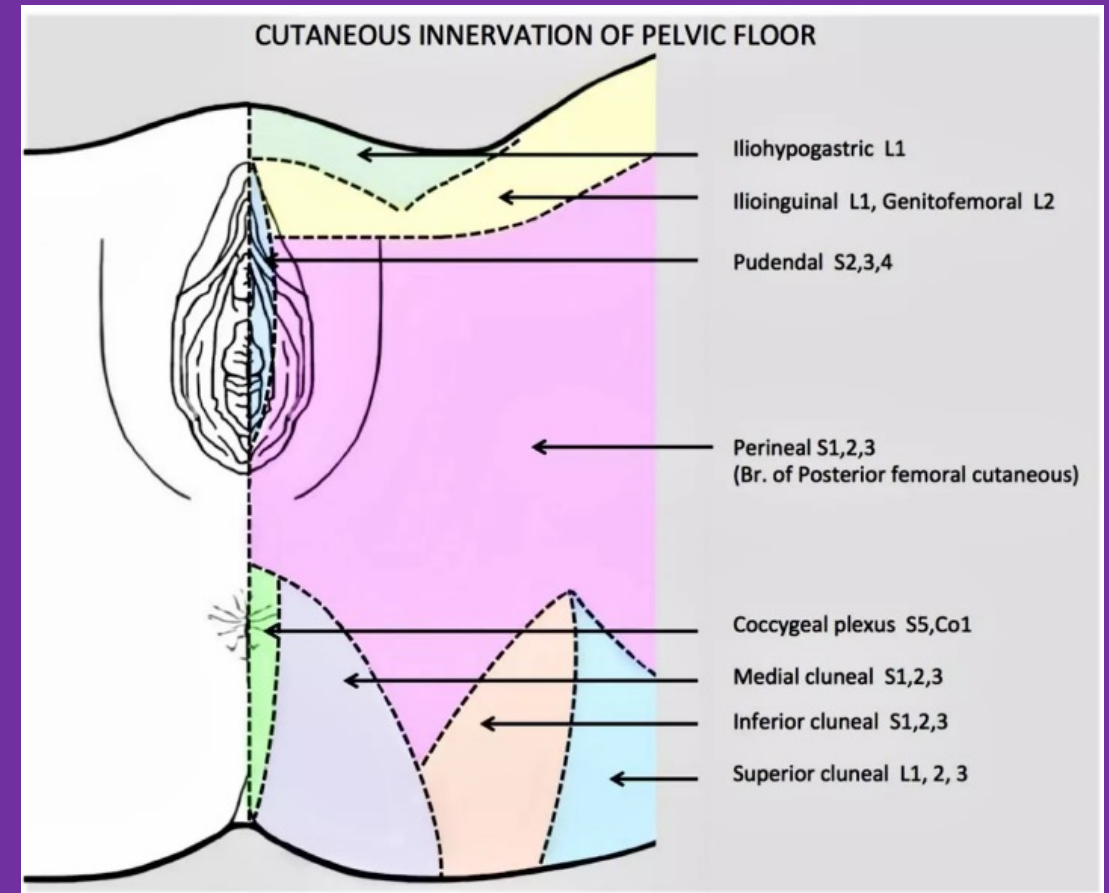
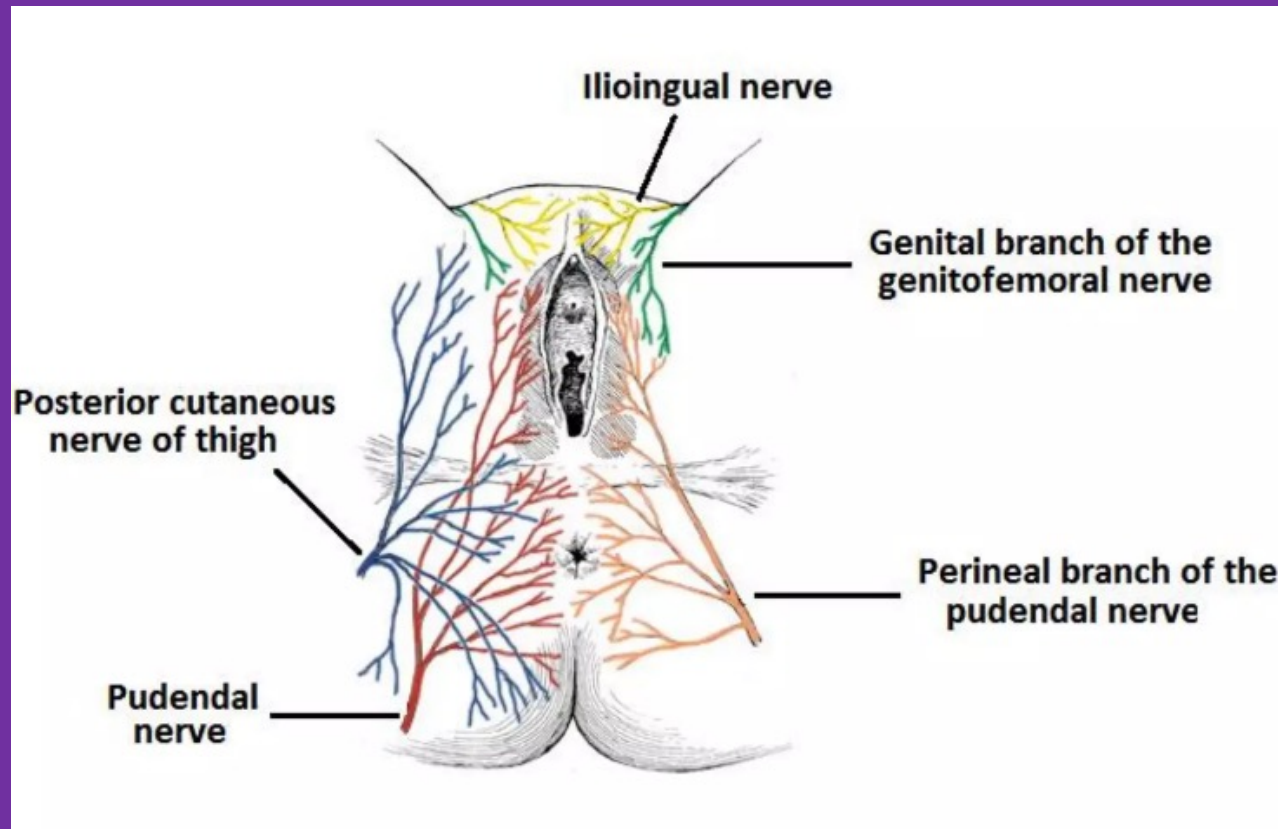
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The clitoris  
in erect  
state

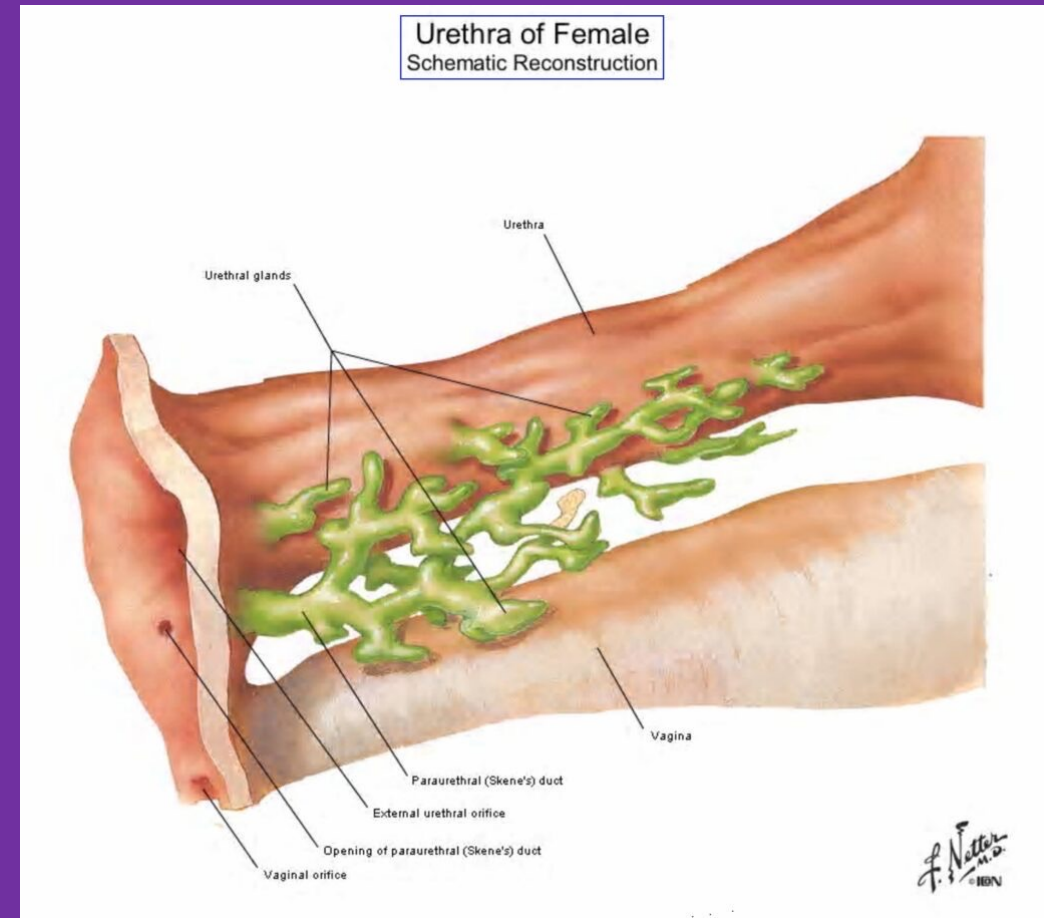
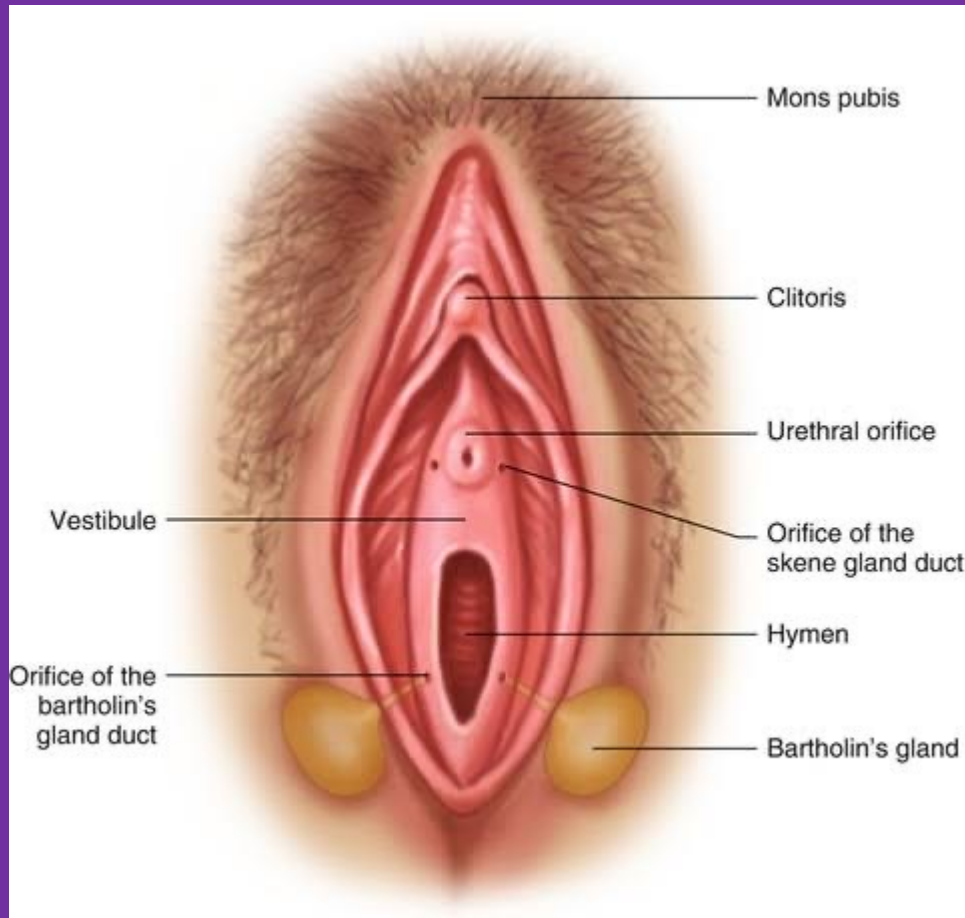


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# VULVAR INNERVATION



# VULVAR GLANDS – SKENES AND BARTHOLIN



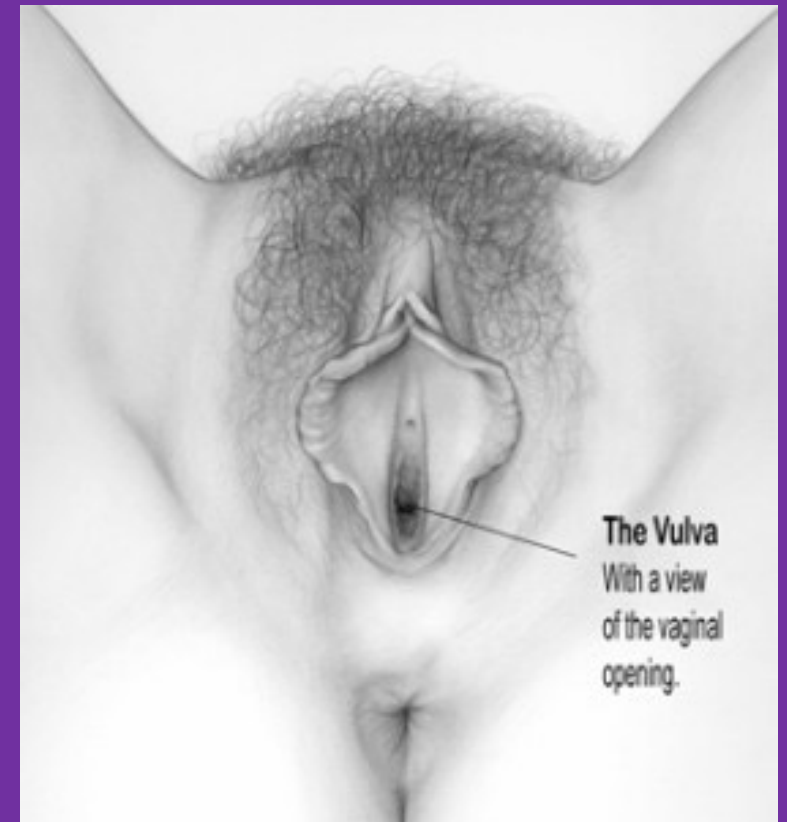
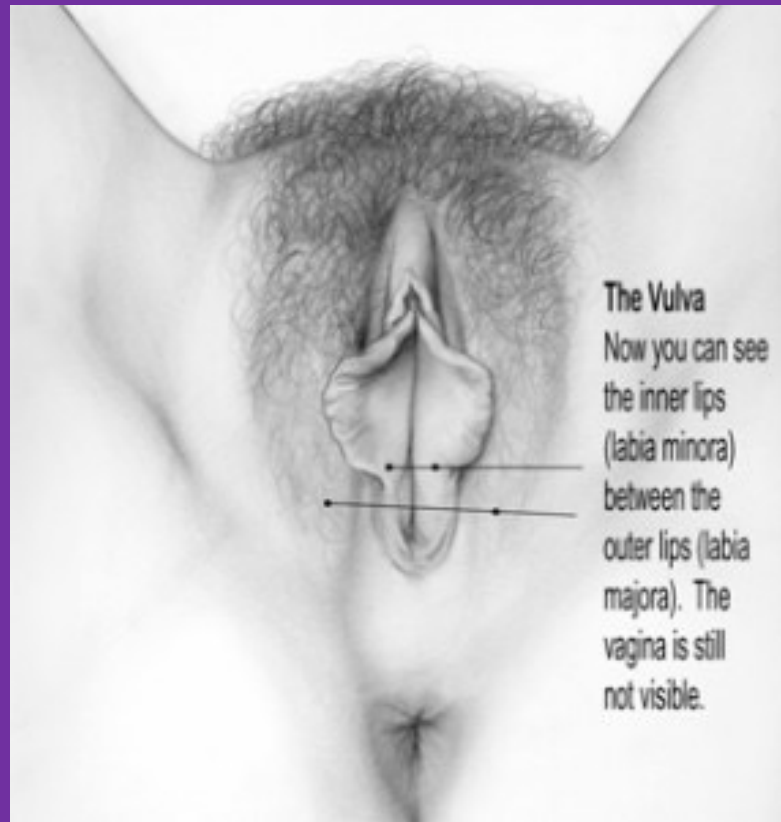


# VULVAR SELF EXAM

- 73% of women are still confused about what their vulva is and what it does.
- Create an inviting space
- Use a hand mirror
- Use your senses – Sight, Touch, Smell
- Performed once a month
- What to look for?
  - Changes in appearance
  - Change in the way it feels
  - Changes in pressure



# VULVAR SELF EXAM



# VULVAR SELF EXAM

## How to Perform VSE

- Perform VSE in a well-lit area.
- Wash your hands before performing your VSE.
- Sit down on a comfortable surface or stand with one foot propped up on a chair or bed.
- Hold a mirror in one hand and use the other hand to examine the vulva.
- Examine the parts of the vulva using sight and touch: the mons pubis; the left and right folds of the labia majora and minora; the clitoris and its general area; the skin around the vaginal entrance; the perineum; and the perianal area.

## What to Look for During Your VSE

- Changes in appearance, such as a new mole, wart, lump or other growth; changes in skin color such as white, reddened or brown patches of skin; cuts or sores.
- Changes in the feel of the skin, paying careful attention to areas where you feel pain, itching, or other discomfort.
- During visual inspection of the vulva, apply gentle pressure to the vulvar skin to check for any lumps.

## When to Perform Your VSE

- VSE should be performed in between menstrual periods, preferably at the same time each month. All sexually active women and women over 18 should perform VSE. If you notice any change, you should contact your healthcare provider promptly.

# PATIENT AUTONOMY AND INFORMED CONSENT

Should a healthcare provider obtain the patient's consent before performing a physical exam and during?

**CONSENT IS:**

**CLEAR COHERENT**  
**WILLING ONGOING**

<p><b>CLEAR</b> Consent is active.</p> <p>It's expressed through words or actions that create mutually understandable permission.</p> <p>Consent is never implied, and the absence of a no is not a yes.</p> <p>Silence is NOT consent.</p> <p>"I'm not sure," "I don't know," "Maybe" and similar phrases are NOT consent.</p>	<p><b>COHERENT</b> People incapacitated by drugs or alcohol cannot consent.</p> <p>Someone who cannot make rational, reasonable decisions because she or he lacks the capacity to understand the "who, what, when, where, why or how" of the situation cannot consent.</p> <p>People who are asleep or in another vulnerable position cannot consent.</p>	<p><b>WILLING</b> Consent is never given under pressure.</p> <p>Consent is not obtained through psychological or emotional manipulation.</p> <p>Consent cannot be obtained through physical violence or threat.</p> <p>Someone in an unbalanced power situation (i.e. someone under your authority) cannot consent.</p>	<p><b>ONGOING</b> Consent must be granted every time.</p> <p>Consent must be obtained at each step of physical intimacy. If someone consents to one sexual activity, she or he may or may not be willing to go further.</p>
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# AMERICAN MEDICAL ASSOCIATION

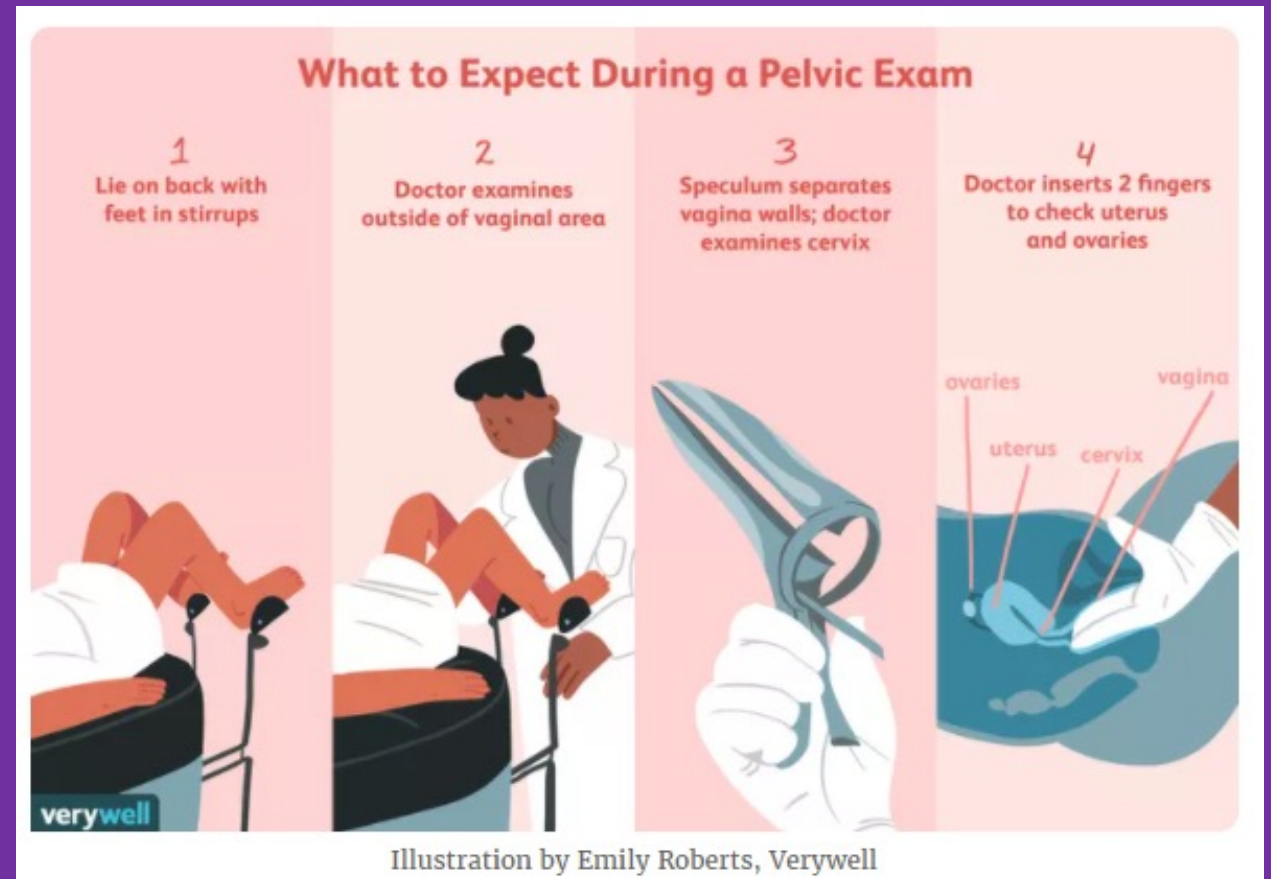
## Informed consent

- Explaining a medical intervention to a patient
- Include the risks and benefits
- Making sure they understand what they've been told
- Ask the patient if they agree
- Documenting the process
- Include ALL options



# COMMUNICATION

- A conversation doesn't just involve speaking to your patient
- Paying attention and active listening
- Use your eyes for nonverbal cues
- Asking permission
- Use their language
- Handouts are great!
- Defer if necessary.



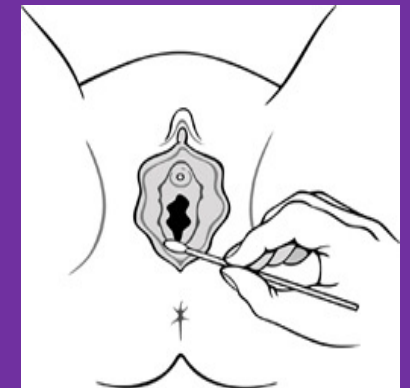
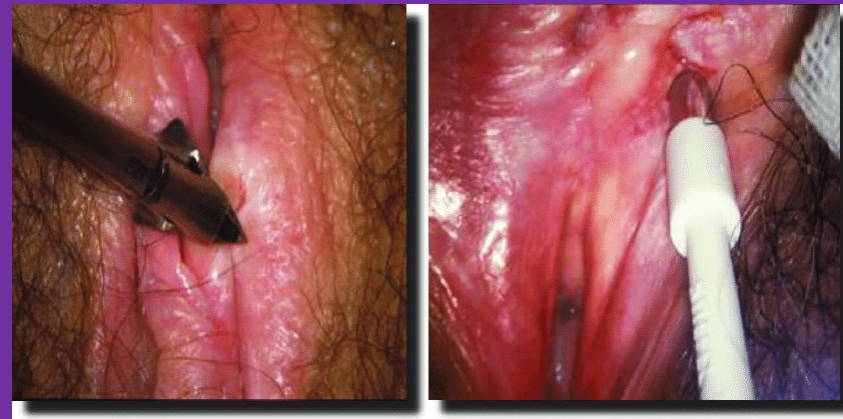
# PELVIC EXAM CONSIDERATIONS

- Environment – lighting, temperature, music
- Decrease anxiety – weighted blanket, stress ball
- Grounding or Mindfulness exercises
- Incorporate mental health as an active participant in the pelvic exam
- Exposure therapy – speculum, PAP items, Q-tip
- Have a mirror handy
- Think about the other people in the room
- Aftercare



# THE VULVA – DIAGNOSIS

- Physical exam
- Vulvar swabs
- Vulvoscopy with or without biopsy
- Q-tip test
- Biothesiometry





# THE VULVA – PATHOPHYSIOLOGY

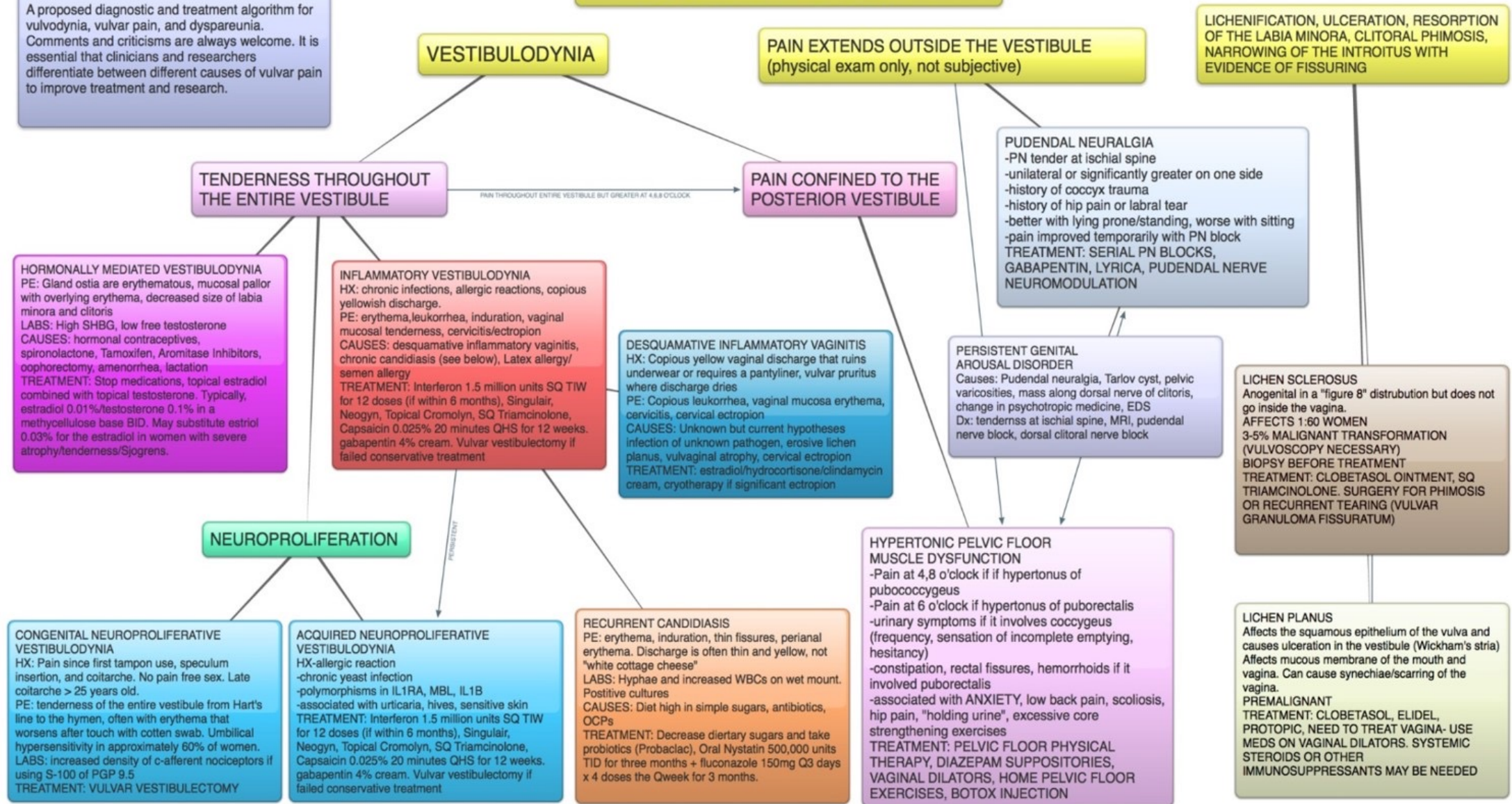
- Vulvodynia
- Lichen Sclerosus
- Lichen Planus
- Lichen simplex chronicus
- Folliculitis
- Contact dermatitis
- Vulvar atrophy (GSM)
- Mast Cell Activation



ANDREW T. GOLDSTEIN, MD FACOG IF  
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A proposed diagnostic and treatment algorithm for vulvodynia, vulvar pain, and dyspareunia. Comments and criticisms are always welcome. It is essential that clinicians and researchers differentiate between different causes of vulvar pain to improve treatment and research.

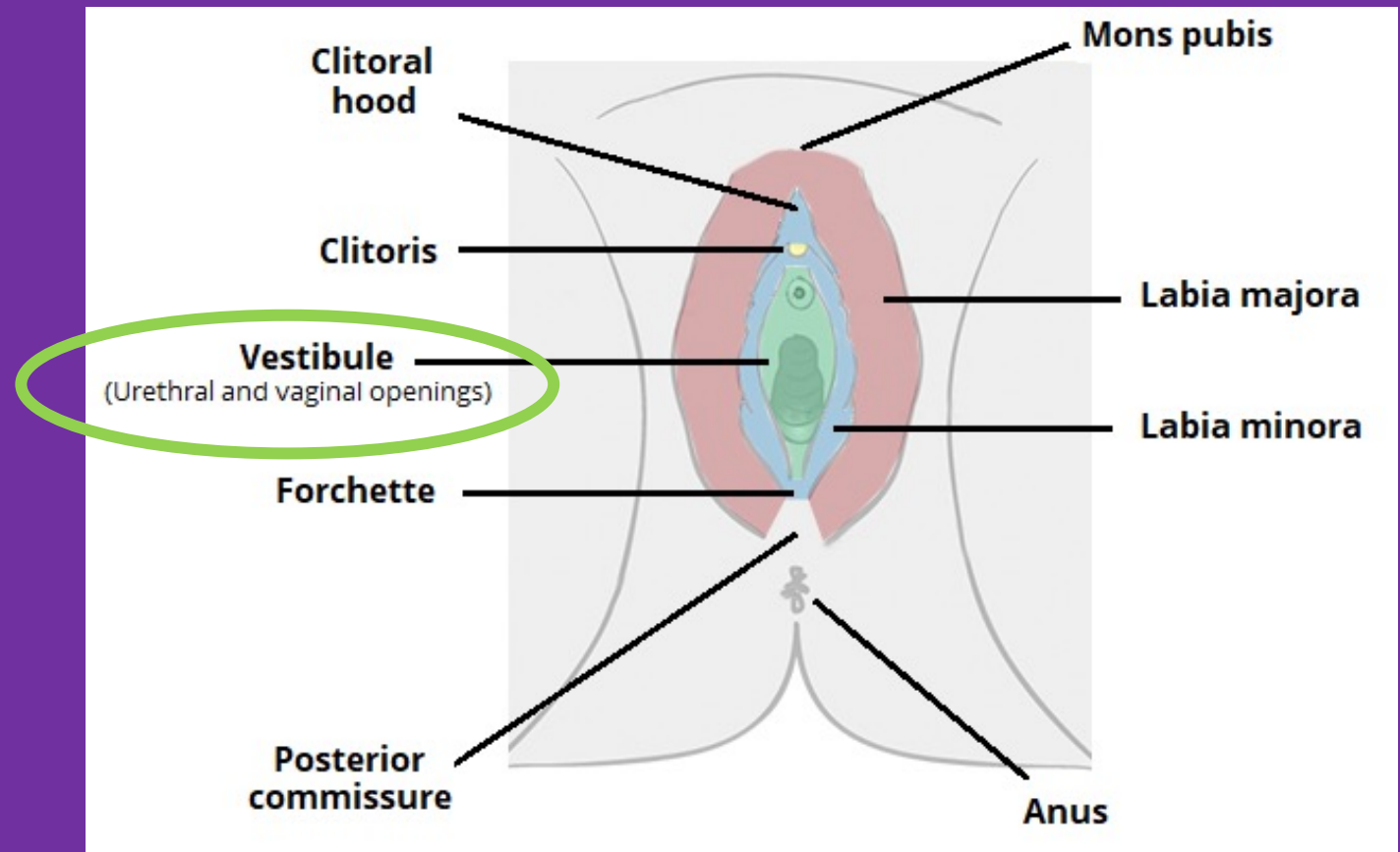
## INTROITAL DYSpareunia & VULVAR PAIN: A diagnostic and treatment algorithm



# VESTIBULE

The area between the two labia minora where the vagina and urethra opening are located is called the vestibule.

Vestibular Glands



# THE VESTIBULE – PATHOPHYSIOLOGY

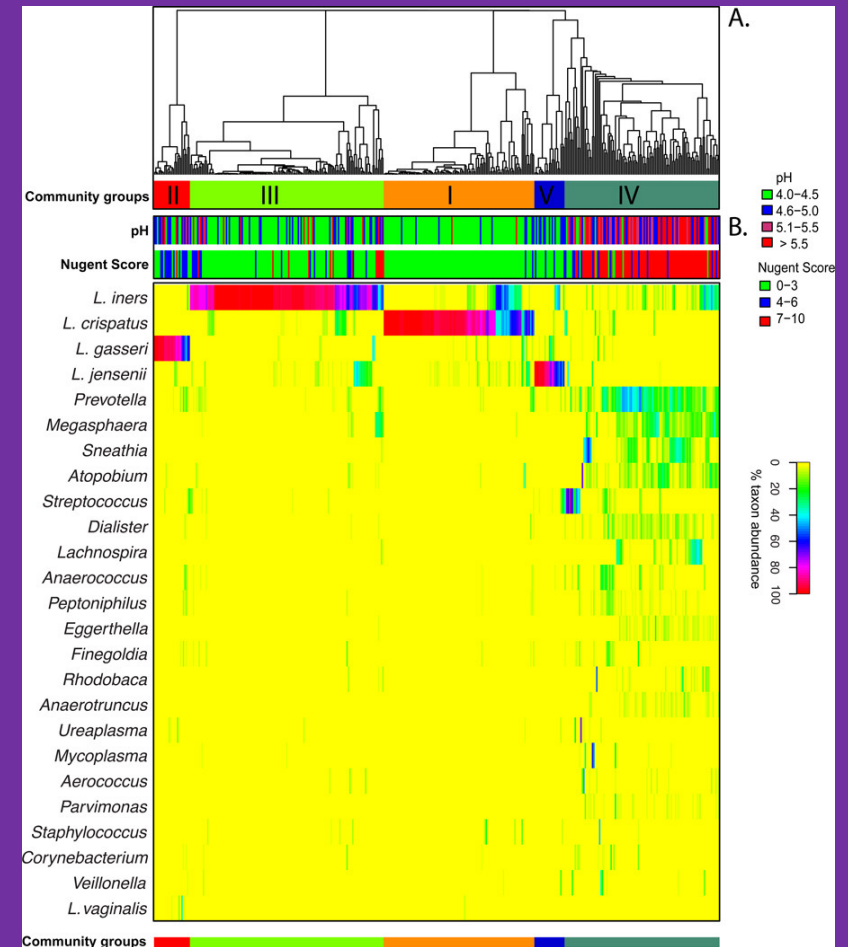
- Vestibulodynia
  - Hormonally mediated
    - Commonly caused by hormonal contraceptives
    - Other causes → menopause, oophorectomy, hormonal control of endometriosis or hirsutism, lactation, infertility treatments, oncology treatments
    - Exam → diffuse vestibular tenderness, ostia of glands are erythematous, low estradiol/testosterone/high SHBG
    - Treatment → stop hormonal contraceptives, topical Estradiol 0.02%/Testosterone 0.1%
  - Neuroproliferative
    - Congenital → umbilical hypersensitivity
    - Acquired → symptom onset after severe local reaction
    - Treatment → Gabapentin (oral/topical), Capsaicin topical, Cromolyn topical, montelukast oral



# CHALLENGING VAGINITIS

## Vaginal Microbiome

- Undergoes dramatic shifts that coincide with hormonal and lifestyle changes.
- Lactobacilli in the vagina produce lactic acid and create a low pH environment to protect against pathogens
  - *L. crispatus*, *L. iners*, *L. gasseri* and *L. jensenii*
  - Although otherwise healthy individuals have vaginal microbiota lacking significant numbers of *lactobacilli* and harbor other anaerobes
- Relationship between mother and baby
- Disruption of ecological equilibria is believed to increase the risk to invasion by infectious agents
  - Hormonal contraceptives
  - Antibiotics
  - Sexual activity
  - Vaginal products and douching



# CHALLENGING VAGINITIS

Vaginitis = inflammation of the vagina

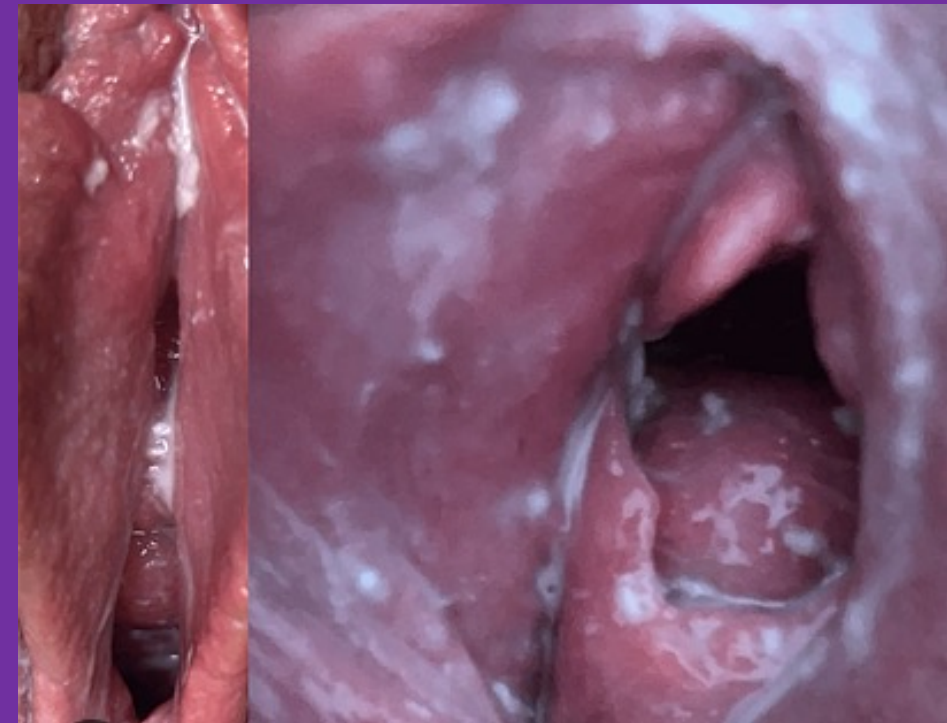
- Symptoms = discharge, odor, pruritis, burning, pain, dysuria, dyspareunia
- Common condition affecting almost all women at some point in their life
- Most common causes
  - Candidiasis
  - Bacterial vaginosis
  - Trichomoniasis
- After puberty, 90% of cases are infectious vaginitis – *Gardnerella*
- Contributing factors
  - Lack of estrogen
  - Anatomy
  - Hygiene – too much and too little
  - Lack of pubic hair
  - Contact irritants
  - Pregnancy
  - Comorbidities

# CHALLENGING VAGINITIS

- Vulvovaginal candidiasis is a common vaginal infection affecting 70-75% of women at least once in their reproductive years
- Primary symptom = vulvar pruritis
  - Additional symptoms can be burning, soreness, irritation
- Physical exam
  - Vulvar edema/erythema
  - Fissures
  - Excoriations (scratching)
  - Discharge – thick, white, clumpy \*\*\* Can you have a candida infection without discharge? \*\*\*
- Diagnosis
  - Obtain a vaginal swab for wet mount with saline or KOH – will see budding yeast and hyphae
  - No microscope? Send for fungal culture – PCR can help differentiate between species and sensitivities
  - 90% of all vaginal candida infections are from *C. Albicans* (second most common is *C. Glabrata*)
- Treatment
  - All OTC imidazoles (butoconazole, clotrimazole, miconazole) and Rx single-dose oral fluconazole

# CHALLENGING VAGINITIS

- Criteria for complicated/recurrent candidiasis
  - Four or more episodes in one year
  - Severe symptoms or findings
  - Suspected or confirmed non-*albicans* *Candida* infection
  - Comorbidities – diabetes, severe medical illness, immunosuppression
  - Co-vulvovaginal infections
  - Pregnancy
- Treatment
  - *Candida glabrata*
    - 50% improvement with “azoles”
    - Topical Gentian Violet
    - Vaginal boric acid 600mg daily for 14 days or Vitamin C 250mg tablet daily for 6 days
    - Flucytosine 15.5% vaginal cream , 5g daily for 14 days with/without amphotericin B 50mg suppositories nightly
  - Longer duration of initial therapy – fluconazole 100/150/200mg on the 1, 4, 7 days
  - Fluconazole 100-150mg PO weekly for 6 months
- Complication with vulvar cellulitis rare – swollen, beefy-red vulva and pain, tenderness, fever, chills, lymphadenopathy
- Management of sex partners

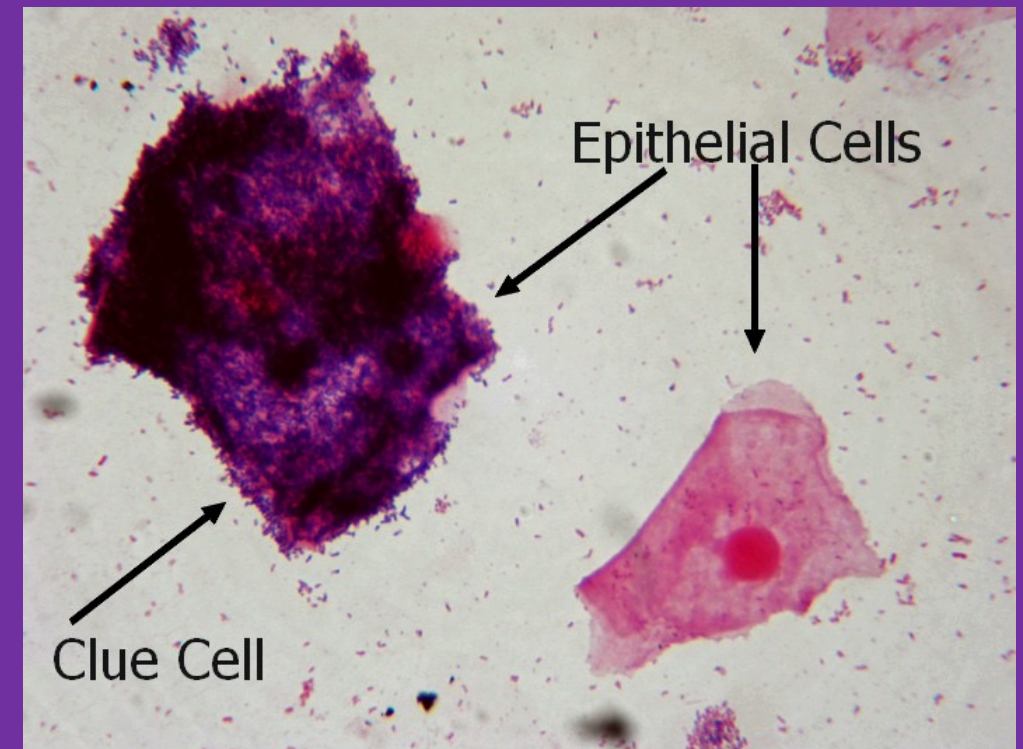




# CHALLENGING VAGINITIS

## Bacterial Vaginosis

- Most common vaginal infection in women between the ages of 15-44
- 84% of women with BV have no symptoms
- 18% of women with BV had never had vaginal penetration
- African Americans and Latino women are at higher risk
- Caused by the lack of normal hydrogen peroxide-producing lactobacilli
  - Overgrowth of anaerobes – *Gardnerella vaginalis*, *Mycoplasma hominis*, *Atopobium vaginae*
  - Other possible causes – menstrual flow, intercourse/sexual activity, douching, female partner
- Complications
  - Preterm labor
  - Pelvic inflammatory disease
  - Urinary tract infections
  - Acquisition/transition of STIs including HIV



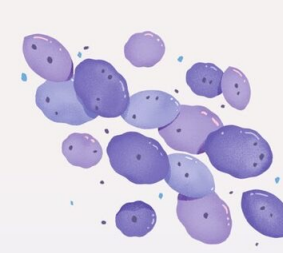
## Available Tests for Diagnosis of BV

Test	Time for Results	Description
Amsel Criteria	<30 minutes	Meets 3 out of 4: <ul style="list-style-type: none"> <li>• Homogeneous white/gray thin discharge</li> <li>• Vaginal pH &gt;4.5</li> <li>• Positive amine (whiff) test</li> <li>• Wet prep – 20% or more clue cells seen</li> </ul>
Affirm VP III test	<1hr	Automated DNA probe assay for detecting <i>G. vaginalis</i>
OSOM BV Blue system	10 minutes	Chromogenic diagnostic test based on presence of elevated sialidase enzyme activity
Vaginal Culture	3 days	Not recommended by the CDC due to decreased viability of bacteria after 24 hours and failure to distinguish pathogens from normal flora

# CHALLENGING VAGINITIS

- Treatment options
  - New option – Clindamycin phosphate 2% (100mg intravaginally) ONE DOSE
  - Secnidazole 2g oral granules single dose
  - Metronidazole 500mg PO BID x 7 days
  - Metronidazole 0.75% gel, 1 applicator PV daily for 5 days (not for use in the first 13 wks of pregnancy)
  - Clindamycin 2% cream, 1 applicator PV daily for 7 days
  - Alternative therapies
    - Tinidazole 2g PO daily x 2 days
    - Tinidazole 1g PO daily x 5 days
    - Clindamycin 300mg PO BID x 7 days
    - Clindamycin ovules 100g PV QHS x 3 days
- Other considerations
  - Recurrence is high! Consider higher doses and longer courses of medications used for initial therapy
  - Routine testing of partner or partner treatment is not recommended
  - Oral and vaginal probiotics are currently being studied
  - Boric acid or Vitamin C vaginal suppositories
  - Condom use after treatment to allow the vaginal ecosystem time to heal
  - Clean sex toys after each use and avoid sharing
  - Avoid douching, multiple sex partners, spermicides

## How do you treat BV?



Gardnerella Vaginalis



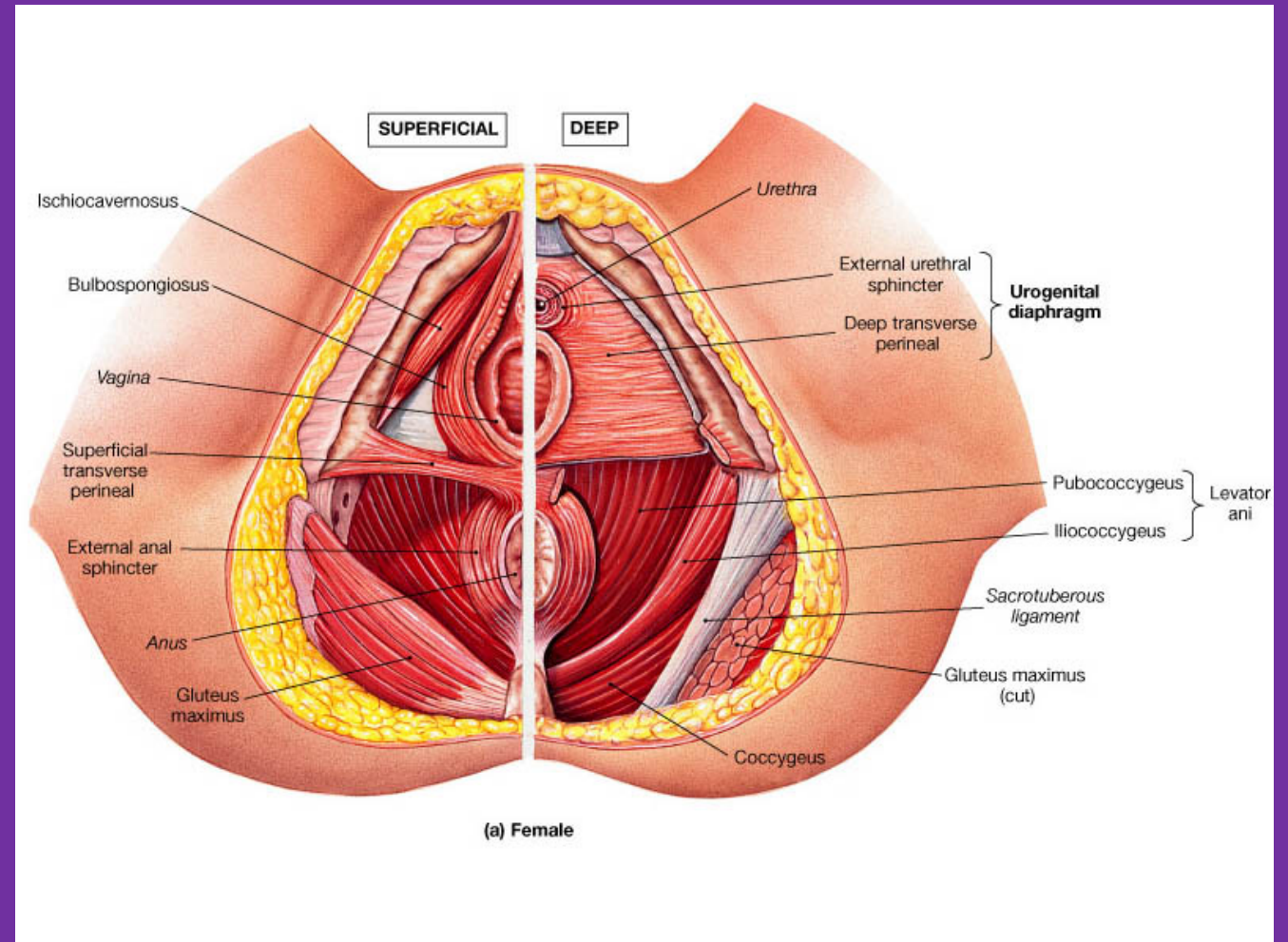
Lactobacillus

### There are two critical aspects of treating a BV infection:

- Killing the harmful bacteria while minimizing the death of the good ones.
- Replenishing your stores of good bacteria.

# PELVIC FLOOR MUSCLES

Let's Find Our  
Pelvic Floor!!



# PELVIC FLOOR MUSCLES

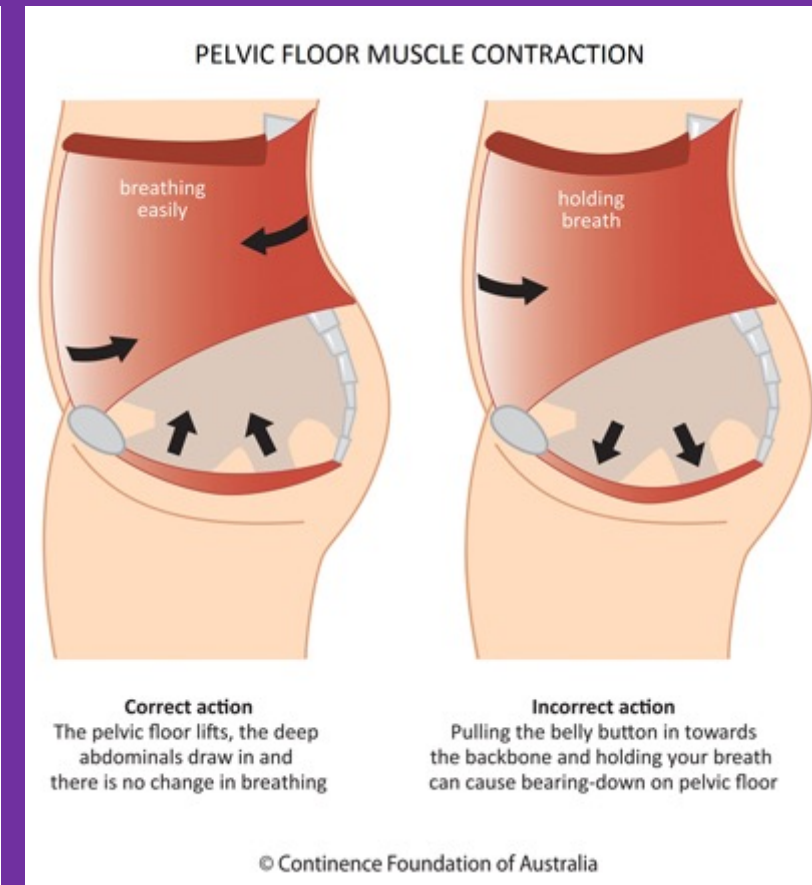
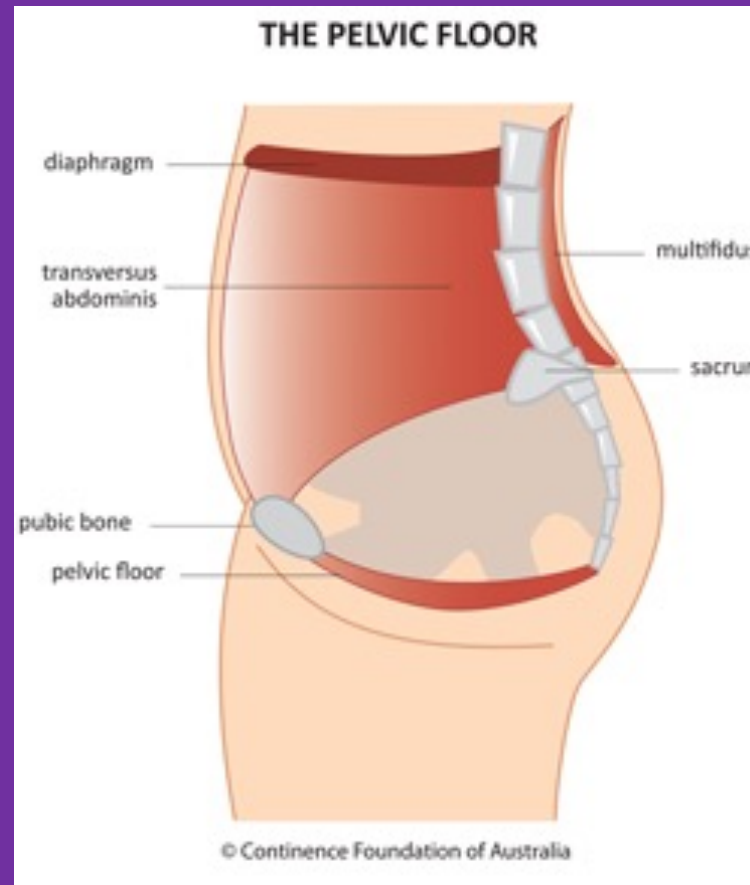
## Let' Use Our Words

- Strong
- Supportive
- Relaxed

## Cause dysfunction

- Weak
- Tight

Referral to pelvic floor therapy.



THANK YOU!

Questions?

Aleece Fosnight, MSPAS, PA-C, CSC-S, CSE, NCMP, IF, HAES

Urology, Women's Health, Sexual Medicine

Skin, Bones, Hearts, and Private Parts 2024

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