Desquamative Inflammatory Vaginitis

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Disclosure

Hope K. Haefner, MD was a past member of the advisory board of Merck Co., Inc.

Written Information Available:

University of Michigan
Center for Vulvar Diseases (Google)

Then, click on Information on Vulvar Diseases

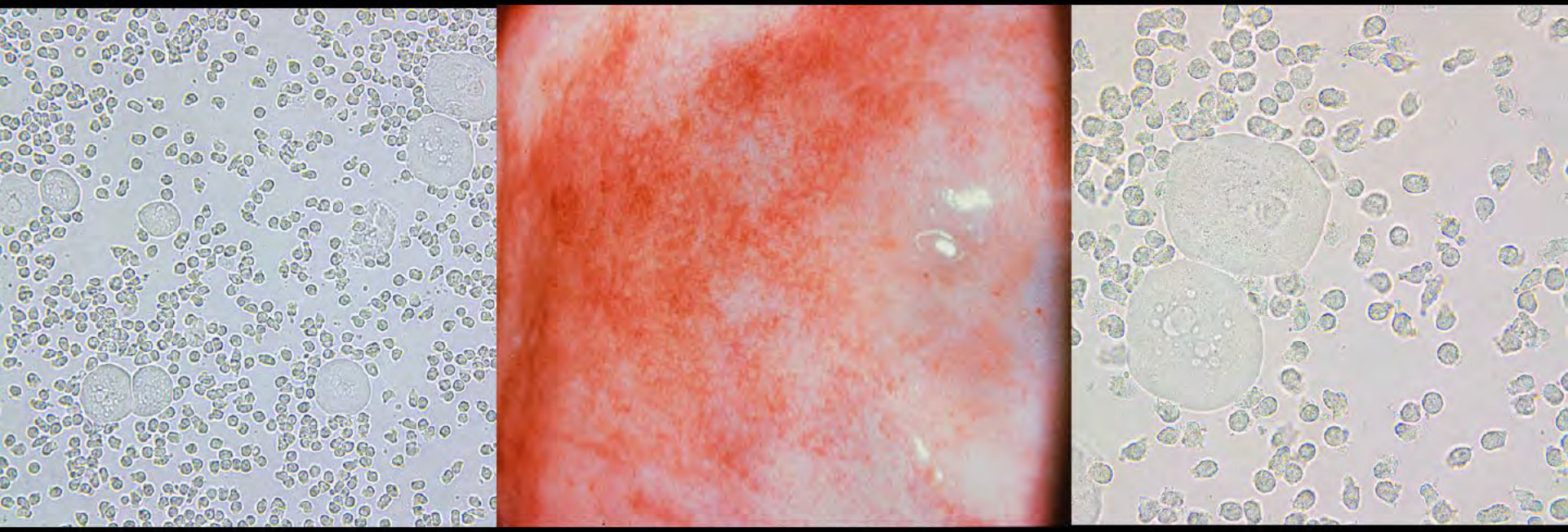
http://obgyn.med.umich.edu/patient-care/womens-health-library/vulvar-diseases

Learning Objectives

the end of this lecture, the participant will gain knowledge on the:

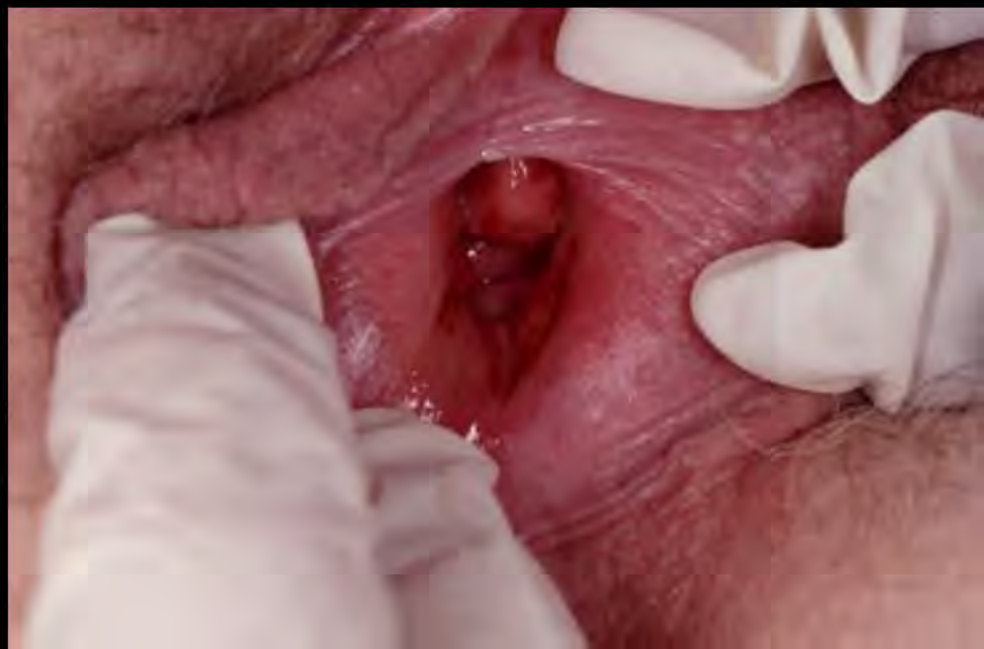
- Diagnosis of desquamative inflammatory vaginitis (DIV)
- Differential diagnosis of DIV
- Treatment strategies for patients presenting with DIV on wet prep

Desquamative Inflammatory Vaginitis



Desquamative Inflammatory Vaginitis (DIV)

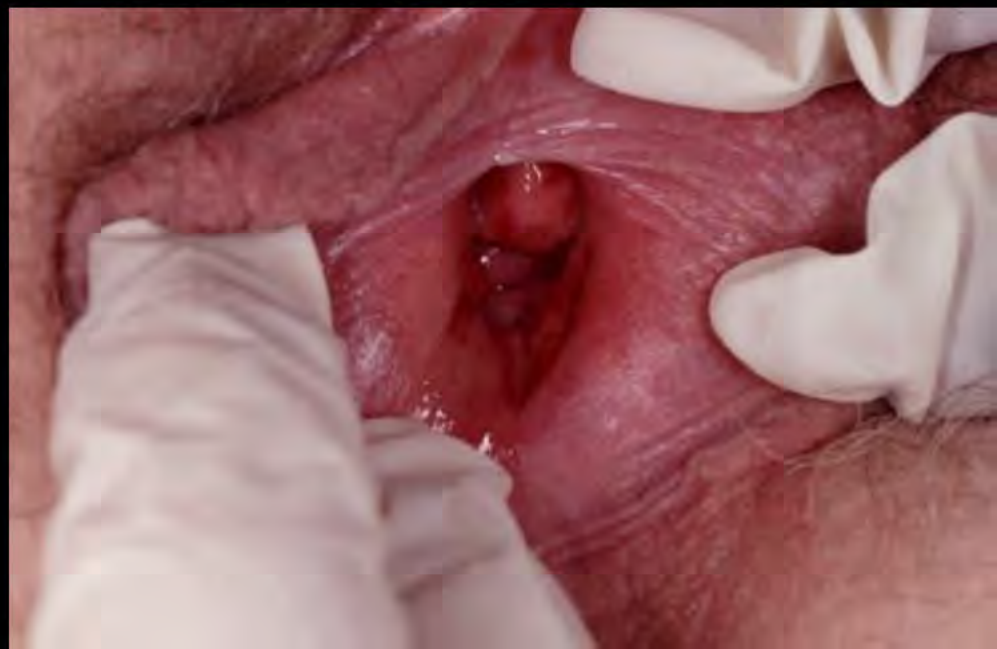
- Occurs in 8% of women presenting to a specialty clinic with chronic vaginitis symptoms
- More frequent in Caucasians
- Peak occurrence in perimenopause
- Diagnosis of exclusion



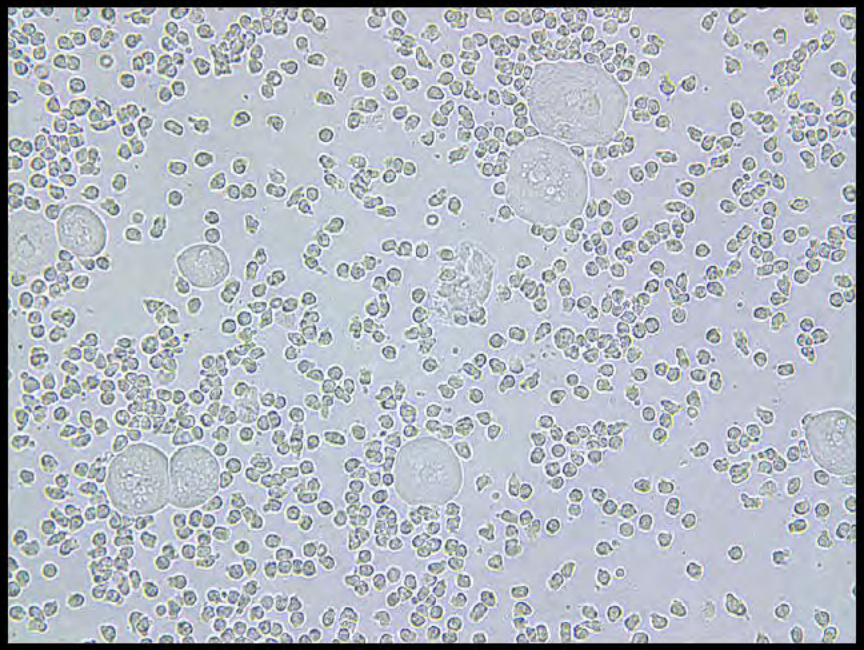
Nyirjesy P, Peyton C, Weitz MV, et al.
Causes of chronic vaginitis
Obstet Gynecol 2006;108:1185-91

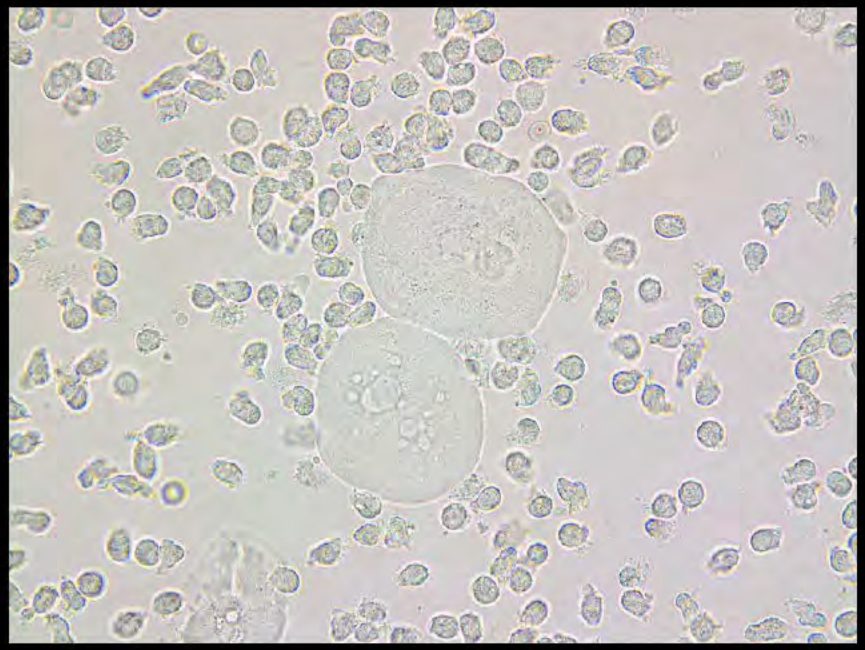
Desquamative Inflammatory Vaginitis Symptoms and Signs

- Dyspareunia
- Spotted rash vagina/cervix
- Purulent discharge



Desquamative Inflammatory Vaginitis (DIV)





D. Birenbaum MD collection

PH and Wet Mount Findings

- Vaginal pH greater than 4.5
- Purulent vaginal discharge
  - (PMNs/epith > 1:1 in at least 4 hpfs on wet prep)
- Increase parabasal cells (>10% total)
- Loss of normal vaginal lactobacilli

	pH (3.0-4.5)	WBC	Para-basals	Features	Discharge
Normal	3.0-4.5	Few or none	no	Nl lactobacilli	Creamy, mucousy, white
Yeast	3.0-4.5	no	no	Hyphae Spores (400x)	Curdy
Bacterial Vaginiosis (Amsel Criteria)	>5.0	no	no	Clue Cell	Yellow, grey w/ odor
Trichomoniasis	>5.0	yes	maybe	Motile trich	Green, yellow, bubbly
Inflammatory	>5.0	yes	yes	Mixed bacteria, absent or reduced lacto	yellow
Atrophic Vaginitis	>5.0	likely	yes	Scant cells, few bacteria	Scant, dry

Desquamative Inflammatory Vaginitis

- Previous terms
  - Exudative or membranous vaginitis
  - Hydrorrhea vaginalis
  - Serofibrinous allergic dysregulative colpitis

Desquamative Inflammatory Vaginitis

- First described in 1950's
  - Franken H, Rotter W. Geburtsh u Frauenh 1954;14:154
  - Scheffey LC, Rakoff AE, Lang WR. An unusual case of exudative vaginitis (hydrorrhea vaginalis) treated with local hydrocortisone. Am J Obstet Gynecol 1956;72:208-211

Desquamative Inflammatory Vaginitis History

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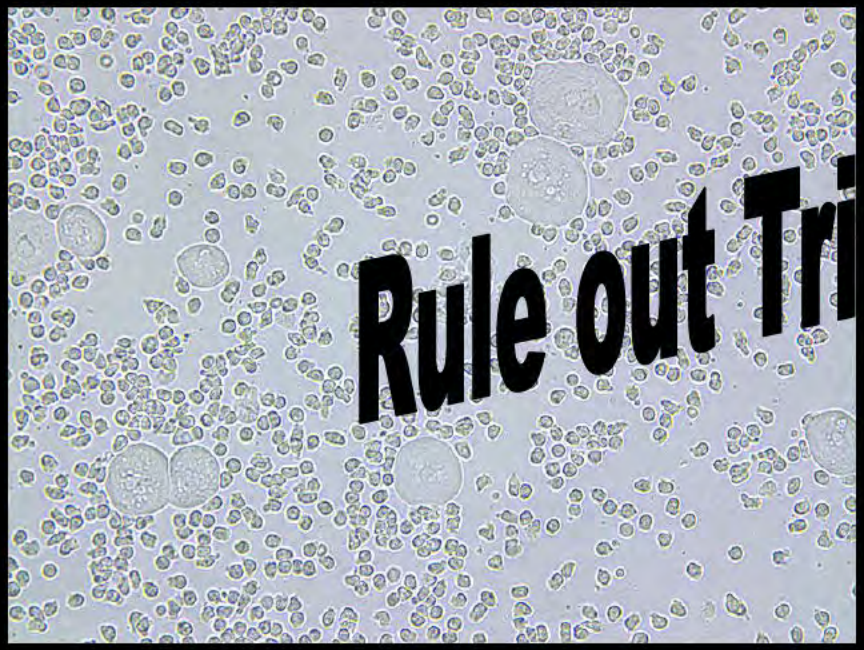
Gray LA, Barnes ML. 1965

Vaginitis in Women, Diagnosis and Treatment. American Journal of Obstetrics and Gynecology & Gynecology 1965;92:125-136.

- 6/478 consecutive women with vaginal complaints had “reddened” vaginas and “numerous puss cells…with oval and round parabasal cells”.
- 2/6 had trichomonas
- 4/6 had DIV

Desquamative Inflammatory Vaginitis



D. Birenbaum MD collection

Nyirjesy 2014 Obstet Gynecol

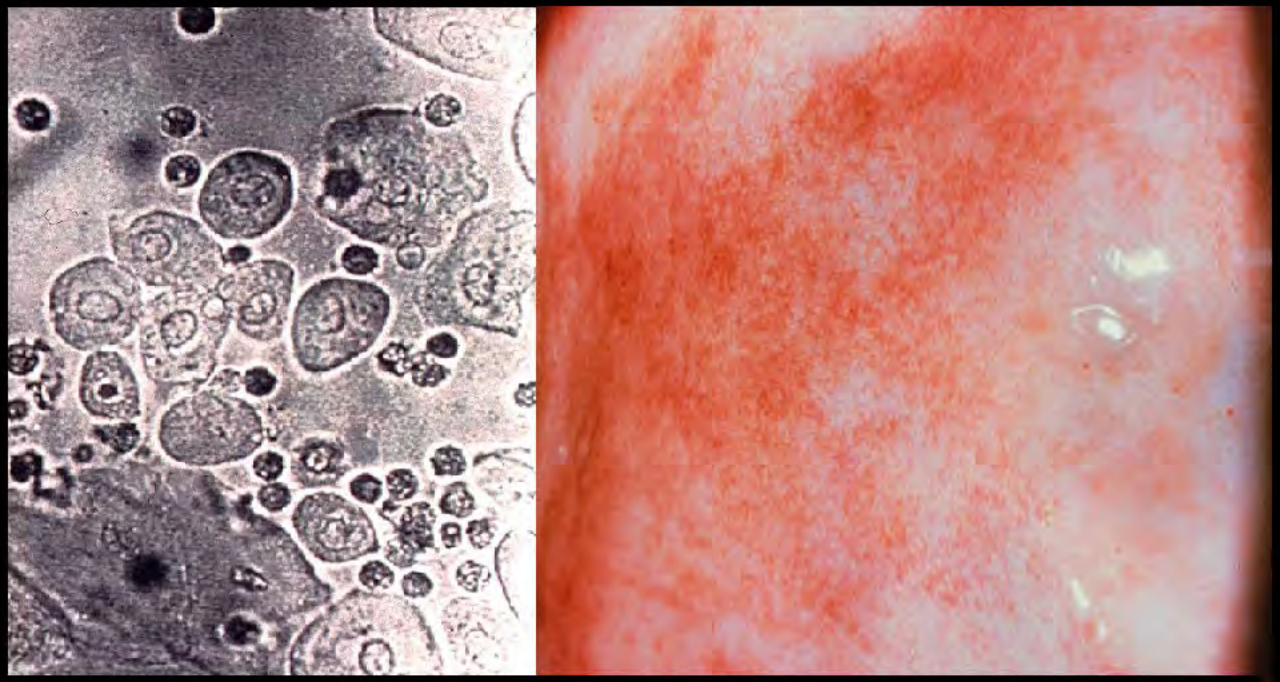
- Routinely perform vaginal bacterial cultures, looking for group A streptococci or S. aureus, and PCR for T vaginalis

What other conditions does DIV has a similar microscopic appearance to?

Inflammatory Vulvovaginitis

- Atrophic vaginitis
- Erosive lichen planus
- Pemphigus vulgaris
- Behçet's disease
- Collagen vascular diseases
- Traumatic
  - Foreign body, vesicovaginal fistulae
- Allergic vaginitis
- Chemical vaginitis
- Infection
  - Group A Streptococcus, Trichomonas, Cervicitis Degenerating leiomyoma or endometrial polyp
- Idiopathic

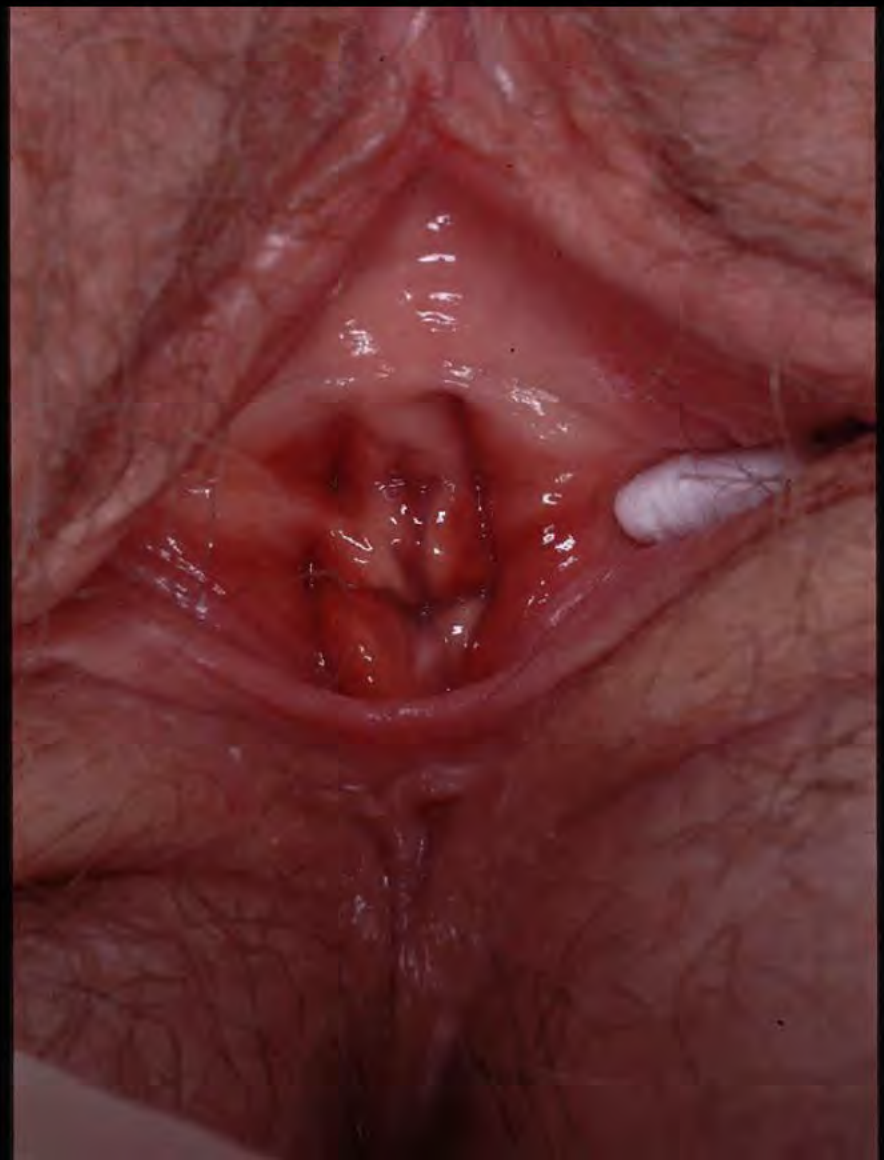
Desquamative Inflammatory Vaginitis



Cytological changes identical to atrophic vaginitis

Oates JK, Rowen D. Desquamative inflammatory vaginitis. A review. Genitourin Med 1990;66:275-279

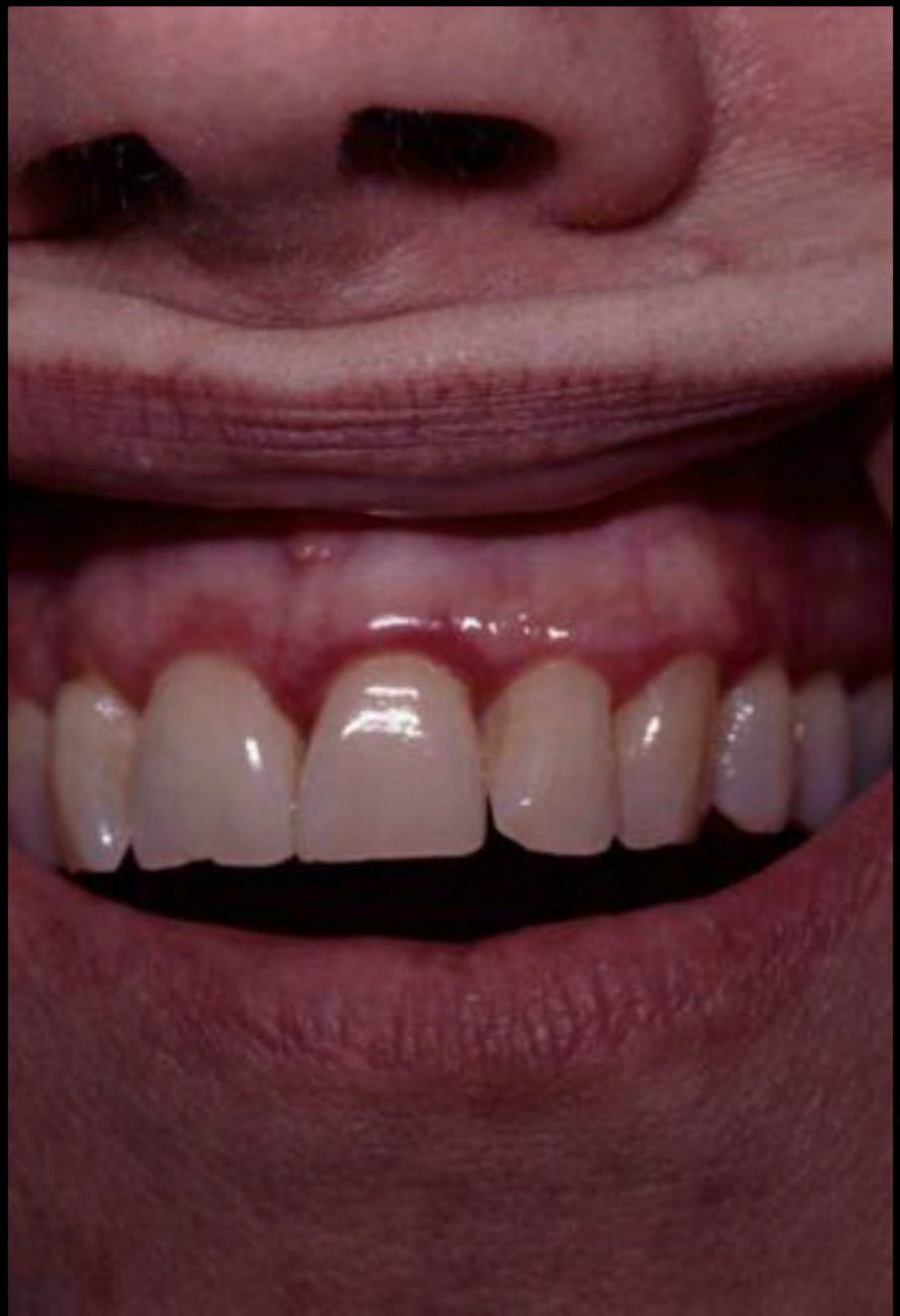
Atrophic Vaginitis

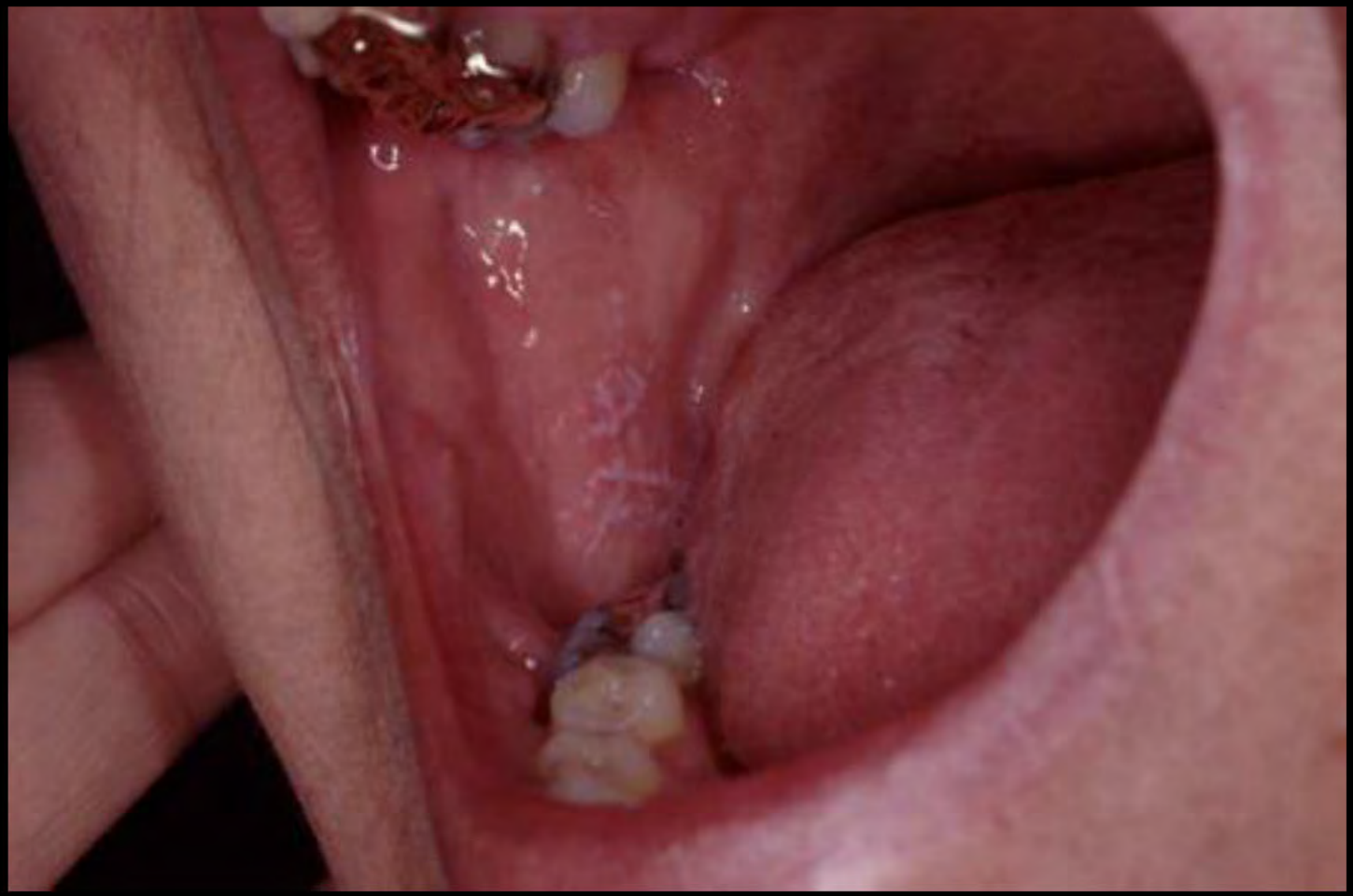


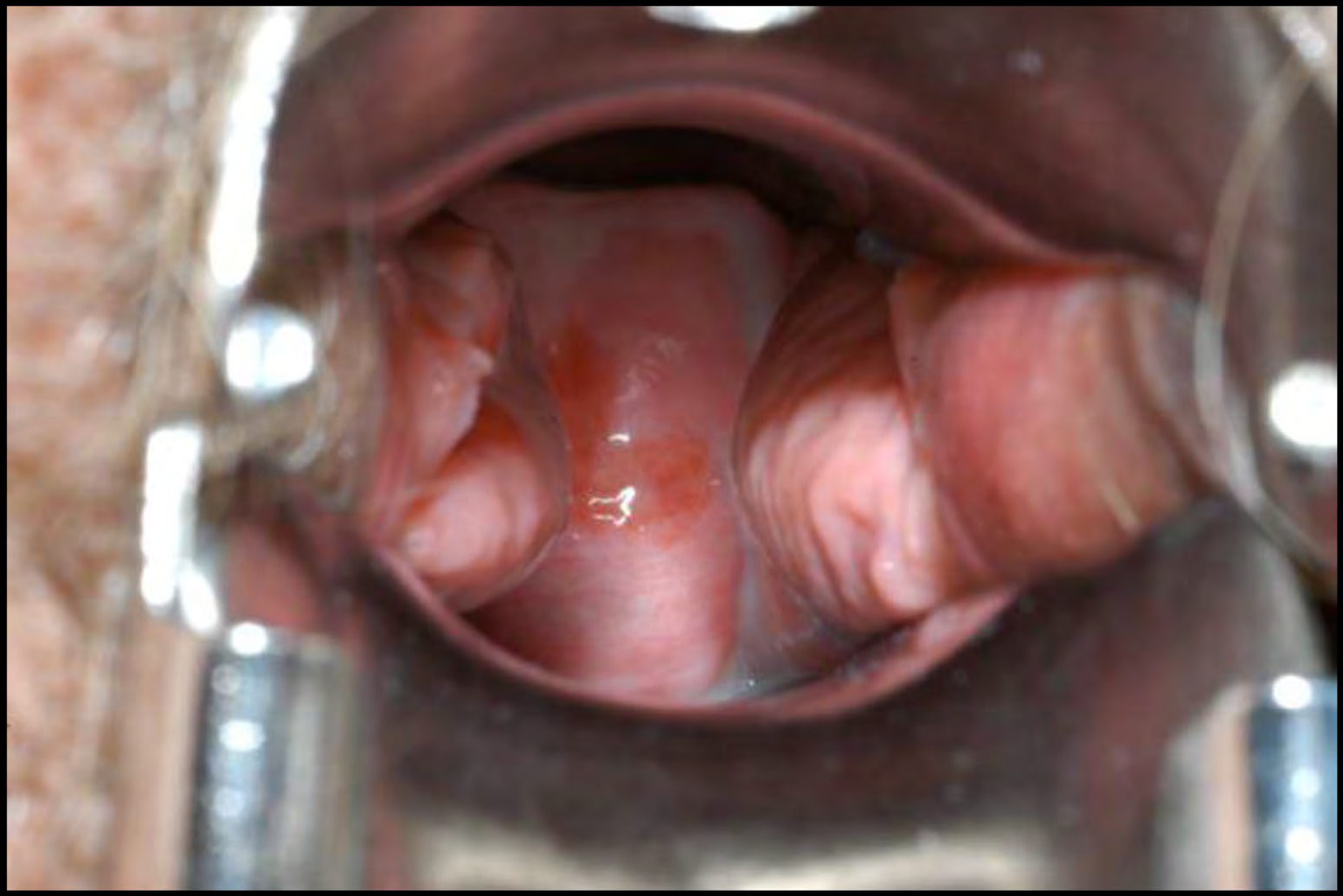
pH > 4.5, increased WBC's, loss of glycogenated cells

Responds well to estrogen

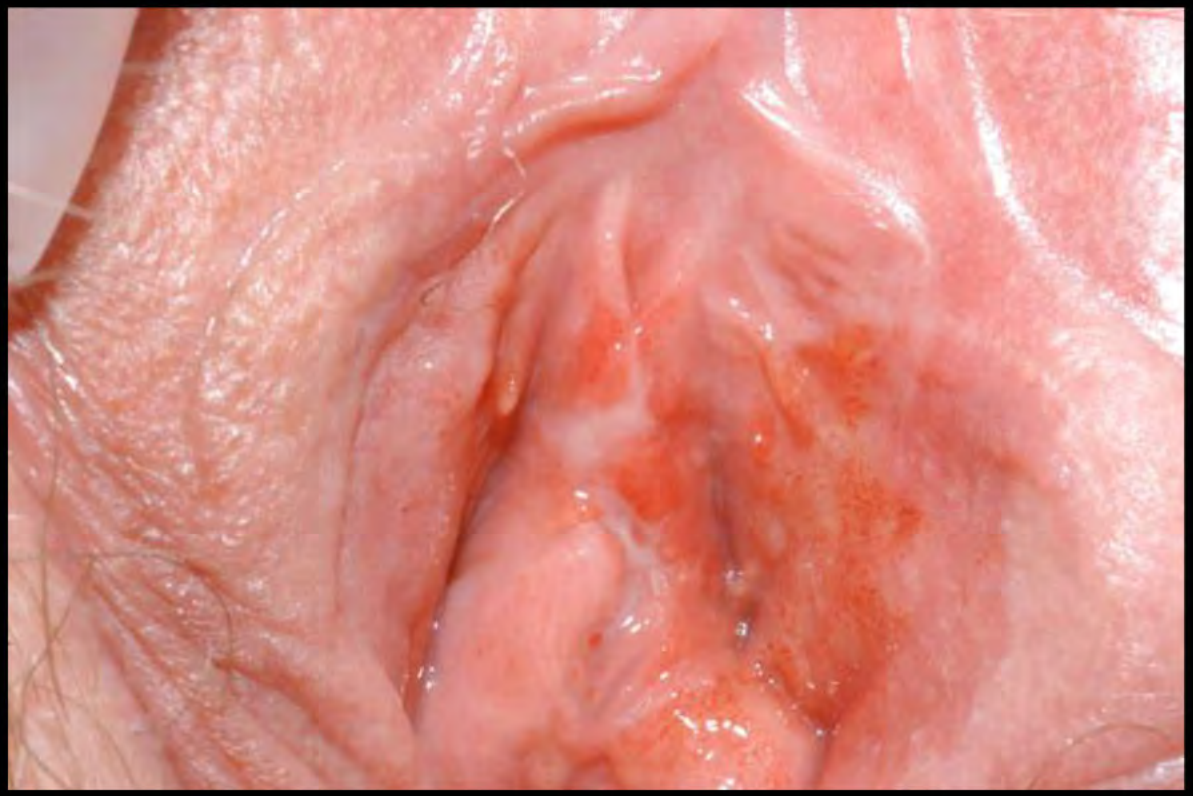
Rule Out Lichen Planus



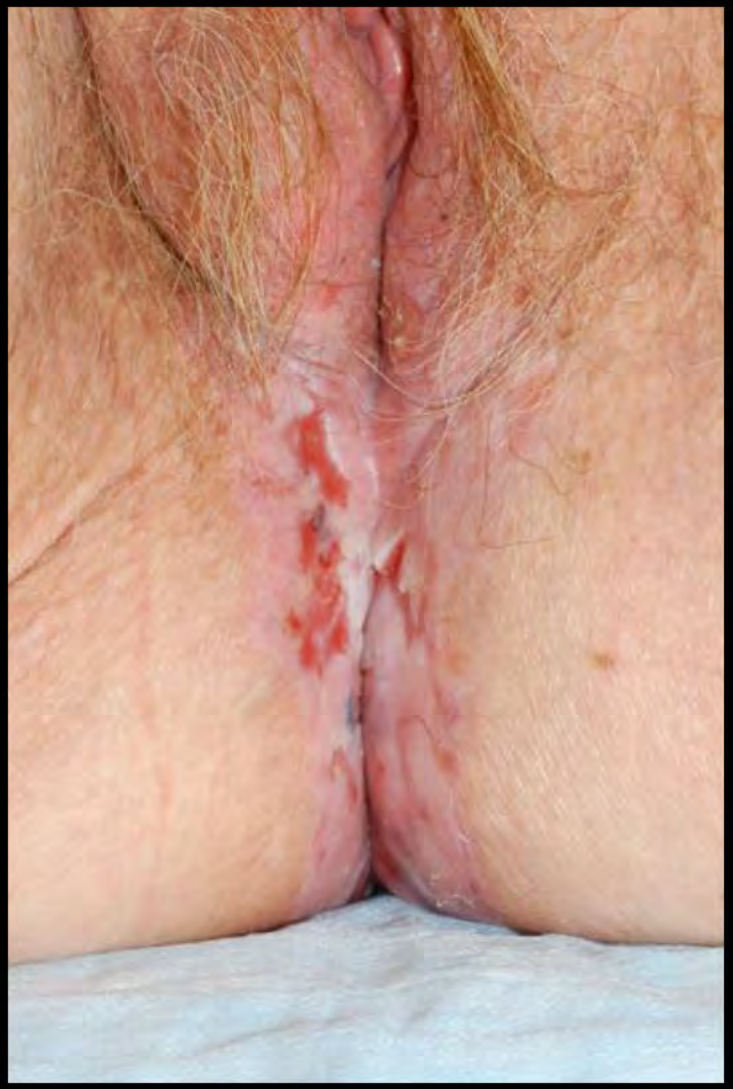




Pemphigus Vulgaris

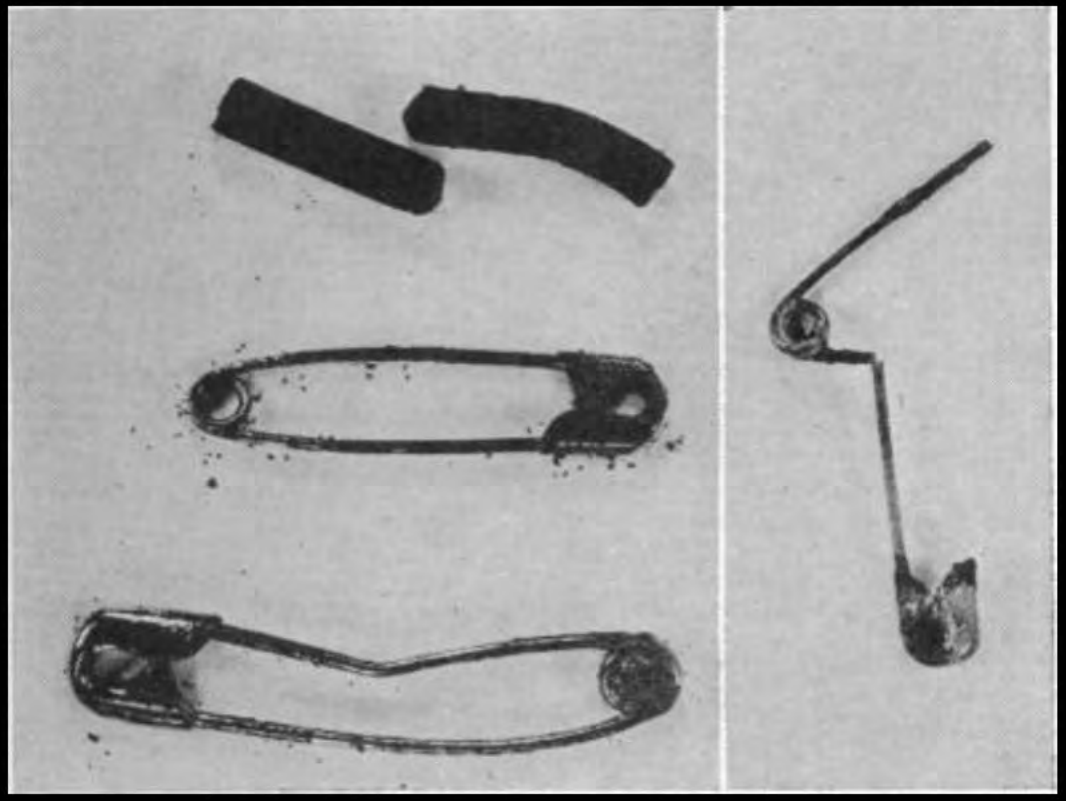


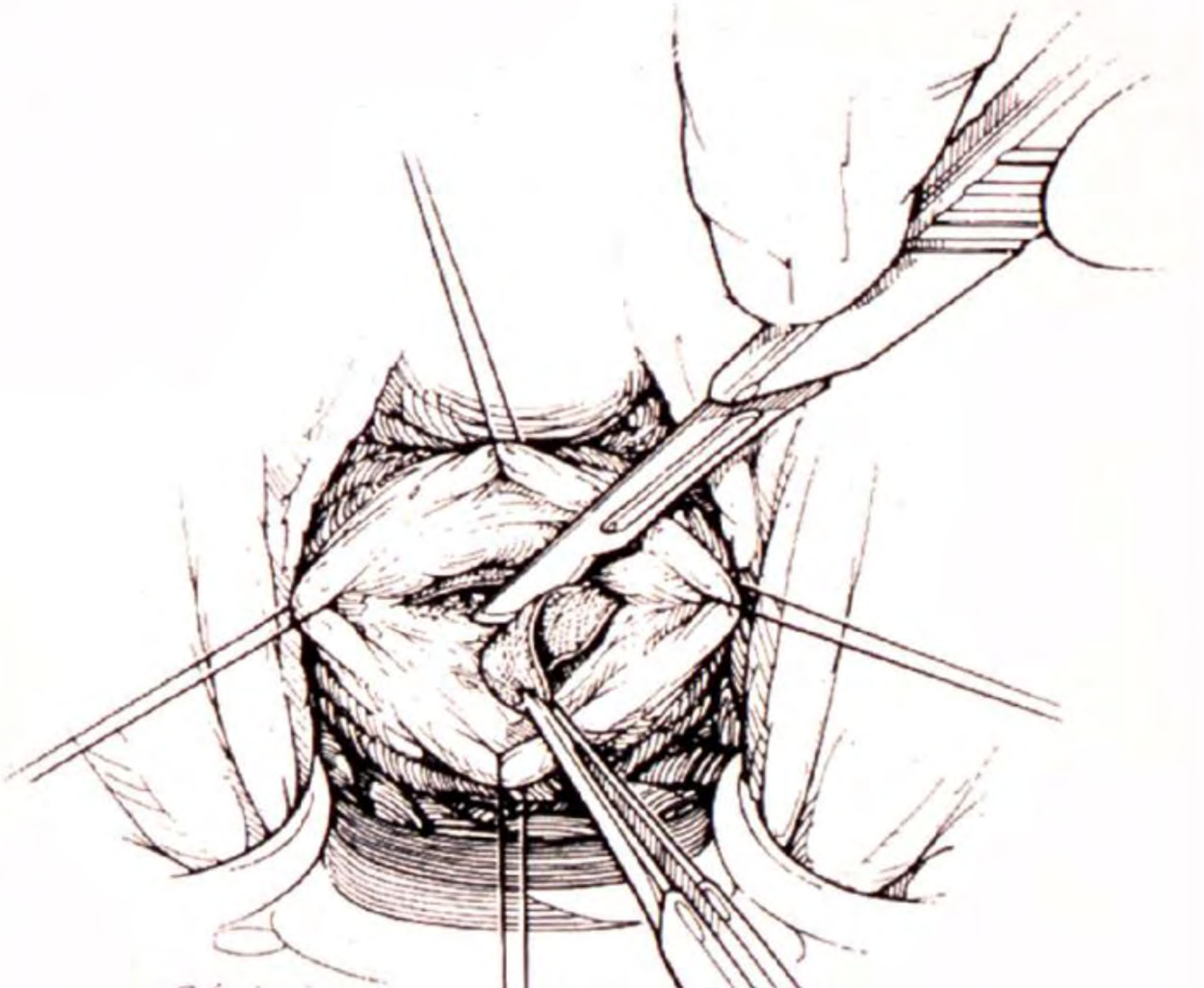
Cicatricial Pemphigoid



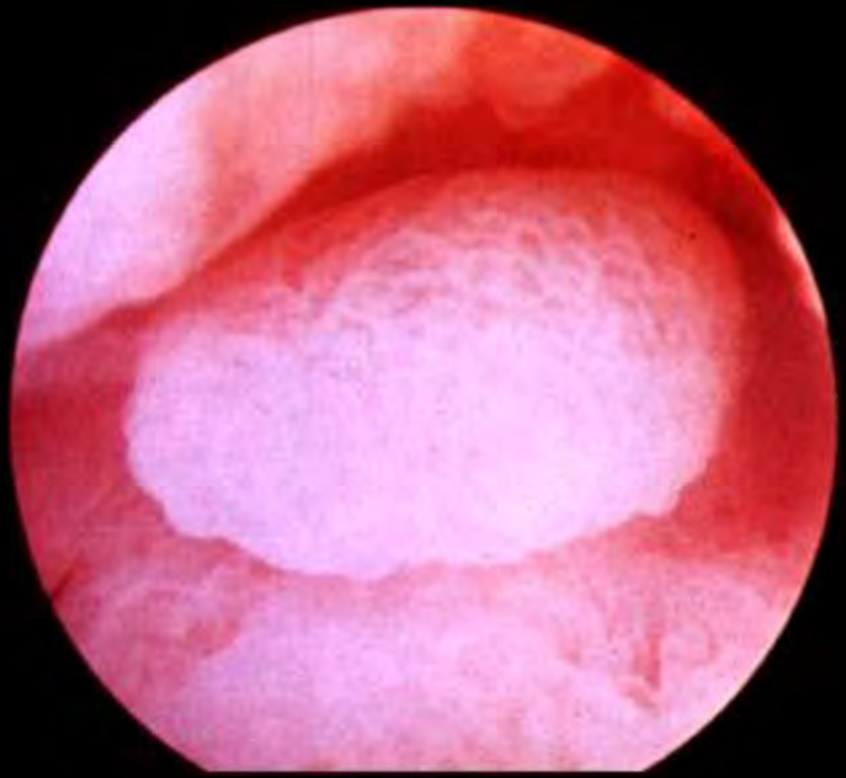
Foreign Body

Foreign Body





Degenerating Endometrial Polyp or Leiomyoma



? **Etiologies ?**

Proposed etiologies

- Immune mediated (autoimmune) (response to anti-inflammatory)
- Kallikrein-related peptidase
- Genetic link
- Bacterial infection

Desquamative Inflammatory Vaginitis History

- Sobel et al. 2011-retrospective study of 130 patients dx with DIV between 1996 and 2007 (98 charts qualified for review)
- Mean age was 48.6 years (plus or minus 10.2 years)
- 50% were postmenopausal

Sobel et al. 2011
Intravaginal Treatment

- 2% clindamycin used in 53 women (54%)
- Hydrocortisone used in 45 women (46%)
- Median 3 weeks (range 1-19 weeks) for first follow up visit

Sobel et al. 2011 cont.

- Both treatments dramatically relieved symptoms in 86% of patients
  - Treatment discontinued (median 8 weeks) in 53 pts (63.1%)
    - 17 (32%) relapsed within 6 weeks
    - 23 (43.4%) relapsed within 26 weeks
    - At 1 year, cure in 25 patients (26%), 57 (58%) asymptomatic but remained on maintenance treatment, and 15 (16%) partially controlled only

DIV

Therapy Options Clindamycin Adapted from Reichman and Sobel 2014)

Clindamycin 2% cream 5(g)

one applicator intravaginally qhs x 3 weeks (consider 2 x per week x 2 months)

Longer suppression time may be required

Clindamycin 200 mg vaginal suppository qhs x 3 weeks

(consider 2 x per week x 2 months)

Longer suppression time may be required

DIV

Therapy Options Clindamycin Adapted from Reichman and Sobel 2014)

Intravaginal hydrocortisone suppositories 25 mg intravaginal bid for 3 weeks (consider 3 x per week x 2 months)

- Longer suppression may be required

Intravaginal hydrocortisone cream 300 to 500 mg intravaginal qhs for 3 weeks (consider 2 x per week x 2 months for maintenance therapy, with gradual dose reduction if possible)

DIV Other Options

Combine clindamycin cream and hydrocortisone suppositories

Compound a high dose intravaginal corticosteroid and 2% clindamycin

Hydrocortisone 100 mg/gram in clindamycin 2% emollient cream base. Insert 5 gram (applicator full) per vagina every other night x 14 doses. This needs to be made at a compounding pharmacy.

DIV Other Options

If not working, reconsider the diagnosis!
(has estrogen been addressed?)

- May need to add estrogen

Murphy R. J Reprod Med. 2008 Feb;53(2):124-8

Current Thoughts on the Same vs. Different Conditions

- Desquamative inflammatory vaginitis is not a diagnosis in itself; it is a diagnosis of exclusion
- May be the presentation of a range of disorders with similar presentations
- Therefore no one treatment will work for all patients

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