Itchy Scratchy and Rashy

From Pregnancy to Menopause

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Disclosure Slide
Slide 1

- **Speaker: Laura Power**

- **Relationships with commercial interests:**
  - **Speakers Bureau/Honoraria: Bayer**

Learning Objectives

- practice approaches to recurrent and treatment resistant vaginitis in women of reproductive age
- analyze the approach to vaginitis in pregnancy and indications and options for treatment;
- examine approaches to vaginal itching in menopause and options for treatment;

Normal Vaginal Flora

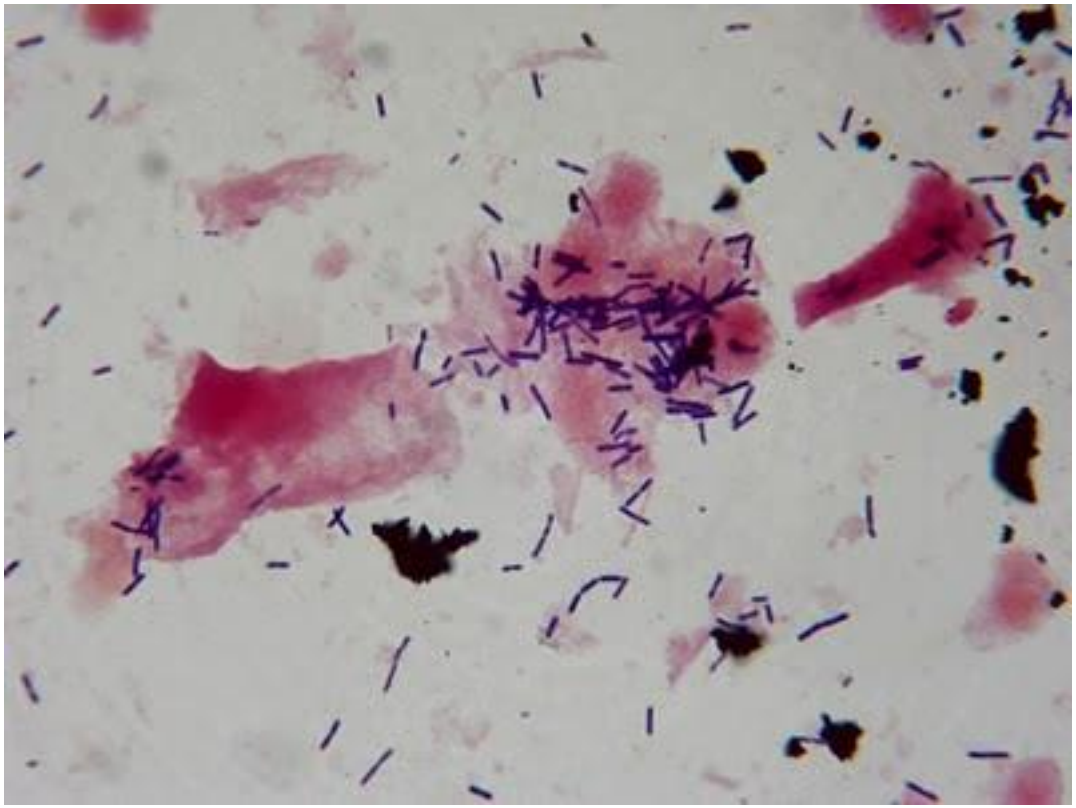
Facultative Anaerobic Bacteria

Gram Positive	Gram Negative	Gram Variable
Lactobacillus crispatus	*Escherichia coli*[a]	*Gardnerella* spp.[a]
Lactobacillus casei	*Enterobacter agglomerans*[a]	
Lactobacillus gasseris	*Enterobacter aerogenes*[a]	
Lactobacillus insers	*Enterobacter cloacae*[a]	
Lactobacillus jensei	*Klebsiella oxytoca*	
Nonhemolytic streptococci	*Klebsiella pneumonia*	
Streptococcus agalactiae[a]	*Morganella morganii*[a]	
Streptococcus viridans	*Proteus mirabilis*	
Staphylococcus epidermidis	*Proteus vulgaris*	
Enterococcus faecalis[a]	*Mycoplasma spp.*[a]	
	Ureaplasma spp.[a]	
	Haemophilus influenzae[a]	

Obligate Anaerobic Bacteria

Gram Positive	Gram Negative
Eubacterium spp.	*Fusobacterium necrophorum*[a]
Peptococcus niger[a]	*Fusobacterium nucleatum*[a]
Peptostreptococcus anaerobius[a]	*Prevotella bivia*[a]
Corynebacterium spp.	*Prevotella melaninogenica*[a]

Normal Vaginal Flora



Vaginitis in the reproductive age woman:

- Most common causes
  - Yeast
  - Trichomonas
  - Bacterial Vaginosis
  - Chlamydia
- Diagnosis:
  - History
  - Physical exam: inspection, swabs, pH test
  - ** Microscopy

Recurrent and Treatment Resistant Vaginitis

- Case 1:
- 34 year old with chronic yeast infections. Responds to oral fluconazole for only a few days and then recurs. She has tried using unscented products, cotton underwear etc.
- PMHx: anemia, ASCUS 2015, gallstones, h. pylori,
- No known allergies
- Fluconazole 100 mg po od x 5 days
- Test results included show: Negative for gonorrhoea and chlamydia , + yeast, negative BV and trich

Back to basics

- **Thorough history**
- Repeat swabs when they have symptoms
- pH testing
- Avoid empiric blind treatment

Differential Diagnosis in the Reproductive Age Woman:

- **Atypical yeast**
- **Chronic BV**
- **Cytolytic vaginitis**
- **Allergy/Contact Dermatitis**
- Allergy to seminal plasma
- Paget's
- Lichen sclerosis/Lichen Planus
- Melanoma/SCC
- Vulvodynia
- Estrogen hypersensitivity vulvovaginitis
- Physiologic Discharge
- **Cervicitis/Cervical pathology**
- **Desquamative Inflammatory Vaginitis**
- **Group A Strep**
- Graft vs. Host
- Fistula
- **Foreign body**
- **Obesity**
- **Atrophic Vaginitis**

Recurrent/Chronic Bacterial Vaginosis

- Amsel criteria:
  - Thin grey d/c that coats the vaginal walls
  - pH > 4.5
  - + whiff test
  - Clue cells
- Treatment of BV
  - Metronidazole 500 mg po bid x 7 days
  - Metronidazole 0.75% gel 5 g PV od x 5 days
  - Clindamycin 2% cream 5g PV od x 7 days

Recurrent Bacterial Vaginosis

- Reasons are unclear
- Retreat with metronidazole or clindamycin
- Suppressive therapy with metronidazole gel 2x per week for 3-6 months
- Alternative/Prevention
  - Boric acid suppositories 600 mg pv od x 14 days then 2x per week
- No proof:
  - Probiotics
  - Treating partner

Recurrent Yeast Infections

- Definition is 4 or more episodes per year
- Usually treatment resistant or atypical
- Risk factors include diabetes, frequent abx use, OCP, HIV
  - Candida glabrata – responds to boric acid
- Treatment
  - Fluconazole 200 mg po q 3 days x 1 week then weekly for 2 months, then biweekly for next 4 months, then monthly for 6 months
  - Exclude DM and HIV

Cytolytic Vaginosis

- Cyclic symptoms
  - Gets better with menstruation
- Swabs and exam all normal
- Treatment:
  - 1-2 tbs of baking soda in 500cc water douche bid x 14 days then od x 14 days then 2x per week or prn

Desquamative Inflammatory Vaginosis

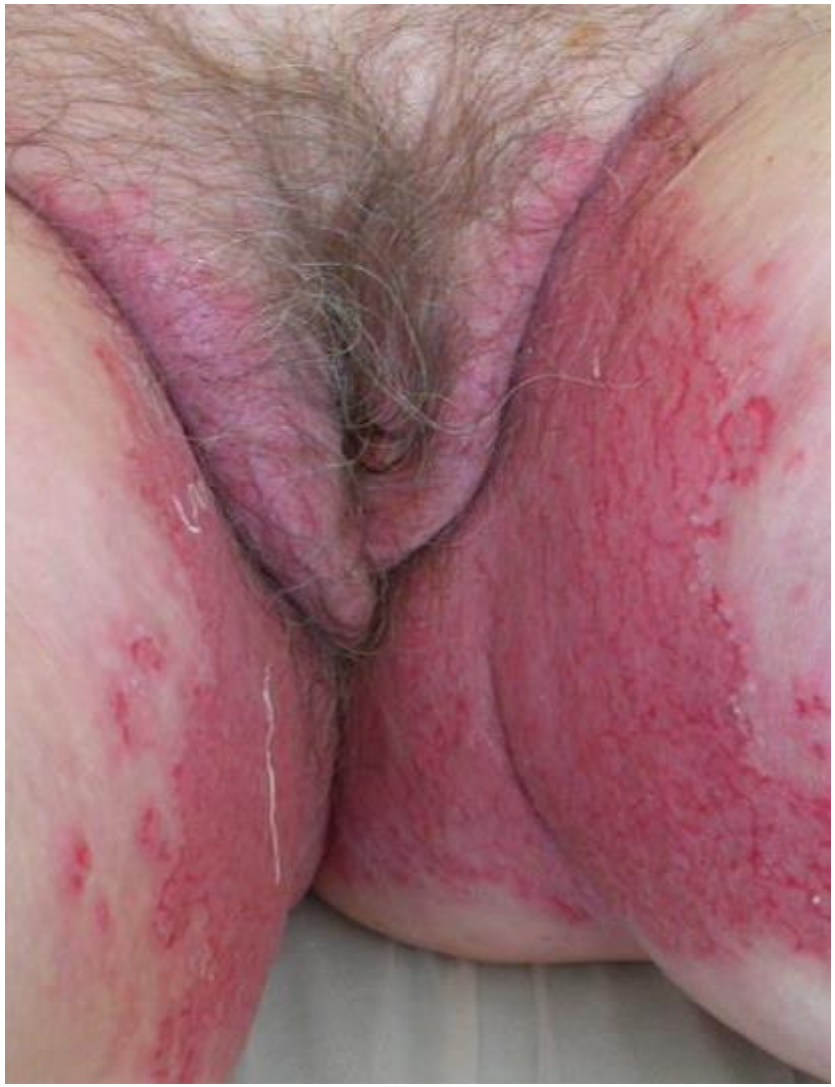
- Characterized by copious purulent discharge, pain with sex, itching and burning,
- On exam: erythema, purulent discharge, petechiae,
- Cultures are negative
- Treatment is vaginal clindamycin OR hydrocortisone 10% vaginal suppository od x 4-6 weeks

Cervicitis

- Most common is chlamydia
- Mycoplasma genitalium is more common than gonorrhoea
- No need to routinely swab for this
- If chlamydia is suspected treat with azithromycin which also covers mycoplasma

Allergy/Contact Dermatitis

- Common
- “dry weave”
- Diagnose with history and biopsy Fixed drug eruptions: statins, acetaminophen, NSAIDs



Case I revisted

- Case 1:
- 34 year old with chronic yeast infections. Responds to oral fluconazole for only a few days and then recurs. She has tried using unscented products, cotton underwear etc.
- PMHx: anemia, ASCUS 2015, gallstones, h. pylori,
- No known allergies
- Fluconazole 100 mg po od x 5 days
- Test results included show: Negative for gonorrhoea and chlamydia , + yeast, negative BV and trich

Case 1 Revisited:

- This patient actually has cyclic symptoms getting better at the time of menstruation
- Repeat swabs were negative despite being symptomatic
- Likely diagnosis:
  - Cytolytic Vaginosis

Vaginitis in the pregnant patient

- Case 2:
  - 32 year old G2P1 presenting for initial prenatal care
  - POBsHx: preterm labour and delivery at 32 weeks
  - Otherwise healthy

  - Vaginal swabs + for yeast and BV, urine culture negative
  - Asymptomatic

Symptomatic Candida

- Diagnose with clinical exam and swabs
- Oral fluconazole is not recommended in pregnancy
- OTC vaginal treatments are first line

Symptomatic Bacterial Vaginosis

- Diagnose with clinical exam and swabs
- Treatment is Metronidazole
  - No longer CI in T1
  - Oral is better
  - Vaginal doesn't eradicate upper genital tract infection

History of Preterm Birth

- Asymptomatic yeast and BV should be treated
  - Treatment doesn't decrease the risk of PTB except in high risk populations (2015 Cochrane review)
- Mycoplasma hominis and Ureaplasma spp
  - Swab in T1 and treat

Case 2 revisted

- Case 2:
  - 32 year old G2P1 presenting for initial prenatal care
  - POBsHx: preterm labour and delivery at 32 weeks
  - Otherwise healthy

  - Vaginal swabs + for yeast and BV, urine culture negative
  - Asymptomatic

Case 2 revisted

- Swab for mycoplasma and ureaplasma
- Refer to OB
- Treat asymptomatic yeast and BV
  - Vaginal OTC yeast treatment
  - Oral metronidazole

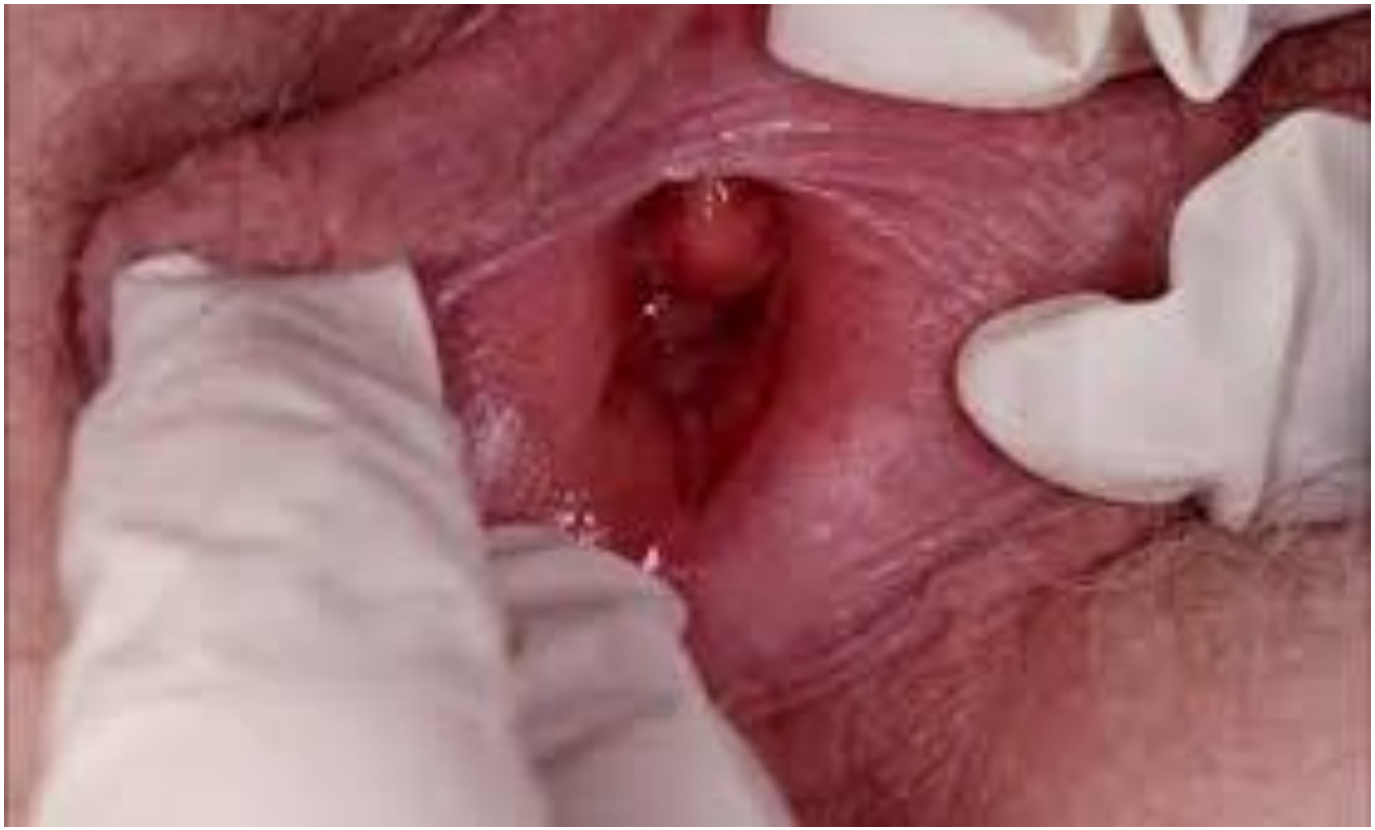
Vaginitis in the Postmenopausal Patient

- Case 3
- 63 year old with 6 month history of worsening burning, itching, dysparunia, dysuria and urgency
- No PVB bleeding since menopause at age 54
- Otherwise healthy

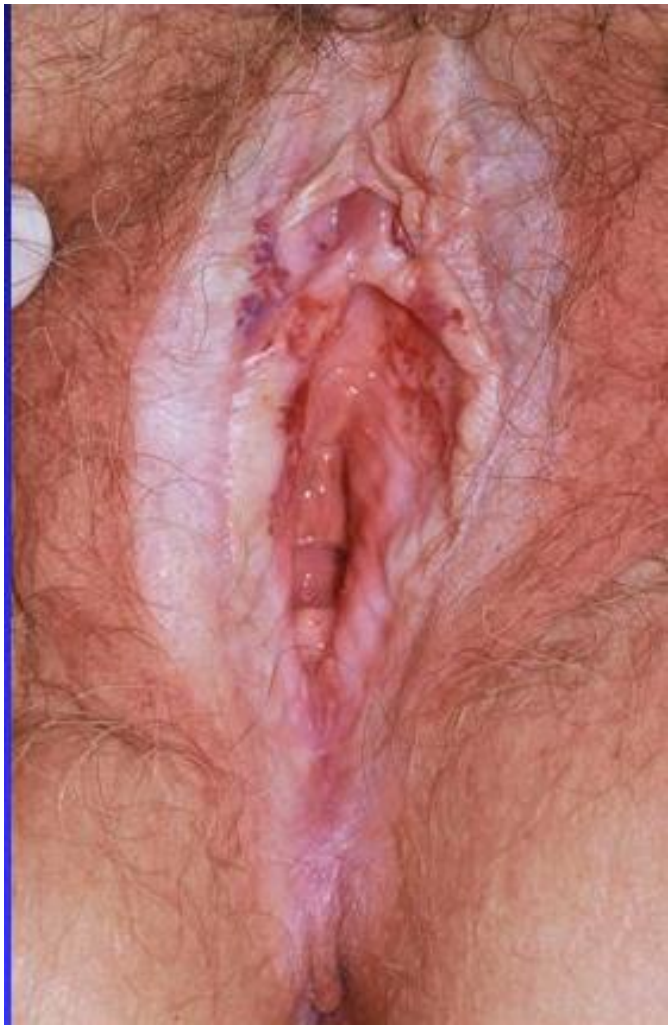
Hypo-estrogenic state

- The lack of estrogen results in thin vaginal epithelium
- There is also a lack of glycogen
- Without glycogen, lactobacilli cannot produce lactic acid
- The pH of the vagina increases to > 4.7

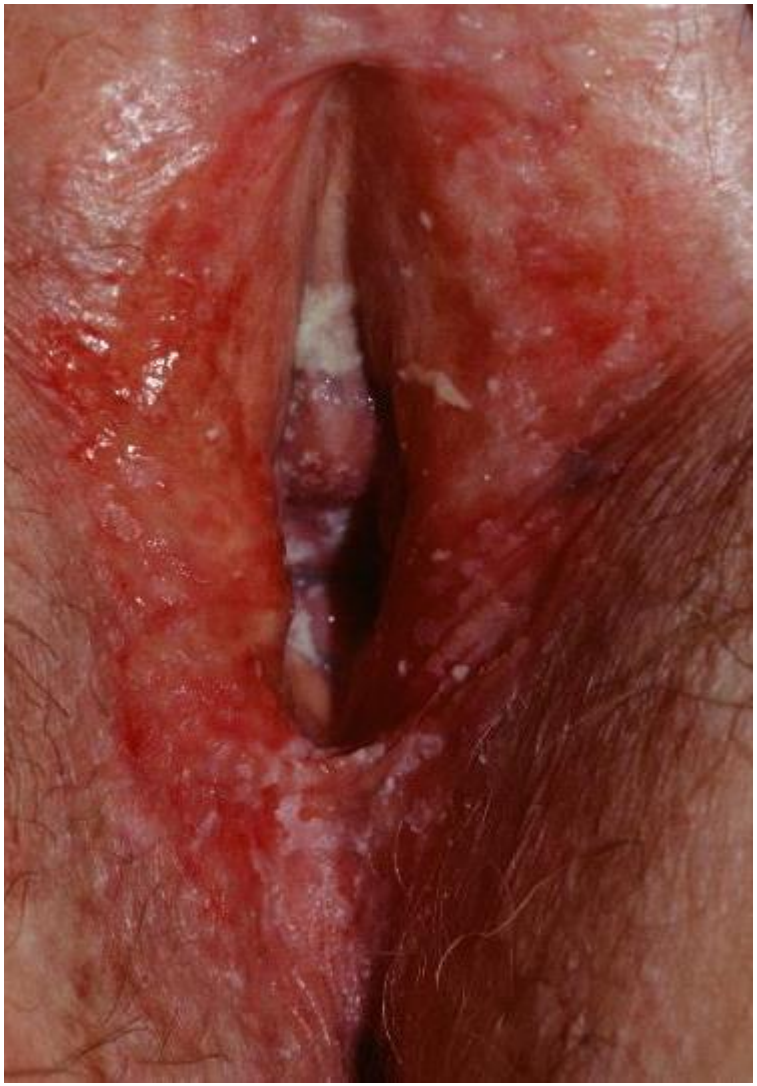
Atrophic vaginitis



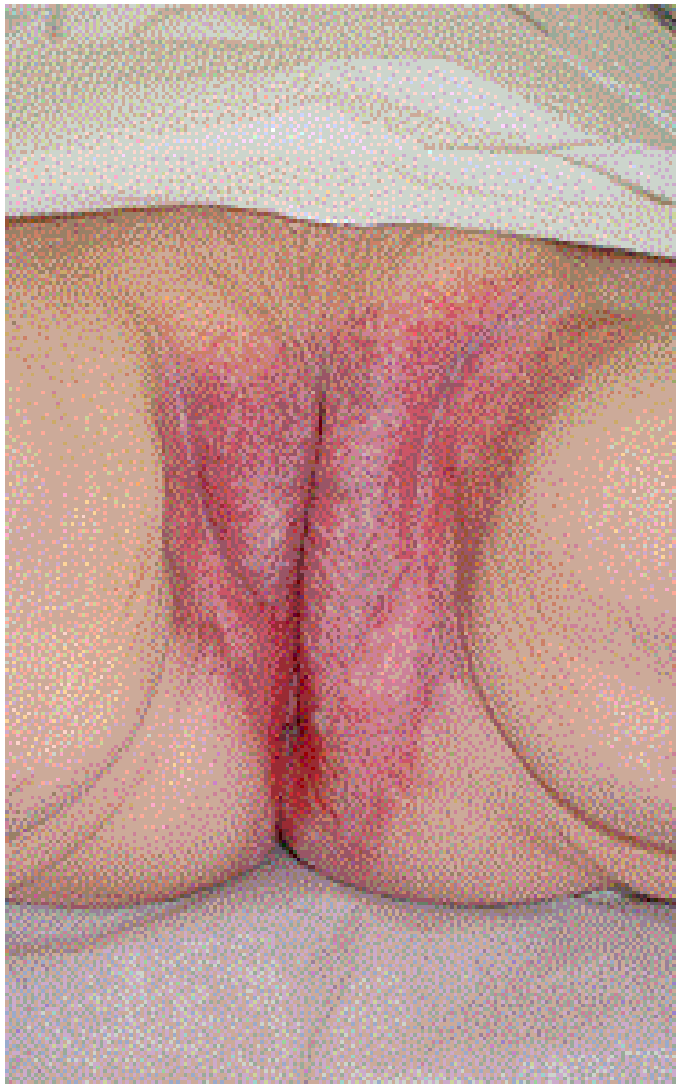
Lichen sclerosis/VIN



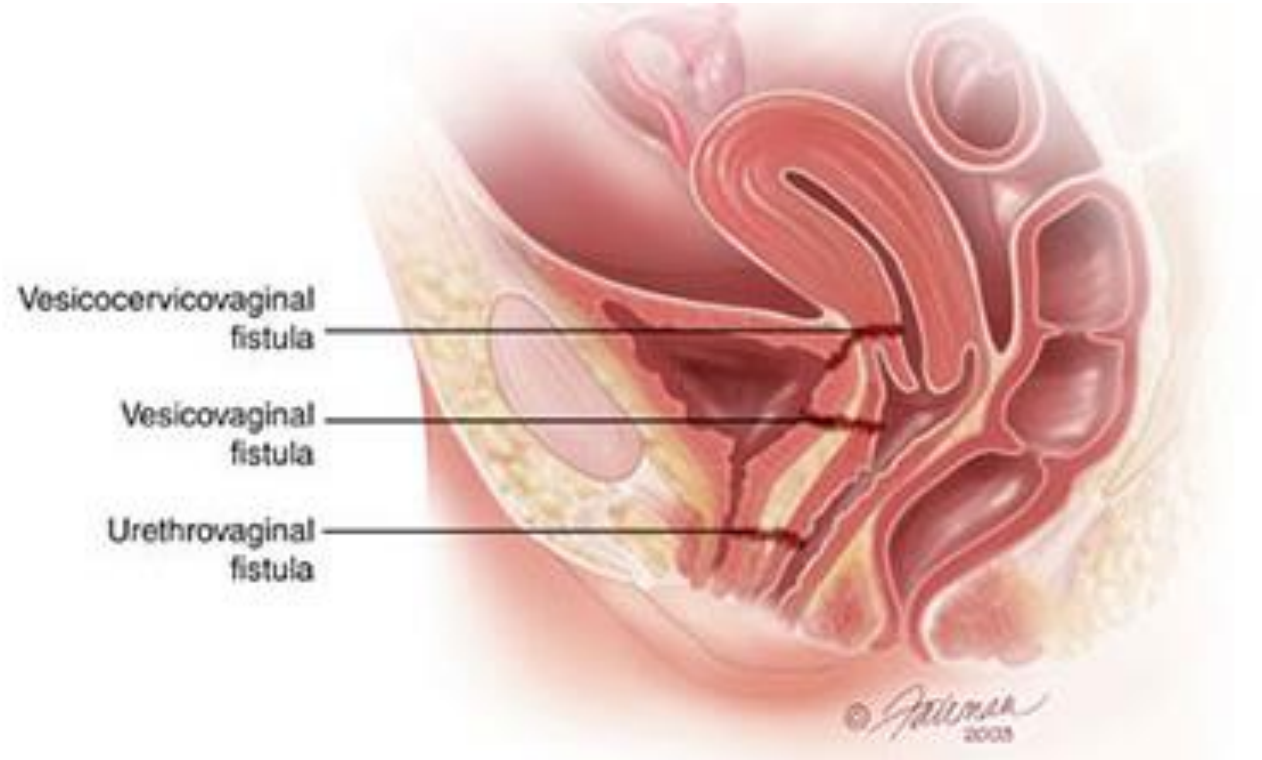
Lichen planus



Paget disease



Fistula


Vesicocervicovaginal fistula
Vesicovaginal fistula
Urethrovaginal fistula

Case 3 Revisited

- Case 3
- 63 year old with 6 month history of worsening burning, itching, dysparunia, dysuria and urgency
- No PVB bleeding since menopause at age 54
- Otherwise healthy

Case 3 revisted

- Exam showed no rashes, no discharge, loss of architecture of labia minora, spec exam revealed petechia in vagina and on cervix, cervix flush with vaginal vault
- Treatment
  - Vaginal estrogen pv od x 14 days then 2x per week indefinitely

Vaginitis in the Pre-pubertal Girl

- Case 4

Rule Out:

- Foreign body
- Sexual abuse
- Poor vulvar hygiene
- Pin worms
- Sarcoma botryoides

Infection

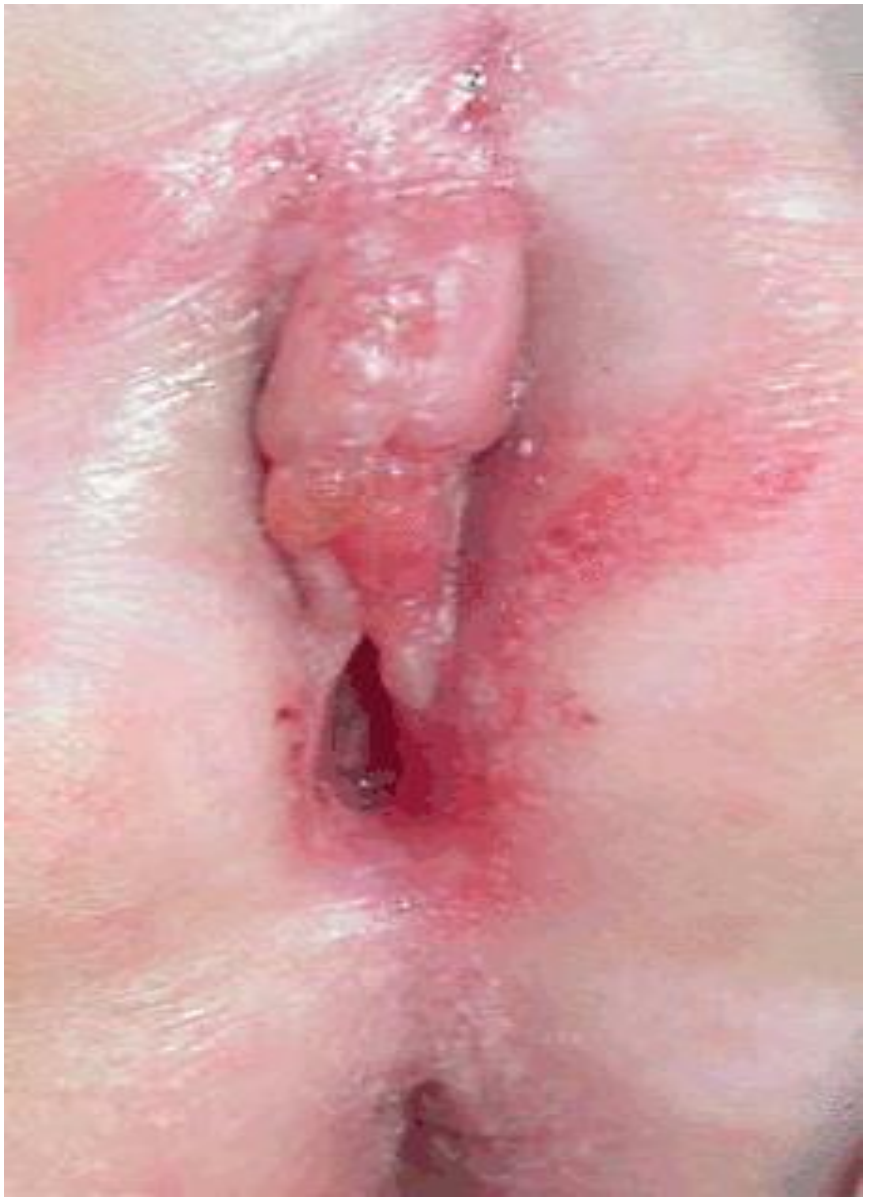
- Usually respiratory or enteric
  - Strep is most common
- Specify pre-pubertal girl on swab requisition
  - Shouldn't be painful unless the hymen is touched
- Candida is uncommon unless immunocompromised
- Any STI needs to be reported to CAS

Foreign body

- Toilet paper is the most common
- Small toys
- Causes discharge, bleeding, odour, pain

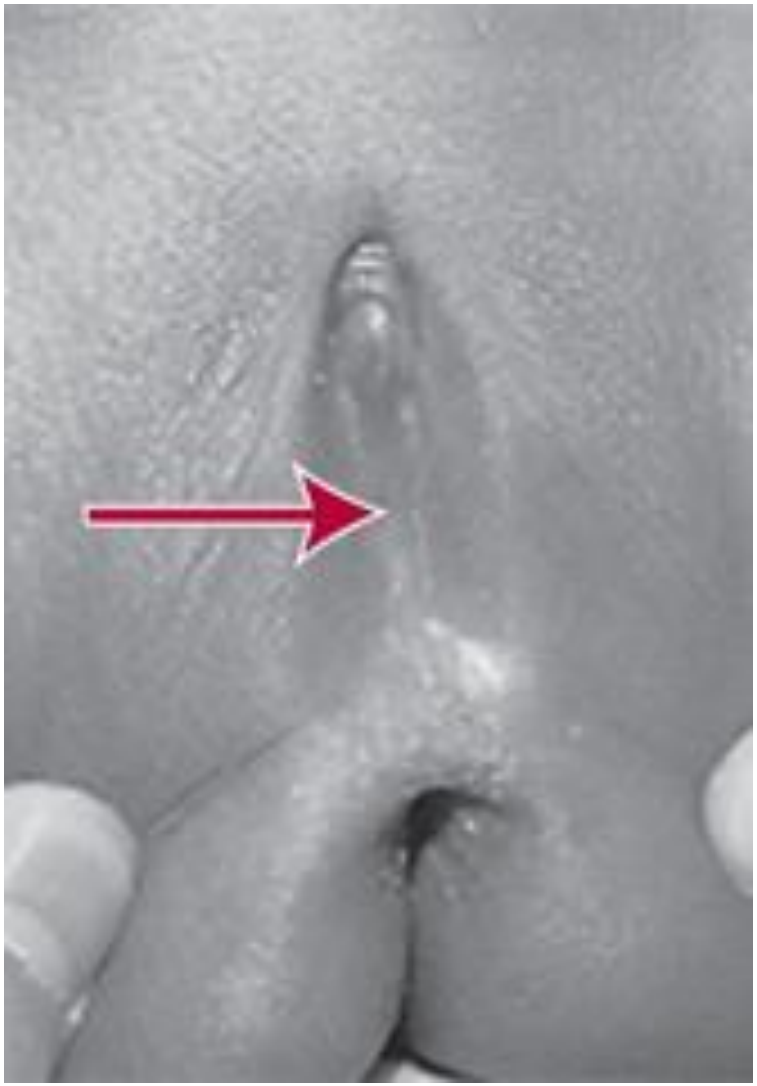
Lichen Sclerosis

- Can be mistaken for abuse or diaper rash
- Treatment is clobetasol and topical estrogen



Labial adhesion

- Emergency if they can't urinate
- Topical estrogen massage once daily



References

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