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

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
<table>
<thead>
<tr>
<th></th>
<th>pH (3.0-4.5)</th>
<th>WBC</th>
<th>Parabasals</th>
<th>Features</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal</strong></td>
<td>3.0-4.5</td>
<td>Few or none</td>
<td>no</td>
<td>NI lactobacilli</td>
<td>Creamy, mucousy, white</td>
</tr>
<tr>
<td><strong>Yeast</strong></td>
<td>3.0-4.5</td>
<td>no</td>
<td>no</td>
<td>Hyphae Spores (400x)</td>
<td>Curdy</td>
</tr>
<tr>
<td>Bacterial Vaginosis (Amsel Criteria)</td>
<td>&gt;5.0</td>
<td>no</td>
<td>no</td>
<td>Clue Cell</td>
<td>Yellow, grey w/ odor</td>
</tr>
<tr>
<td><strong>Trichomoniasis</strong></td>
<td>&gt;5.0</td>
<td>yes</td>
<td>maybe</td>
<td>Motile trich</td>
<td>Green, yellow, bubbly</td>
</tr>
<tr>
<td><strong>Inflammatory</strong></td>
<td>&gt;5.0</td>
<td>yes</td>
<td>yes</td>
<td>Mixed bacteria, absent or reduced lacto</td>
<td>yellow</td>
</tr>
<tr>
<td>Atrophic Vaginitis</td>
<td>&gt;5.0</td>
<td>likely</td>
<td>yes</td>
<td>Scant cells, few bacteria</td>
<td>Scant, dry</td>
</tr>
</tbody>
</table>
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
Desquamative Inflammatory Vaginitis

History

• First described in 1950’s
  – Franken H, Rotter W. Geburtsh u Frauenh 1954;14:154
Gray LA, Barnes ML. 1965

- 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

Rule out Trichomonas

D. Birenbaum MD collection
Routinely perform vaginal bacterial cultures, looking for group A streptococci or S. aureus, and PCR for T vaginalis.
What other conditions does DIV have 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

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
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 (aplicator 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

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
References

Desquamative Inflammatory Vaginitis


