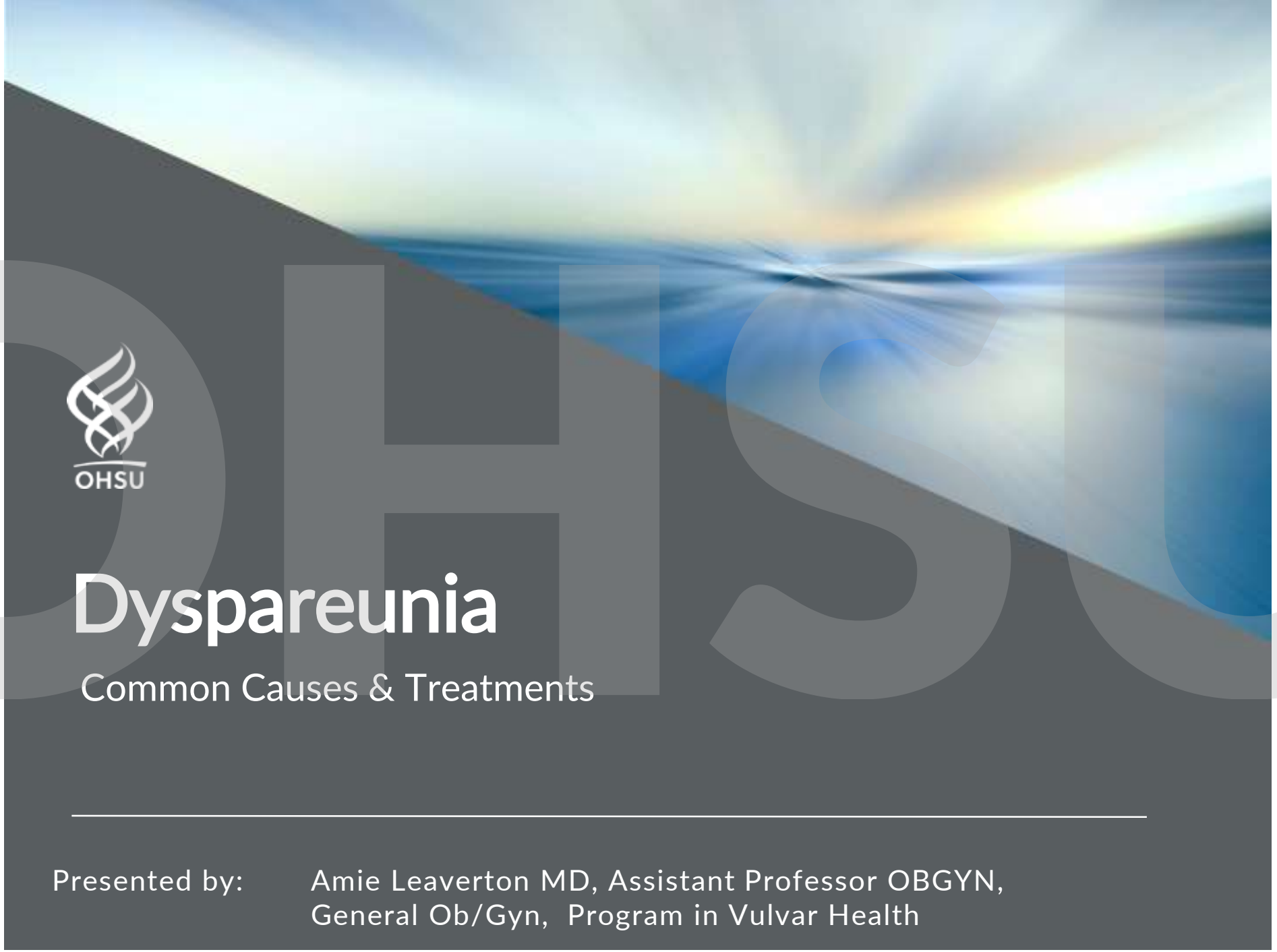


Dyspareunia

Common Causes & Treatments

Presented by: Amie Leaverton MD, Assistant Professor OBGYN,
General Ob/Gyn, Program in Vulvar Health

Introduction

- Program in Vulvar Health at OHSU
  - www.ohsu.edu/womens-health/vulvar-health-program
- Multidisciplinary treatment team care model.
- I may use the term “women” in this talk, but all of the concepts apply to patients who identify as trans men, non-binary or queer
- I have no disclosures

Objectives

- Create a differential diagnosis for dyspareunia
- Define, diagnose and begin management for 4 common causes of dyspareunia

    1. Genital Syndrome of Menopause (aka “atrophic vaginitis”)
    2. Vulvar dermatoses/lichen sclerosus
    3. Provoked Localized Vulvodynia or Vestibulodynia (aka “vulvar vestibulitis”)
    4. Levator Myalgia or Vaginismus

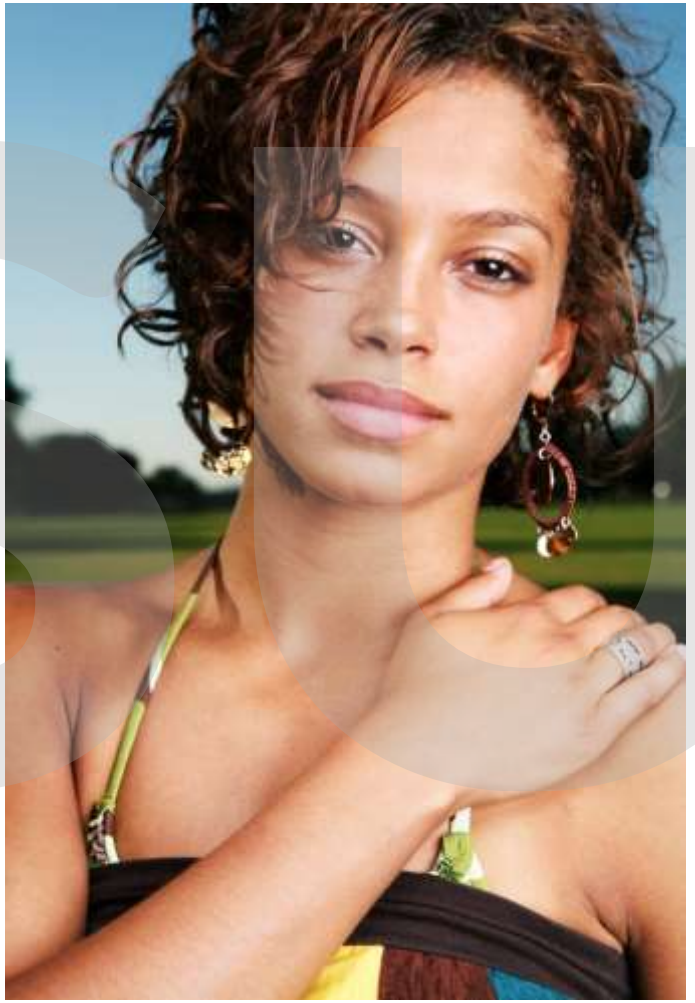
- Appreciate the impact on sexual expression

No Disclosures

Dyspareunia

- Definition: Recurrent or persistent genital pain associated with vaginal penetration causing personal distress

- 8-22% of the general population
  - Women >> men
  - Risk factors: PID, sexual abuse, low estrogen state, depression-anxiety



Causes of Dyspareunia: Differential

- **Provoked Localized Vulvodynia or Vestibulodynia**
- **Genital Syndrome of Menopause or "atrophic vaginitis"**
- **Levator myalgia or Vaginismus**
- Poor arousal
- **Vulvar dermatologic disorders (**Lichen sclerosus, etc)
- Chronic Vaginitis (Yeast)
- Chronic Pelvic Pain
- Endometriosis
- Fibroid Uterus
- Interstitial Cystitis
- Ovarian cysts
- IBD/IBS

Evaluation

Office Evaluation: History

- Quality: onset, frequency, location, severity, circumstances, description of pain, associated symptoms like bleeding or vaginal discharge
- Co-morbidities: fibromyalgia, Interstitial cystitis, IBS, mental illness, Chronic Pelvic Pain (CPP)
- Exposure to contact irritants/allergens: spermicide, lubricants, intra-vaginal products (enhancing gels, toys), cleaning habits of toys
- Hormonal status : Estrogen replete vs depleted (postpartum, menopause, anti-estrogen breast cancer treatment)
- Skin changes: symptoms of itching, ulceration, fissures or skin breakdown
- OTC or other treatments tried: anti-fungal, antibiotics, steroids, lidocaine, hormones

Dyspareunia specific questions

- Introital: “Does it hurt just with penetration?” or “Does it hurt at the time of insertion of a finger, speculum, tampon or penis?”
  - What is the quality of the pain? “Burning, stinging, sharp, tearing”
- Deep: “Does it hurt deep inside the pelvis, like with thrusting?” or “Does it feel like a pain, ache, stab more inside the vagina as opposed to just at the opening?”

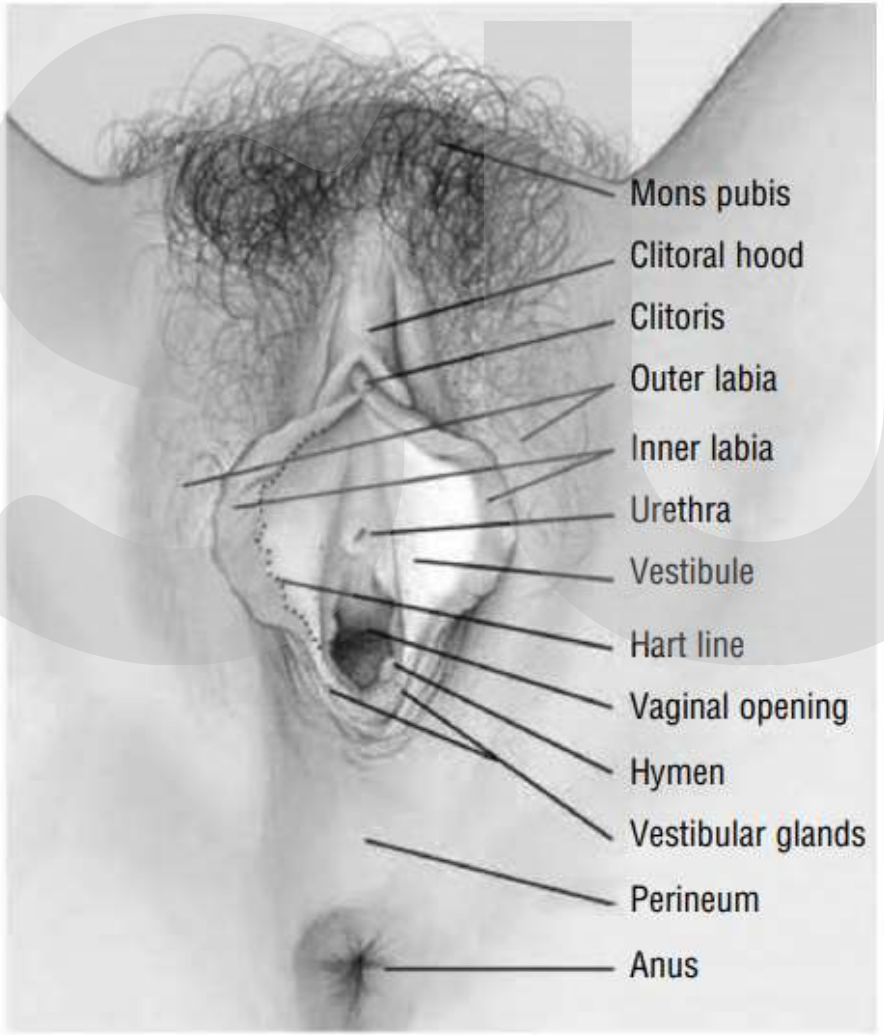


Image from: Persistent Vulvar Pain. ACOG CO #673

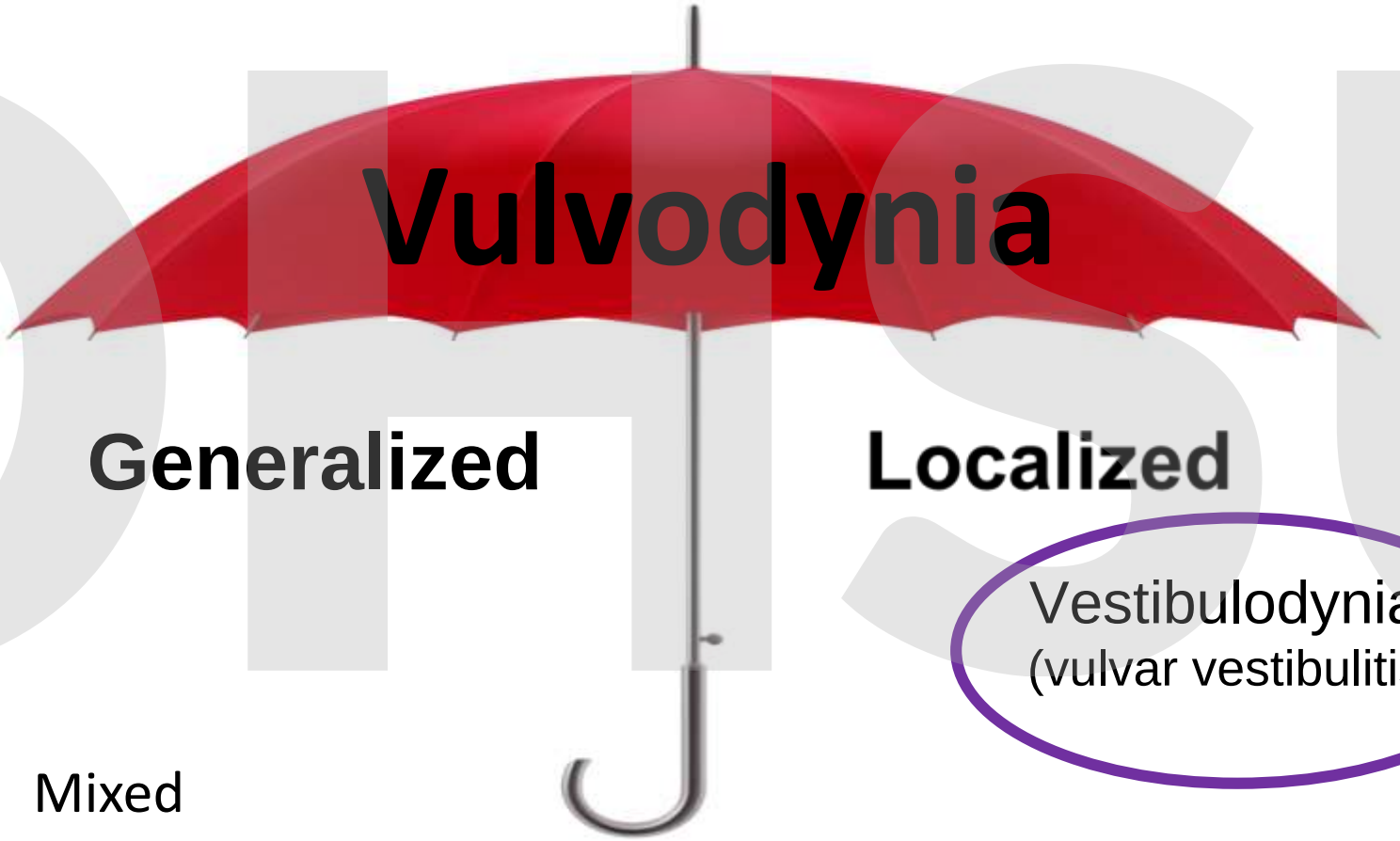
Office Evaluation: Objective Data

- Physical Exam
  - Visual inspection of vulva , perineum, anus & vagina (speculum)
- Microscopy
  - pH immediately (normal=3.5-4.5)
  - NaCl and KOH: fresh prep or suspend in saline
  - APTIMA or BD AFFIRM vaginal swab (POC): appropriate if suspect vaginitis
- Vaginal Culture
  - Fungal culture helpful for identification and speciation of yeast
  - General bacterial culture not helpful
- Vulvar Biopsy
  - Reserved only for SKIN CHANGES, Random biopsy not helpful
  - **Careful not fooled by the blush of erythema in the vestibule (vestibulodynia)
- Pelvic Ultrasound
  - Appropriate when pelvic mass suspected or deep pain elicited on pelvic exam

Case Presentation: Vestibulodynia

28yo G0 on OCPs who presents with dyspareunia. She complains of a raw and burning sensation with penetration

Vulvodynia



Generalized

Localized

Vestibulodynia:
(vulvar vestibulitis)

Mixed

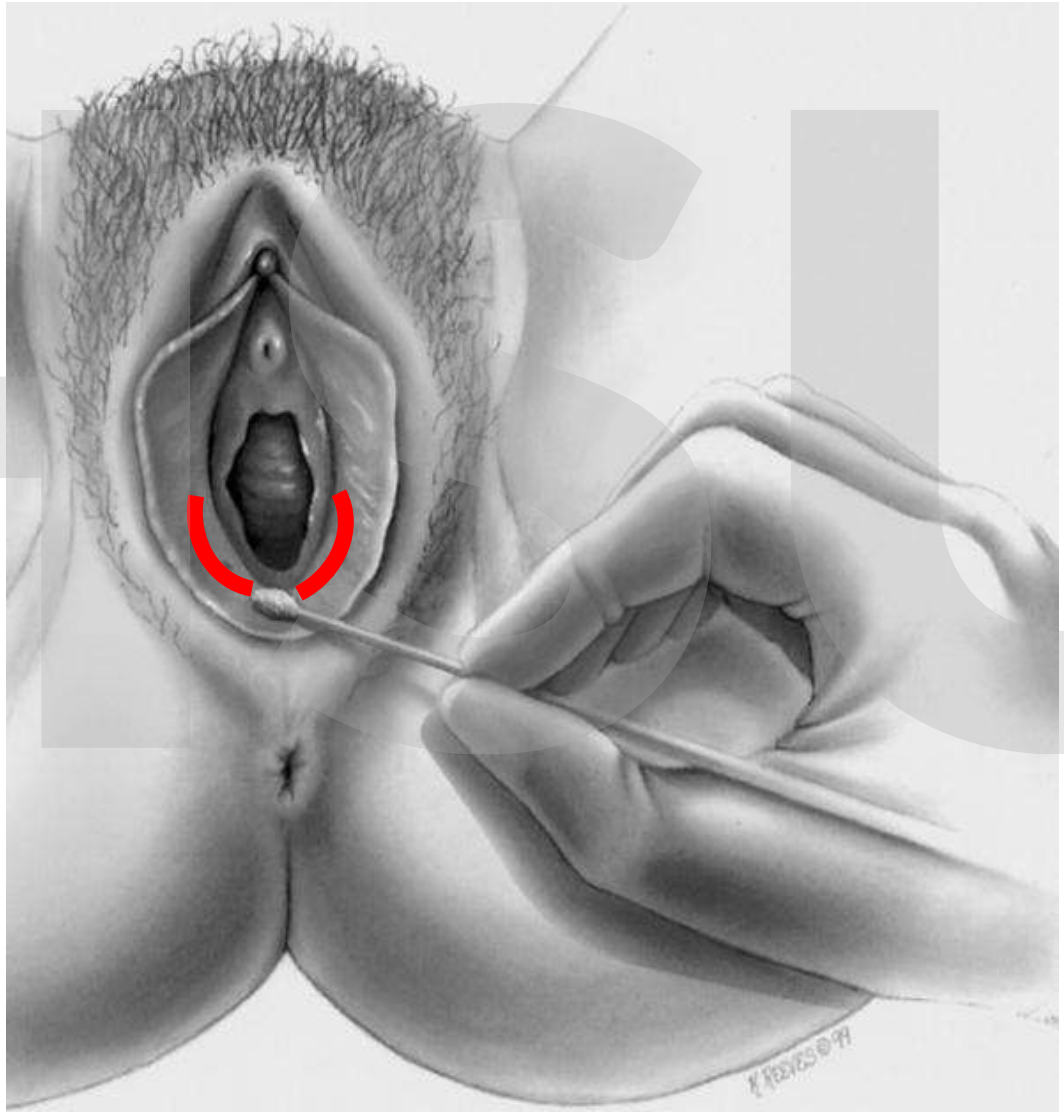
Clitorodynia

Provoked localized vulvodynia/Vestibulodynia

SYMPTOMS	SIGNS
Entry dyspareunia	-/+Vestibular erythema
(“at the bottom of the opening”)	+ Qtip test
Difficult tampon use	Response to lidocaine
Painful speculum exam	Difficult speculum exam
Pain usually only with touch	(tender pelvic floor muscles)

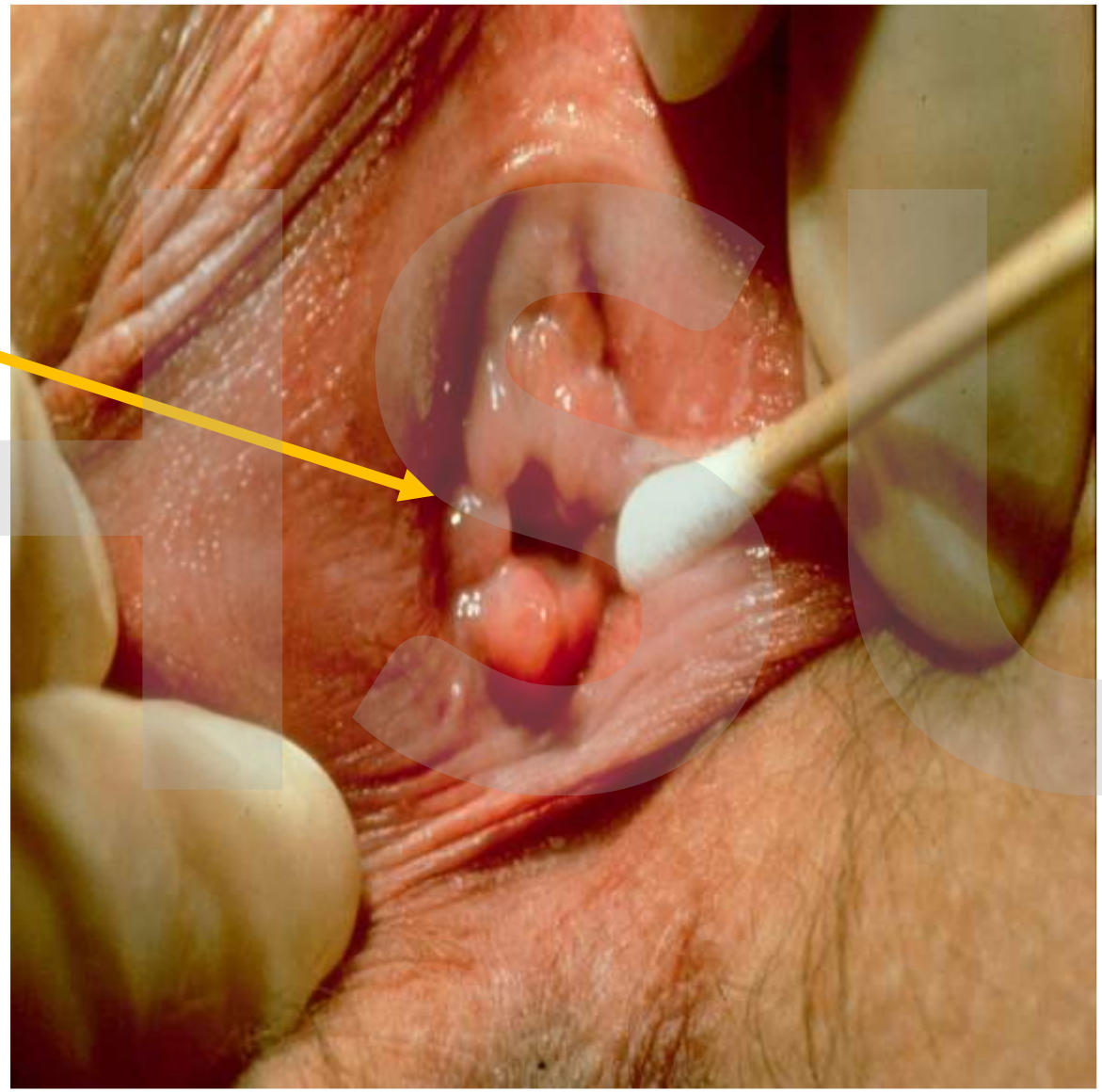
Diagnosis of Vestibulodynia: Friedrich's Triad

- Friedrich's Triad
  - Reported painful penetration
  - Qtip test (+) for tenderness
  - -/+ vestibular erythema



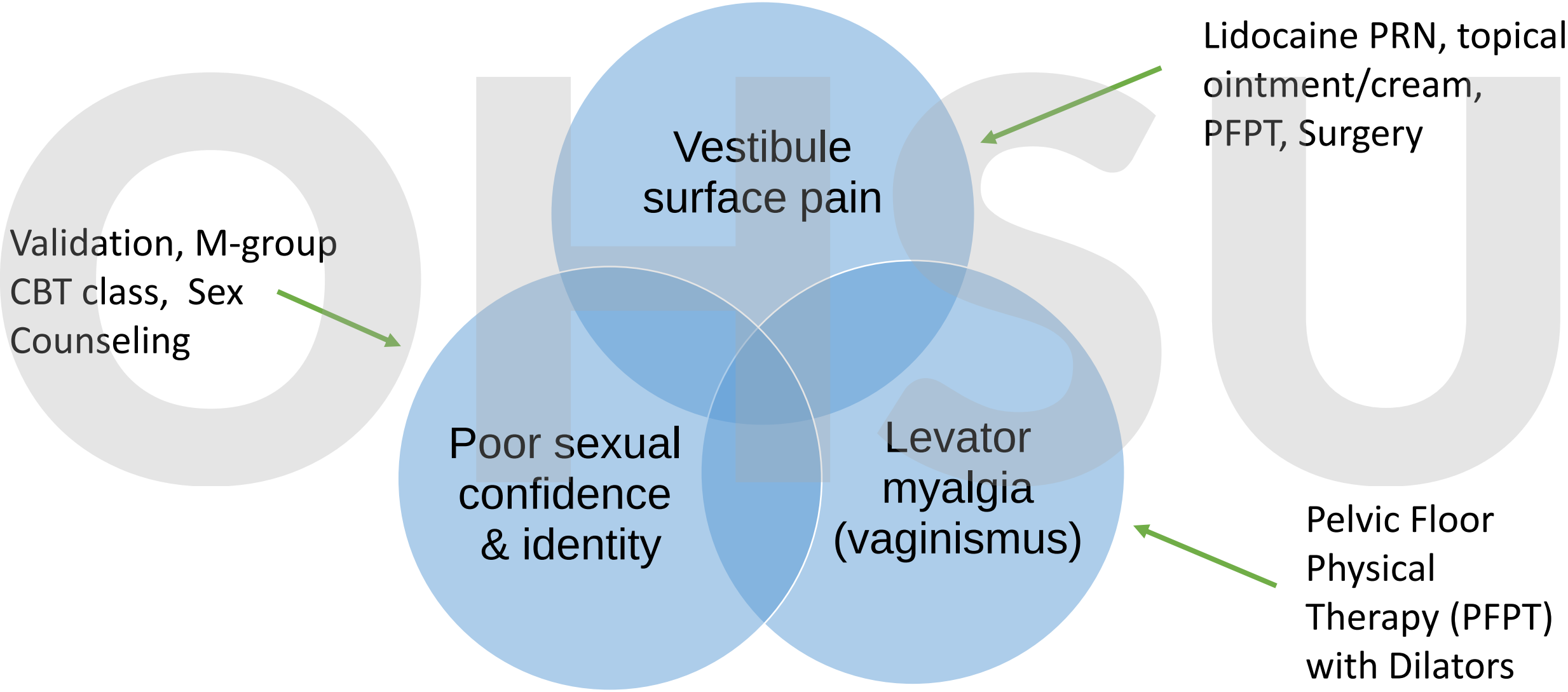
Qtip Test

- First locate the vestibule (just under the hymen)
- Gently **ROLL** moist Qtip. . . . no pressing or poking Qtip
- Give time for patient to answer your verbal rating scale
- Start up at 2 o'clock
- Vestibule clock-face
  - 2, 4, 6, 8, 10 o'clock
  - Numeric verbal pain scale: 0-10
  - Record



Vestibulodynia is a clinical diagnosis

The Oregon Approach: Vestibulodynia



Lidocaine PRN, topical ointment/cream, PFPT, Surgery

Validation, M-group CBT class, Sex Counseling

Pelvic Floor Physical Therapy (PFPT) with Dilators

What can you do?

- Validate her pain, give her a diagnosis, refer her to Vulvar Program
- RX Pelvic Floor Physical Therapy
- RX topical lidocaine
  - 4% Aqueous lidocaine

    sig: apply with cotton ball to vestibule for 10 min prior to intercourse
  - 2% lidocaine gel

    sig: apply amply at vaginal opening for 15 min prior to intercourse, wipe off and then apply lubricant

Case Presentation: Vaginismus or Levator Myalgia

32yo G0 with anxiety, chronic constipation, dysmenorrhea and aching deep pain with intercourse

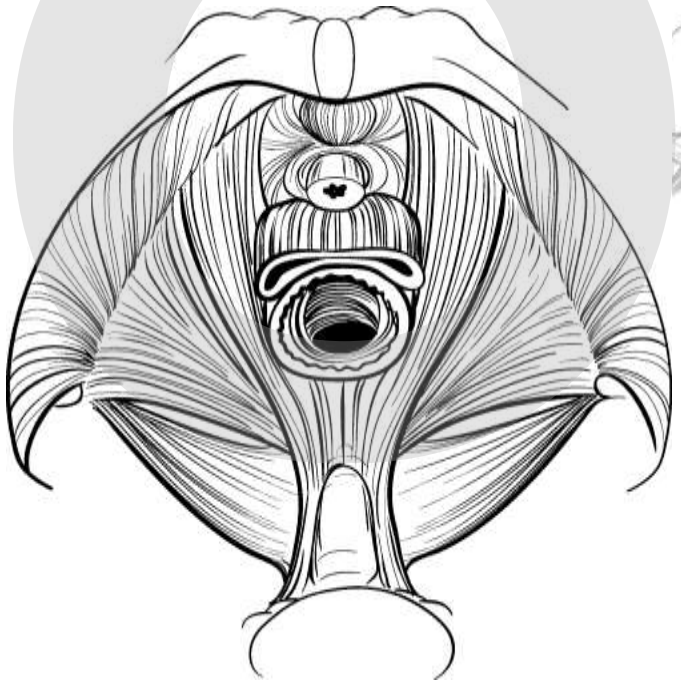
Definition Levator Myalgia or Vaginismus:

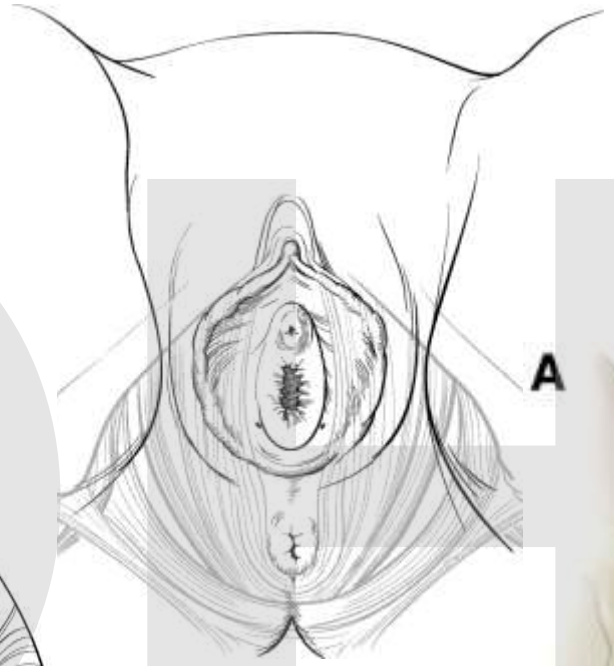
- Hypertonicity of the pelvic floor with pelvic floor motor dysfunction and tenderness (reduced ability to contract and relax the pelvic floor)

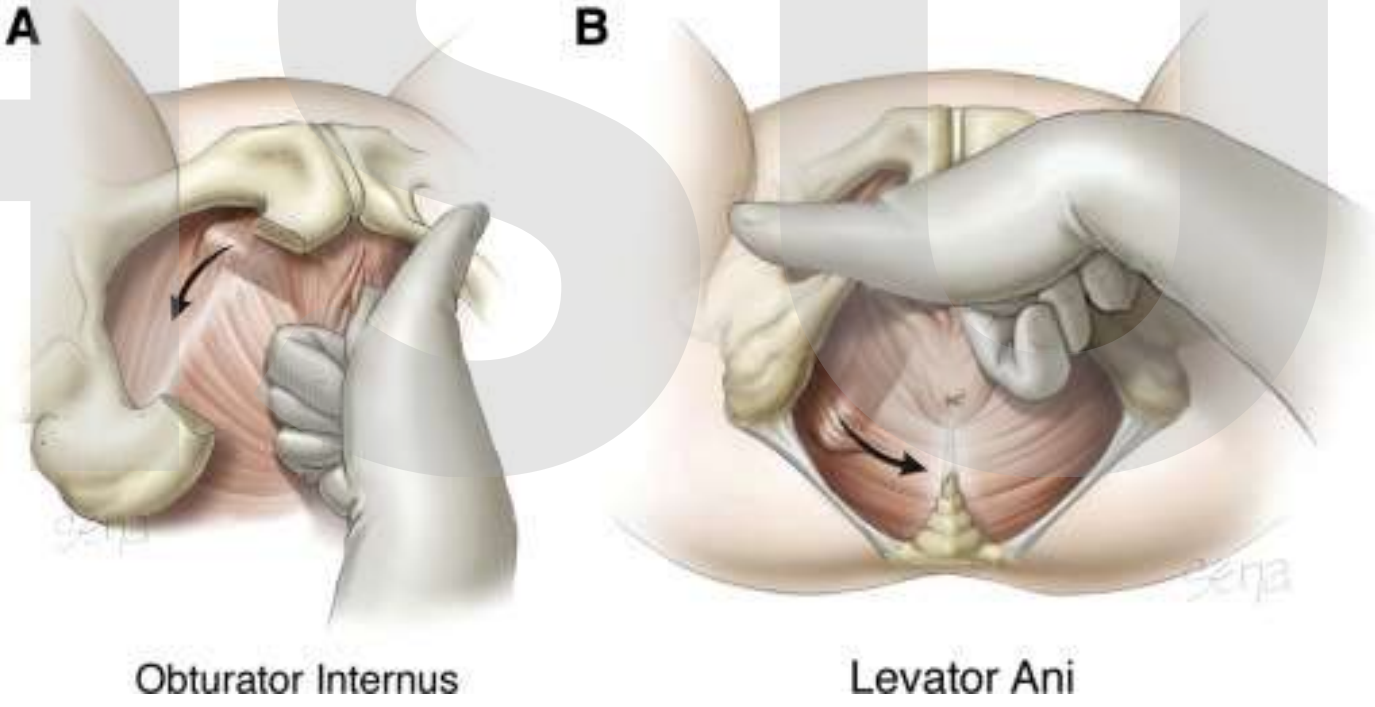
Image: https://feminisminindia.com/2021/07/21/what-vaginismus-what-can-you-do/

Physical Exam

Notice **no** hand on the abdomen
Notice different muscle bellies: levator vs obturator
Normal feels like pressure (rectum) but abnormal is tender







R.Jensen©

Levator Myalgia- Vaginismus

- Pelvic Floor Physical Therapy (PFPM) + Dilator Work
  - Treats levator muscle spasm, hypertonicity and poor contraction/relaxation phase
  - Biofeedback with dilator therapy increases patient awareness (home program), accommodation (of increasingly larger stretch w/o triggering contraction) and control over muscles
  - Good evidence that PFPT improves pain and decreases dyspareunia
  - In VESTIBULODYNIA, evidence supports the PFPT in combination of surgery improves outcome and often leads to cure.
  - Role for dilators in transitional intercourse (managing the anxiety, voyeurism to pain)

Levator Myalgia-Vaginismus

- Exists independently of vestibulodynia
- Any traumatic experience or condition of chronic pain (to the pelvis) can lead to levator myalgia/vaginismus
- Be suspicious in women with co-morbid chronic constipation, CPP, dysmenorrhea, IBS/IBD or h/o sexual assault WITH dyspareunia

What can you do?

- Validate her pain, give her a diagnosis, refer her to Pelvic Floor PT
- Be inquisitive about your referral
  - Managing incontinence (PFPT) is NOT the same as managing dyspareunia
  - Have your office support (MA, RN) inquire if your PFPT has worked with dyspareunia/vaginismus patients in the past
- www.vaginismus.com

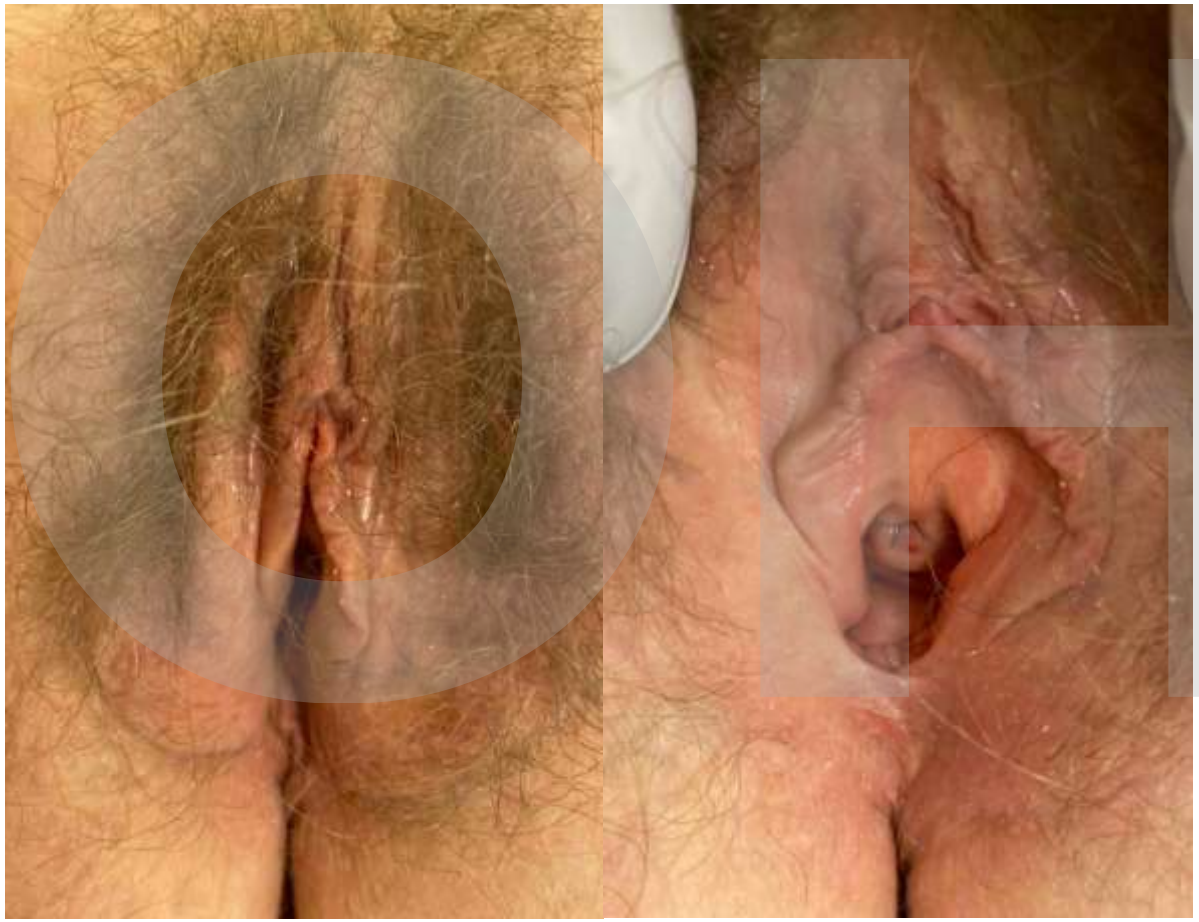
Case Presentation: GSM or “atrophic vaginitis”

54yo woman presents with increasing pain during intercourse. She reports dryness, poor lubrication and a burning, sand paper sensation.

Genitourinary Syndrome of Menopause (GSM)

- Symptoms:
  - dryness & irritation
  - burning
  - fissures
  - poor arousal response
  - poor lubrication
  - Intercourse bleeding
  - dysuria
  - **dyspareunia**
  - urethral burning
  - Urinary frequency
  - Urinary urgency

Genitourinary Syndrome of Menopause (GSM)



- Physical Exam:
  - thin, dry, pale vaginal mucosa
  - loss of labial fat pads
  - scant pubic hair
  - reduced amount of discharge
  - loss of vaginal rugae
  - increased pH (>5.0)
  - loss of lactobacillus +/- wbc on wet mount, scant cellularity

GSM

- Treatment:
  - Vaginal Moisturizers
  - Lubricants
  - Local Hormonal Treatment
    - Topical estrogen
    - Prasterone vaginal insert

Table 1. Nonhormonal and Hormonal Treatment Options

Formulation	Composition	Dosages
Nonhormonal options		
Lubricants	Water-, silicone-, and polycarbophil-based products	See product labeling
Moisturizers	Hyaluronic acid Polyacrylic acid Polycarbophil-based vaginal moisturizer	5 mg daily for 2 weeks, then 3–5 times per week 3 g daily 2.5 g 3 times/week
Vaginal suppositories	Vitamin E Vitamin D	30–200 international units 1,000 international units
Lidocaine	4% aqueous lidocaine	Fully saturated cotton ball applied to the vulvar vestibule for 3 minutes
Hormonal options		
Vaginal insert	Prasterone*	One 6.5-mg vaginal insert once daily
Vaginal cream	17β-estradiol†	The usual dosage range is 1 to 4 g (marked on the applicator) daily for 1 or 2 weeks, then gradually reduced to one-half initial dosage for a similar period; a maintenance dosage of 1 g, 1 to 3 times a week, may be used after restoration of the vaginal mucosa has been achieved‡
Vaginal cream	Conjugated equine estrogen	• Evidence-based regimen: twice weekly administration of 0.5 g intravaginally (eg, Monday and Thursday) for treatment of moderate-to-severe dyspareunia • Dosage regimens of 1 g every night for 2 weeks, then twice a week or 0.5 g twice a week are commonly used‡§
Vaginal ring	17β-estradiol	7.5 micrograms/day for 90 days
Vaginal tablet or insert	Estradiol hemihydrate	• 10 micrograms/day for 2 weeks, then 10 micrograms/day 2 times a week • A vaginal insert containing 4 micrograms is available, although not used in included studies
Vaginal cream	Testosterone	• 300 micrograms or 150 micrograms applied daily for 28 days • 300 micrograms or 150 micrograms applied daily for 2 weeks, then 3 times a week

*The product label contains the following warning and precaution for those with a current or past history of breast cancer: "Estrogen is a metabolite of prasterone. Use of exogenous estrogen is contraindicated in women with a known or suspected history of breast cancer. [It] has not been studied in women with a history of breast cancer." Additional data have been published on this population since the U.S. Food and Drug Administration approval of this medication.

†Known, suspected, or history of breast cancer is listed as a contraindication in the product label.

‡U.S. Food and Drug Administration–approved dosages of conjugated estrogen and estradiol creams may be higher than dosages commonly used in clinical practice.

§Study protocol: cyclic administration of 0.5 g intravaginally (daily for 21 days then off for 7 days) for treatment of moderate-to-severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause.

Table: ACOG Clinical Consensus Number 2, December 2021

GSM Treatment: Moisturizer, Lubricants & Estrogen

1. Vaginal Moisturizers

   Hyalo Gyn®

   Replens®: lubricating product containing mineral oil, glycerin, purified water and other fillers to produce a moisturizing effect.

   - Not intended as sexual lubricant, many use as such
   - To maintain effect, need to use 2-3x/week
   - $15 for ~2 oz tube, advertised as 14 count
   - Does not affect vaginal epithelium

2. Lubricants

   Water : Astroglide®, Slippery Stuff®, and Wet®

   Silicone: EROS®, PJUR®, Uber lube®

   Oil: natural oils like coconut, mineral or olive oil

GSM: Local Estrogen

- Cochrane Review of 4000 PMP women using local estrogen
  - **All delivery methods essentially equal in relieving effects of atrophy whether ring, tablet or cream***
  - **No opposing progestin needed ***
  - **Less studied in breast cancer patients but most Med Onc on board with use**
    - **Crean-Tate, et al. "Management of genitourinary syndrome of menopause in female cancer patients: A focus on vaginal hormonal therapy". AJOG. February 2020.**
    - **"Treatment of Urogenital Symptoms in Individuals With a History of Estrogen-dependent Breast Cancer". ACOG Clinical Consensus Number 2, December 2021**

Genital Syndrome of Menopause: Estrogen RX

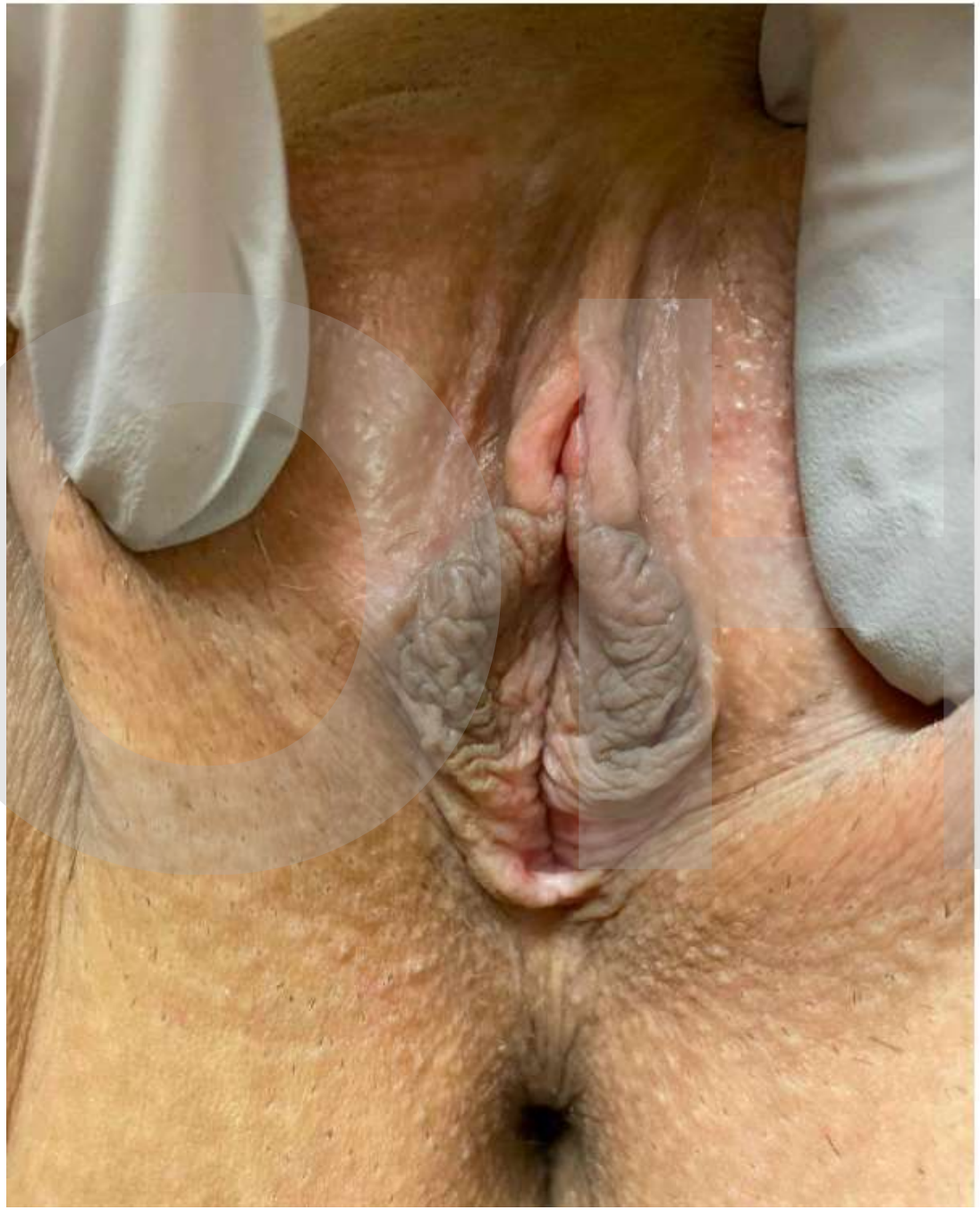
Preparation	Dosing	Regimen (by manufacturer)
Estring® *Low Dose	7.5mcg E2/day 90d ring	Ring inserted vaginally and replaced/removed in 90d
Vagifem® *Low Dose	10mcg E2/tablet	1 tab PV QHS x 14d then 2x/week
Premarin® cream *Moderate Dose	0.625mg CEE/g	1g PV QHS x 7-14d then 0.5g cream 2x/week
Estrace® cream *Moderate Dose	100mcg E2/g	1g PV QHS x 7-14d then 1g 1-2x/week

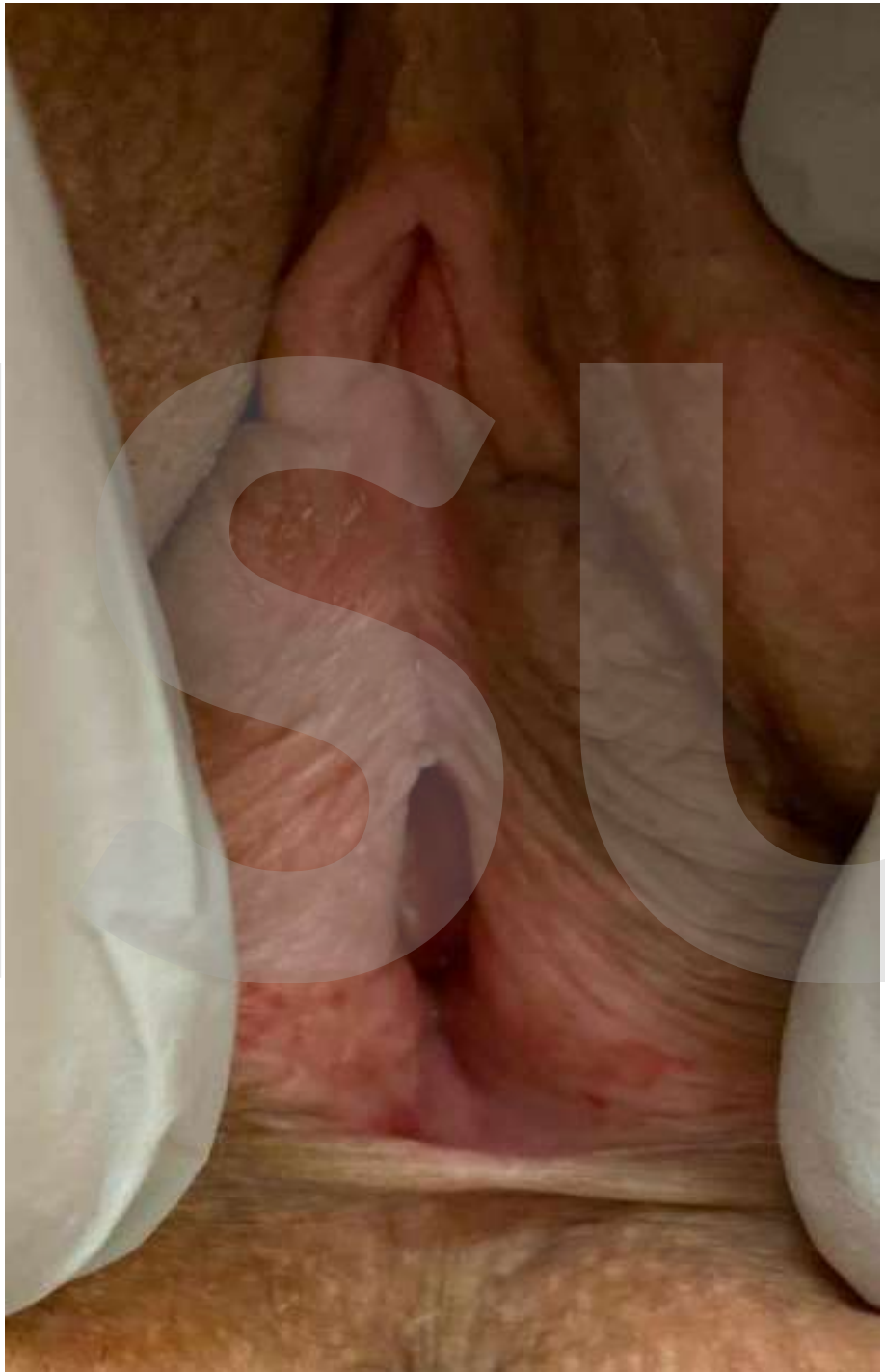
What can you do?

- Discuss arousal phase, lubricants, positioning and potential use of moisturizers
- Realize that local estrogen is gold standard for GSM
- Choose estrogen vehicle (s)
  - Step 1: Consider intravaginal (ring or tablet) **AND** vestibular (introitus) application for local support of vulva
    - Topically: dime size QHS of estrogen cream at vestibule
  - Step 2: Allow adequate time for effect
    - No data on how long to wait
    - observation 4-6 wks
  - Step 3: Re-examine for effect
    - If related just to estrogen then pain should improve

Case Presentation: Lichen Sclerosus

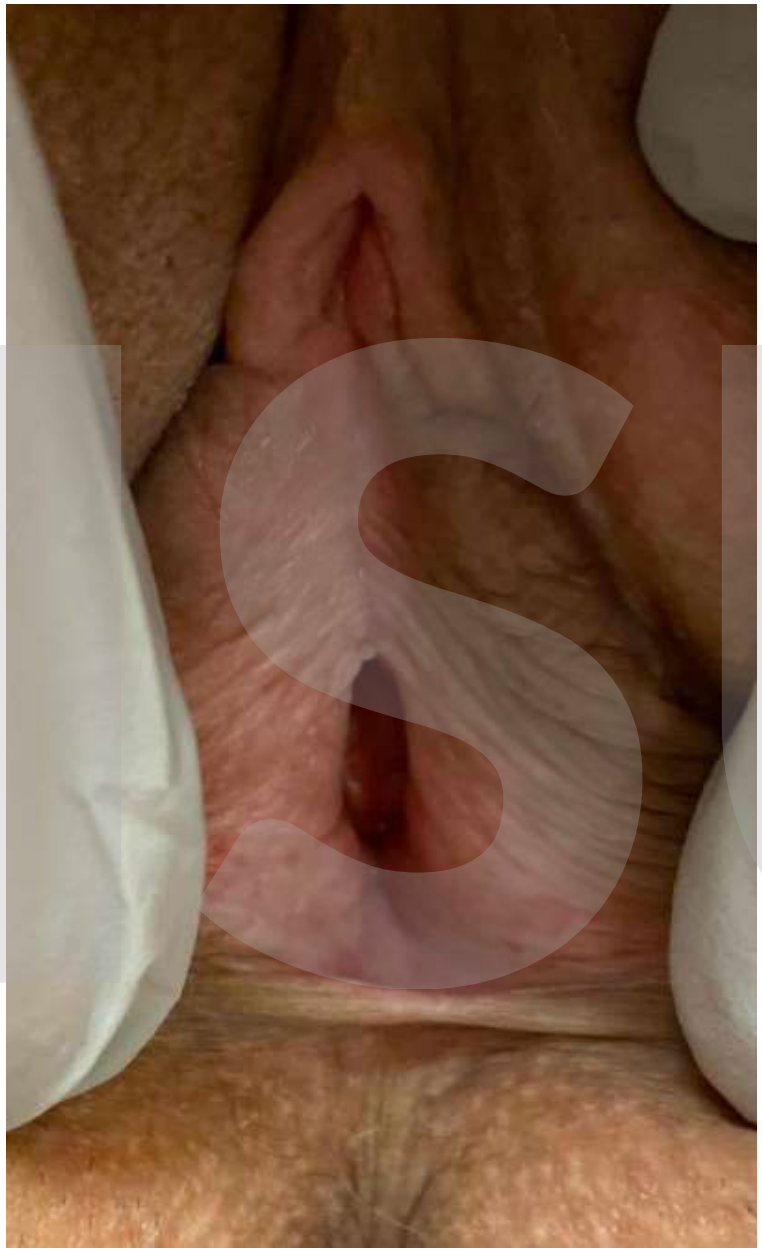
33 yo w pain with intercourse since becoming sexually. Pain is with insertion. Speculum exams painful. Some improvement with pelvic floor PT and dilator work. Seeing couples sex therapy. Does endorse itching at opening of vagina and her skin is very sensitive.

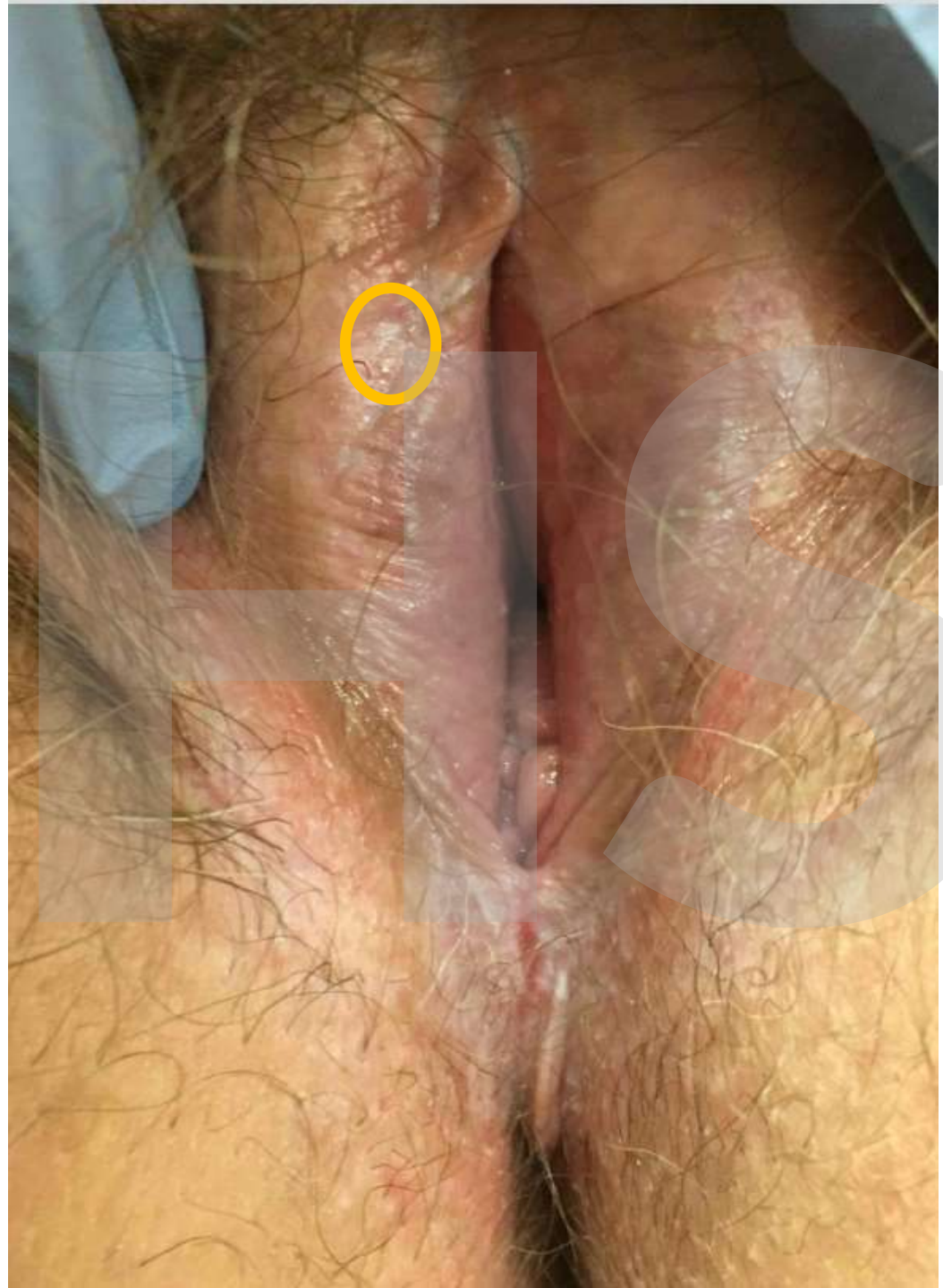


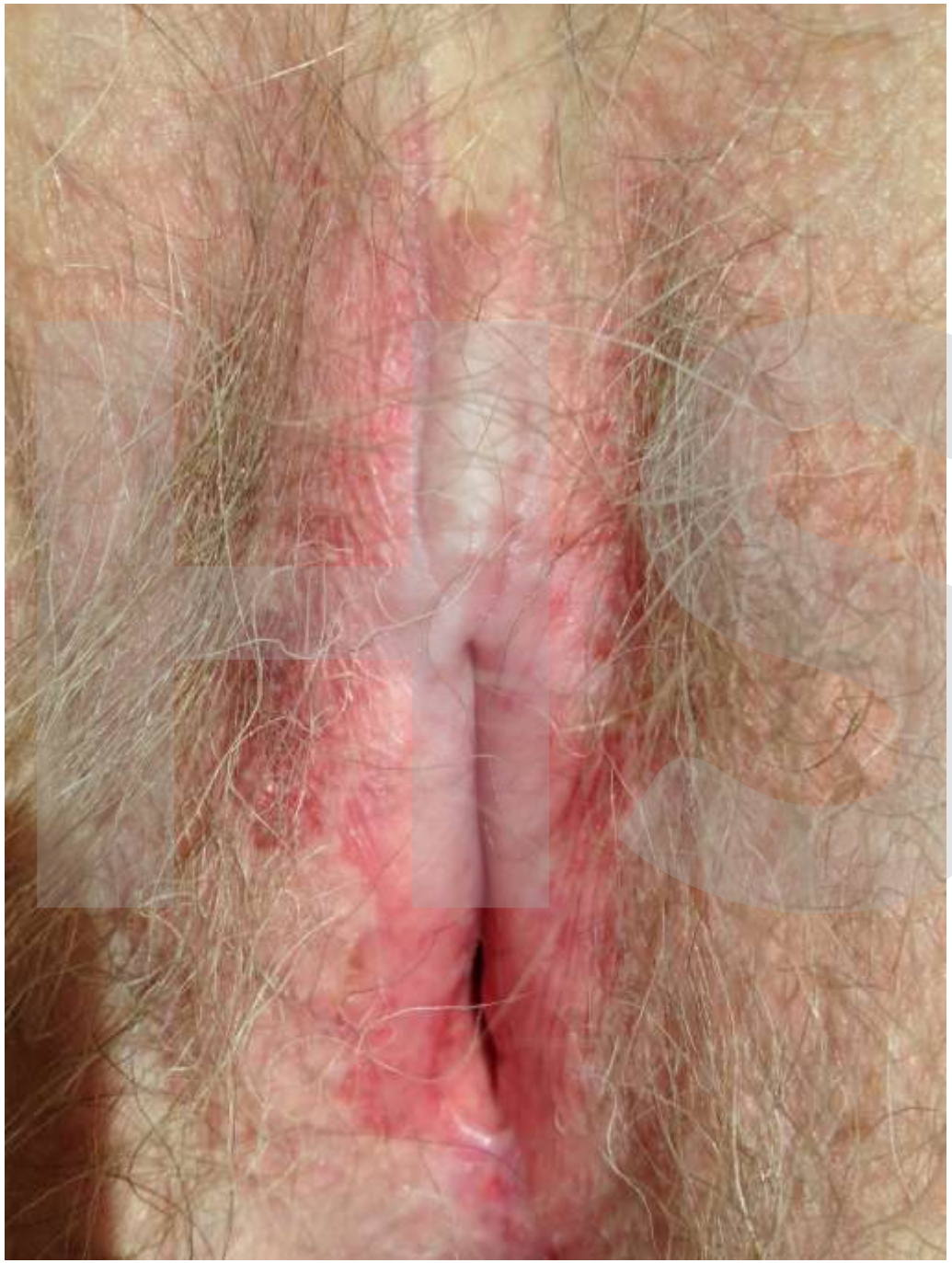


Lichen Sclerosus

- Chronic inflammatory skin condition
- 1% of women, prepubescent, peri/postmenopausal women
- Symptoms: Itching, burning, chronic tearing/skin splitting, dyspareunia, painful BMs
- Signs: Hypopigmentation, red chapped, lichenification, plaques, parchment paper skin, brown patches, erosions/fissures, loss of anatomy (phimosis, narrowing of introitus)







Lichen Sclerosus: Treatment

- Step 1: Confirm clinical impression with biopsy */ refer to gynecologist
- Step 2: Treat skin with steroids and bland emollient (VASELINE)
  - Triamcinolone 0.1% ointment or Clobetasol 0.05% ointment
  - Bolus with BID x 2-4 wks, then back to assess response. Eventually taper to 2x/week
- (Step 3: Consider estrogen support for PMP)
- Step 4: Determine if any anatomical contribution to pain
  - Commissure bands
  - Stricturing/narrowing from inflammatory effects
- Step 5: If dyspareunia persists, consider another cause

Psychosexual Distress

- Individual or Couples-Sexual Counseling
- Sensate Focus
- Programs at OHSU
  - Counseling
  - Menopause & Sexual Medicine Clinic
  - Mindfulness-CBT Group

Thank You