Vulvar Ulcers

Diagnostic Algorithm

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Vulvar Ulcers-Diagnostic Algorithm

Acute Ulcer

HSV Testing (1)

Candida Testing (2)

Test for Other STD's acute infection

Syphilis (3)

HIV (4)

Epstein-Barr (5)

Note: The Syndromic approach is used where appropriate (already addressed)
Vulvar Ulcers-Diagnostic Algorithm

History of Trauma (8)

Tests for other STD Infections (unusual in United States) (6)

Chancroid

Positive

Lymphogranuloma venereum

Positive

Granuloma inguinale (Donovanosis)

Clinical Pattern and Biopsies (9)

Consider Aphthae (7)
- Idiopathic
- Secondary to Underlying Condition
### Type-Specific HSV Antibody Testing: Interpreting Serology Results

<table>
<thead>
<tr>
<th>HSV-1</th>
<th>HSV-2</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>Negative</td>
<td>• No Infection</td>
</tr>
<tr>
<td>Positive</td>
<td>Negative</td>
<td>• Uncertain Result • Possible genital • Possible oral</td>
</tr>
<tr>
<td>Positive</td>
<td>Positive</td>
<td>• Genital Herpes • Oral Herpes ±</td>
</tr>
</tbody>
</table>

**Note:**

- HSV: Herpes Simplex Virus
- HSV-1: Type 1 HSV
- HSV-2: Type 2 HSV
Candida Testing

- KOH and wet prep
- Culture (best on Sabaroud’s medium)
  - Identify the Candida species in patients with recurrent candidiasis
Syphilis

- Non-treponemal tests – RPR and VDRL
  - Not as sensitive as the treponemal test for primary syphilis
- Treponemal tests – Fluorescent Treponemal Antibody Absorption Test (FTA-ABS), (Microhemagglutinin-Treponema Pallidum) MHA-TP

Either the FTA-ABS or the MHA-TP should be ordered if the non-treponemal syphilis serology is positive

FOR TREATMENT INFORMATION
**Human Immunodeficiency virus (HIV)**

- Serology - enzyme immunoassay (EIA) for HIV antibody, HIV 1 and HIV 2
- Followed by Western Blot or immuno-fluorescent assay
Epstein Barr

- Serology – IgM antiviral capsid antibody (VCA-Ab)
  - Acute and convalescent serum
Chancroid

- Culture for H. ducreyi – bacterial culture is on a specific culture medium and special arrangements may need to be made in advance
- PCR tests are available
Lymphogranuloma Venereum

- Diagnosis - serology with complement fixation titers
Granuloma inguinale

• Diagnosis by tissue crush or biopsy and stain for a “Donovan bodies”
STD Risk Factors

• Sexual contact with:
  Person with a genital ulcer
  New sex partner traveling to or from an endemic area
  Sex-trade workers and their clients
  Anonymous sexual contact (e.g. a Rave Party)

• Partner HIV positive
• Travel to an endemic area
• STD
• Previous drug use –self or partner
Aphthous Ulcers (7)

- Idiopathic in 90%
- Secondary in 10%
  - Inflammatory bowel disease
    - Crohn’s disease
    - Ulcerative colitis
    - Celiac disease
- Drugs (NSAIDS, cytotoxic drugs, foscarnet)
- Infections – HIV
  (Rarer – typhoid, TB, enterocolitis, yersinia)
- Behcet’s disease - rare
- Myeloproliferative disease (neutropenia, lymphopenia)
  Syndromes (very rare)
  Acute Febrile Neutrophilic Dermatosis (Sweet syndrome)
  Mouth and genital ulcers, inflamed cartilage
  (MAGIC syndrome)
Vulvar Ulcers - Diagnostic Algorithm

- Clinical Pattern and Biopsies (9)
  - Non-Bullous Dermatoses
  - Bullous Dermatoses
  - Premalignant and Malignant Tumors
  - Infections
  - Miscellaneous
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Clinical Pattern and Biopsies (9)

Non-Bullous Dermatoses

Irritant contact dermatitis
Drug Reaction
Fixed Drug Rxn
LE
Crohn’s
Darier’s
Behcet’s
P gangrenosum
H suppurativa
Necrolytic Migratory Erythema
Vulvar Ulcers-Diagnostic Algorithm

Clinical Pattern and Biopsies (9)

Bullous Dermatoses

a) Autoimmune
   BMM Pemphigoid
   P. vulgaris
   Bullous pemphigoid
   Linear IgA Disease
   EB Acquisita

b) Non-autoimmune
   TEN / EM
   Contact Dermatitis
   Hailey-Hailey
   EB Inherited
Toxic Epidermal Necrolysis
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Clinical Pattern and Biopsies (9)

Premalignant and Malignant Tumors

VIN
BCC
SCC
Extramammary Paget’s Disease
Verrucous Carcinoma
Melanoma
Lymphoma
Leukemia
Hodgkins
Langerhans Cell
Histiocytosis
Squamous Cell Carcinoma (in LS)
## Vulvar Ulcers-Diagnostic Algorithm

<table>
<thead>
<tr>
<th>Clinical Pattern and Biopsies (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infections</strong></td>
</tr>
<tr>
<td>H. zoster</td>
</tr>
<tr>
<td>Varicella</td>
</tr>
<tr>
<td>Vaccinia</td>
</tr>
<tr>
<td>Hand/Foot/Mouth</td>
</tr>
<tr>
<td>Staph&amp;Strep</td>
</tr>
<tr>
<td>Typhoid</td>
</tr>
<tr>
<td>Paratyphoid</td>
</tr>
<tr>
<td>Brucellosis</td>
</tr>
<tr>
<td>Diphtheria</td>
</tr>
<tr>
<td>Pseudomonas</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Histoplasmosis</td>
</tr>
<tr>
<td>Actinomycosis</td>
</tr>
<tr>
<td>Cryptococcosis</td>
</tr>
<tr>
<td>Leishmaniasis</td>
</tr>
<tr>
<td>Schistosomiasis</td>
</tr>
<tr>
<td>Amebiasis</td>
</tr>
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</table>
Methicillin Resistant Staph
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Clinical Pattern and Biopsies (9)

Miscellaneous
- Rheumatoid nodule
- Gangrene
- Acrodermatitis
- Lymphangiectasis
- Graft vs. Host
- Spider bite
- Hymenal Fissures
- Reiter’s Disease
- Wegener’s Granulomatosis
- Factitial
- Female Genital Mutilation
Herpes Zoster
# Vulvar Ulcers - Diagnostic Algorithm

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- SCC
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- Pseudomonas
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Vulvar Ulcers
Vulvar Ulcers- Diagnostic Tool

Age
Country
Recent partner change
Ethnicity
First ulcer episode
Recurrent ulcers
Fever
Groin node enlargement
Etc…
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YOUR DIAGNOSIS IS..... XYZ