

Online Learning Module:
Syndromic management of
sexually transmitted infections

Course Objectives

- Understand how to identify and manage common vaginal and cervical infections based on a group of signs and symptoms called syndromes.

The Syndromic Approach

- Identifies consistent groups of signs and symptoms (syndromes) and treats accordingly
- Provides treatment for majority of serious organisms responsible for producing a syndrome
- Overcomes lack of laboratory infrastructure, expensive tests and special trained personnel
- Overtreatment

General signs and symptoms of STIs

- Vaginal discharge
- Pruritus (itching) of the vulva or vagina
- Lower abdominal pain
- Spotting
- Pain with urination (dysuria)
- Sexual intercourse (dyspareunia)
- Genital ulcers or warts
- Inflammation on exam

SYNDROME:
Vaginal Discharge/Pruritis

Vaginal Discharge or Pruritus

- **Inflammation** is the most common pathological condition of the cervix and vagina. Usually caused by an infection
- **Discharge** can be due to **cervicitis** (inflammation of the cervix) or **vaginitis** (inflammation of the vagina)

Vaginal discharge/pruritis

Most common causes

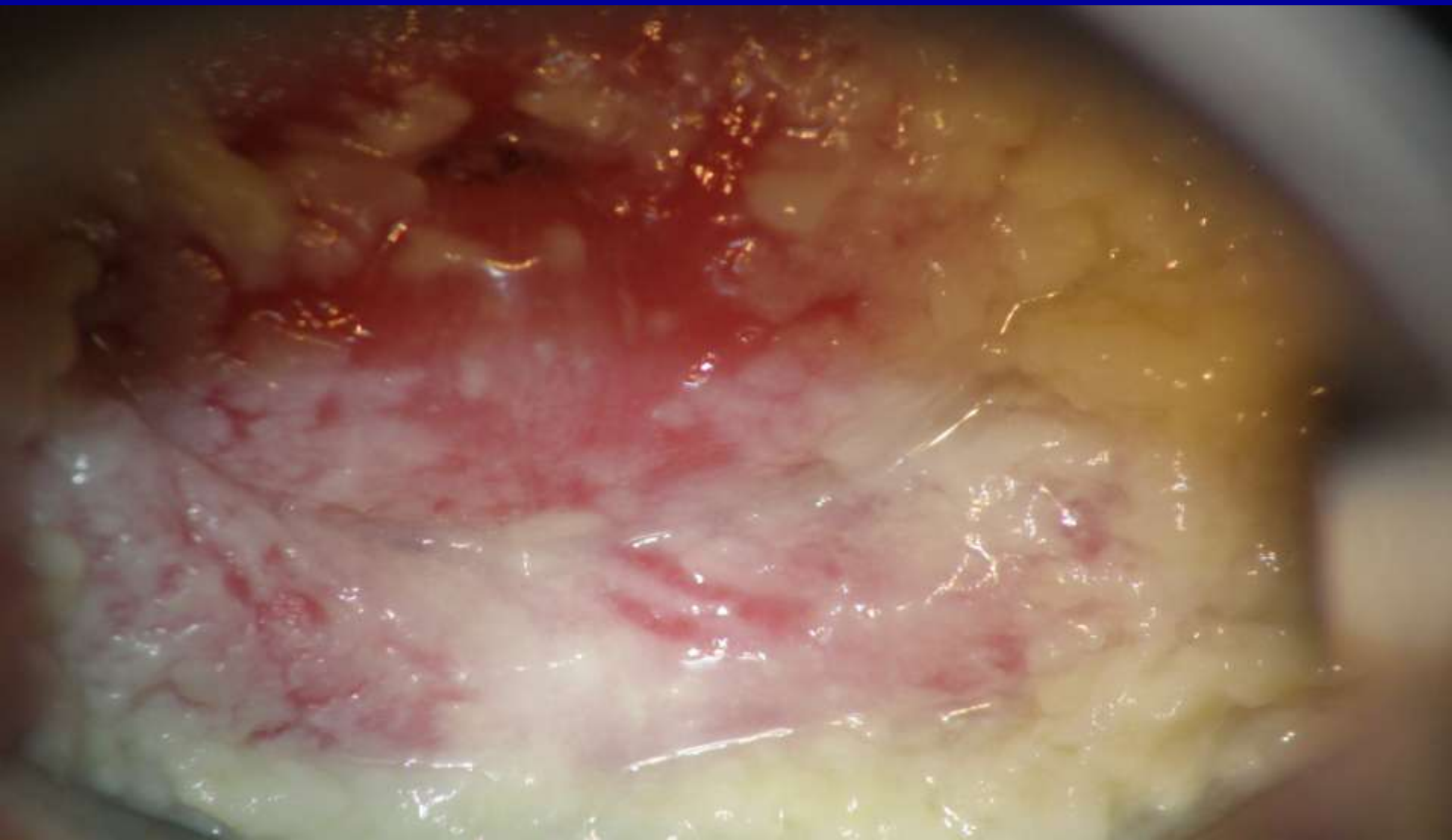
- Trichomonas vaginalis
- Bacterial vaginosis
- Candida albicans
- Gonococcal/Chlamydial cervicitis (Rarely)

Vaginal discharge/pruritis

	Discharge	Itching	Inflammation	Odor
Candida	White, curd-like	Yes	Yes	No
Trich	Yellowish, frothy	Yes	Yes	Yes
Bacterial vaginosis	Greyish, white	No	No	Yes



Candidiasis



Candidiasis



Vaginal discharge/pruritis

- Highly predictive of vaginal infection but poorly predictive of cervical infection
- Thus, all women presenting with vaginal discharge should receive treatment for vaginitis and cervicitis.

Vaginal discharge/pruritis

Syndromic treatment

- Trichomoniasis or Bacterial vaginosis
 - Metronidazole (Flagyl) 2g PO, once stat
 - Metronidazole (Flagyl) 400-500mg BID x 7
- Candidiasis
 - Fluconazole 150-200mg PO, once stat
 - Clotrimazole 500mg intravag, once stat
 - Miconazole or clotrimazole 200mg intravag, daily x 3
 - Nystatin pessary daily x 5

Vaginal discharge/pruritis

Syndromic treatment

- Chlamydia
 - Azithromycin 1g PO, once stat
 - Doxycycline 100mg PO BID x14 d
 - Erythromycin 500mg PO QID x 7 d
- Gonorrhea
 - Ciprofloxacin 500mg PO, once stat
 - Ceftriaxone 125mg IM Stat

SYNDROME:
Vaginal Discharge +
Lower Abdominal Pain

Syndrome: Vaginal discharge + lower abdominal pain

Signs

- Vaginal discharge
- Lower abdominal tenderness on palpation
- Temperature > 38C

Symptoms

- Lower abdominal pain
- Dyspareunia

Syndrome: Vaginal discharge + lower abdominal pain

Most common causes

- Gonococcus
- Chlamydia
- Mixed anaerobes

Syndrome: Vaginal discharge + Lower abdominal pain

Syndromic treatment

- Chlamydia
 - Azithromycin 1g PO stat
 - ***Doxycycline 100mg PO BID x14 d***
 - Erythromycin 500mg PO QID x14 d
- Gonorrhea
 - Ciprofloxacin 500mg PO Stat
 - ***Ceftriaxone 125mg IM Stat***
- Mixed Anaerobes
 - ***Metronidazole (Flagyl) 400-500mg BID x14 d***

Abdominal pain

Reasons for referral

- Rebound tenderness
- Guarding
- Last menstrual period overdue
- Recent abortion or delivery
- Menorrhagia—profuse or prolonged menses
- Metrorrhagia—irregular bleeding

SYNDROME: Cervicitis

Cervicitis

Symptoms

- Unusual vaginal discharge
- Dysuria (pain on urination)
- Dyspareunia (pain on intercourse)
- Abnormal bleeding

Cervicitis

Signs

- Swollen, reddened, and “beefy” cervix
- Cervix bleeds easily when touched
- Mucopurulent or copious discharge from OS

Cervicitis

Most common causes

- Gonococcus
- Chlamydia

Cervicitis

Syndromic treatment

- Chlamydia

- Azithromycin 1g PO stat
- Doxycycline 100mg PO BID x 7
- Erythromycin 500mg PO QID x 7

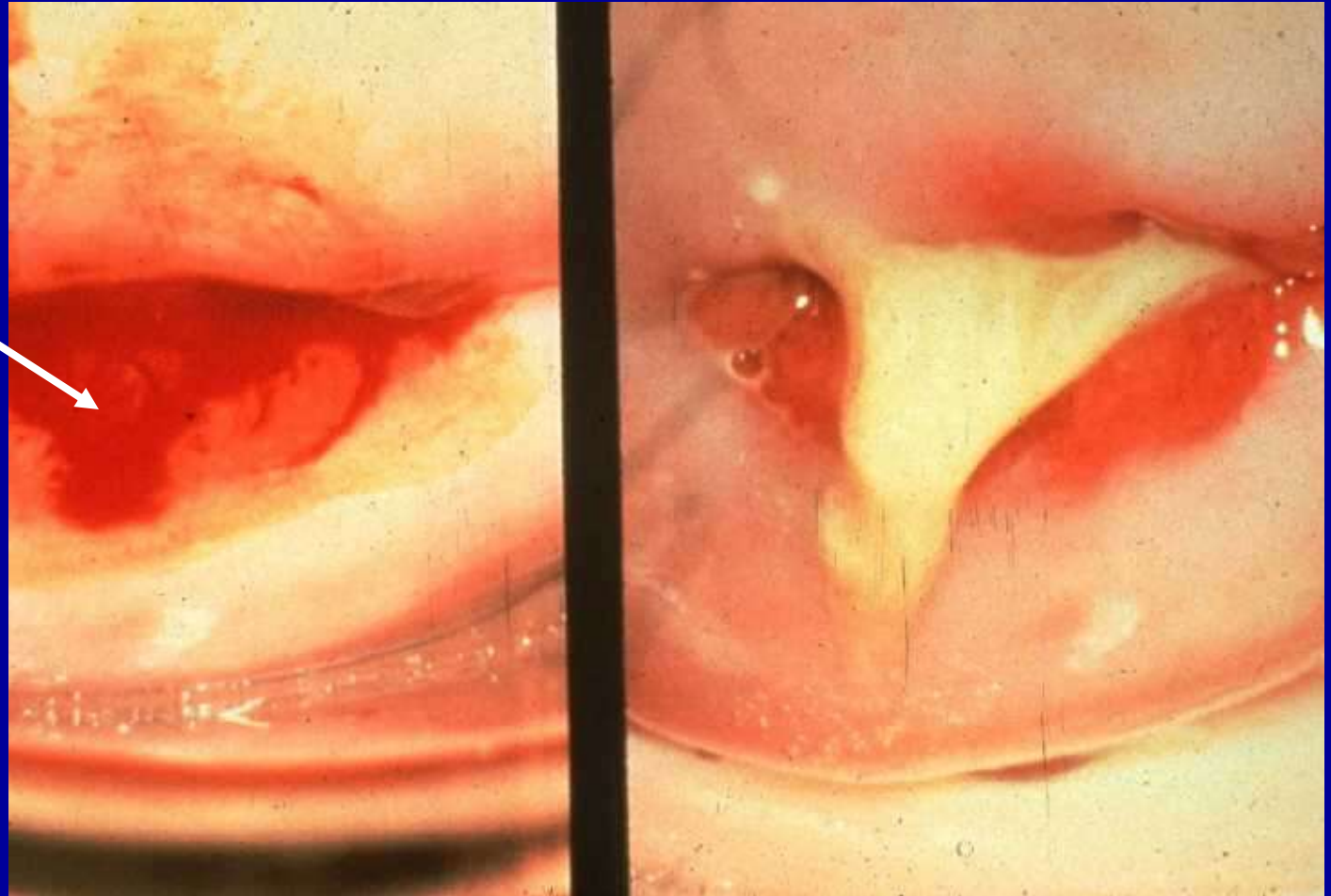
- Gonorrhea

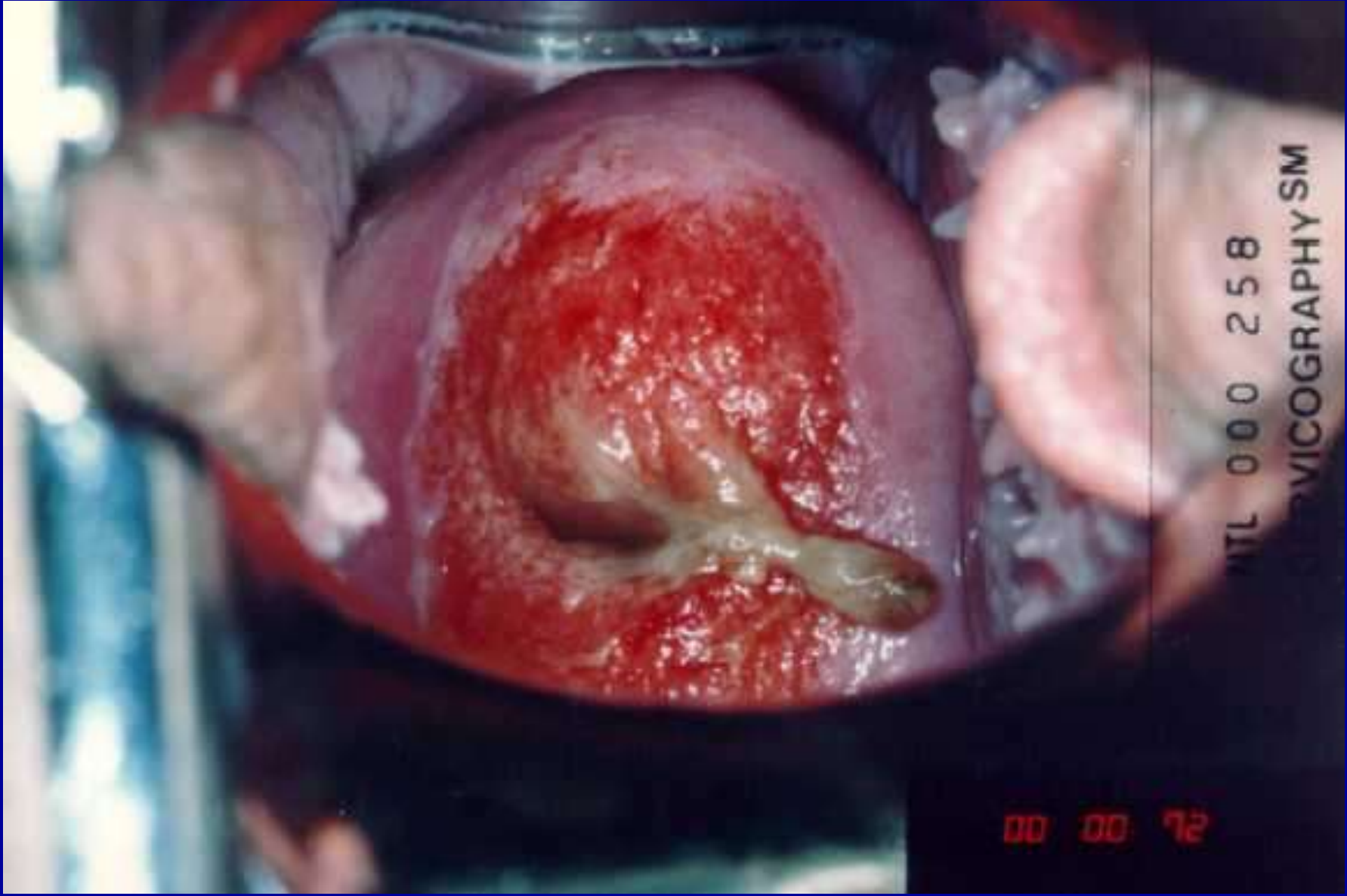
- Ciprofloxacin 500mg PO Stat
- Azithromycin 2g PO Stat
- Ceftriaxone 125mg IM Stat



Cervicitis

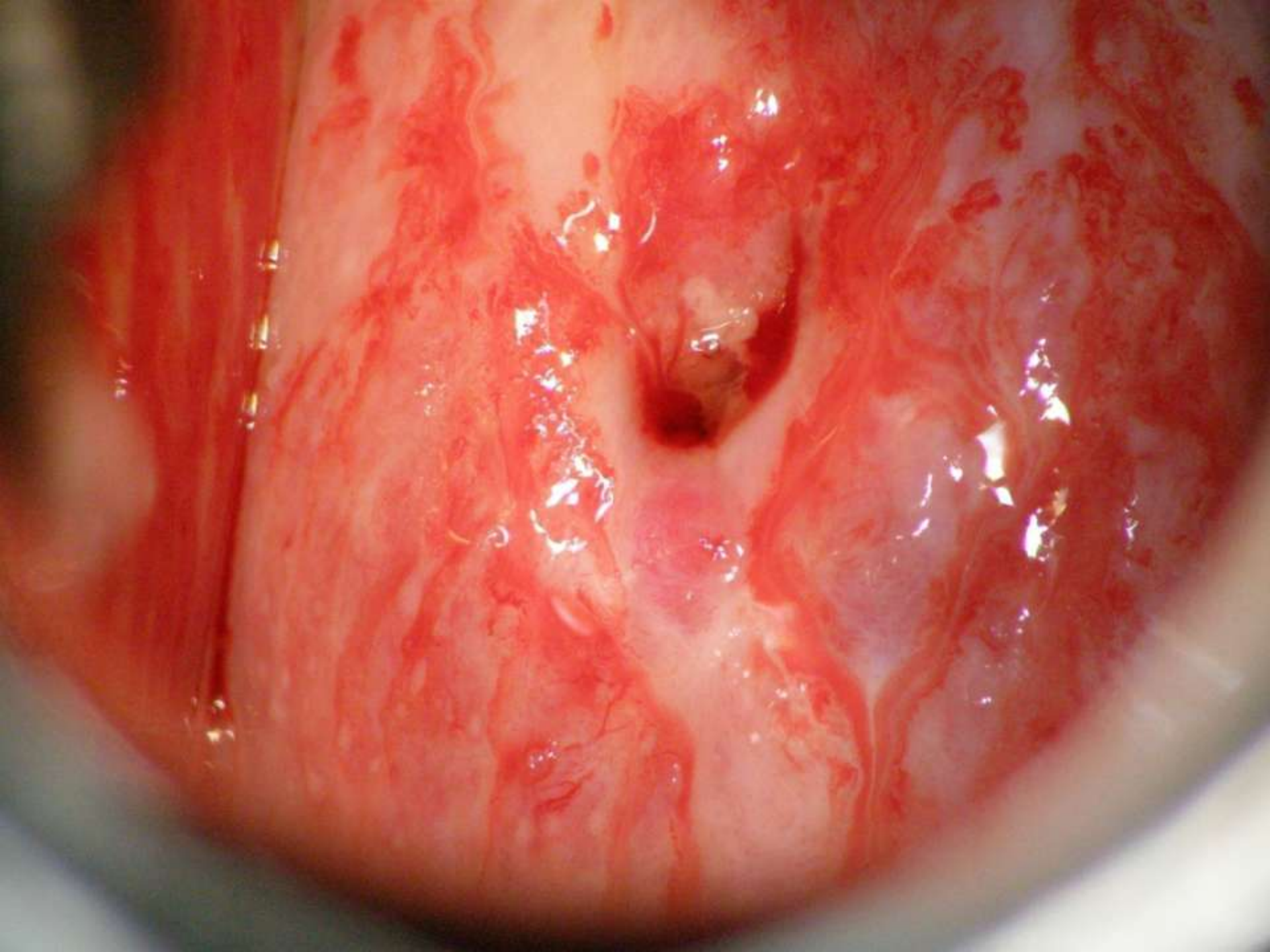
Note mucosal bleeding where purulent discharge has been wiped away.





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Other counseling

- Avoid alcohol with antibiotic treatment
- Supply condoms
- Counsel regarding risk reduction
- Partner treatment
- Follow-up after completion of treatment
- Repeat VIA after treatment if necessary

Genital Ulcer Disease

Genital ulcer disease

Most common causes

- Genital herpes
- Chancroid
- Syphilis

- Associated with an increased risk of HIV infection

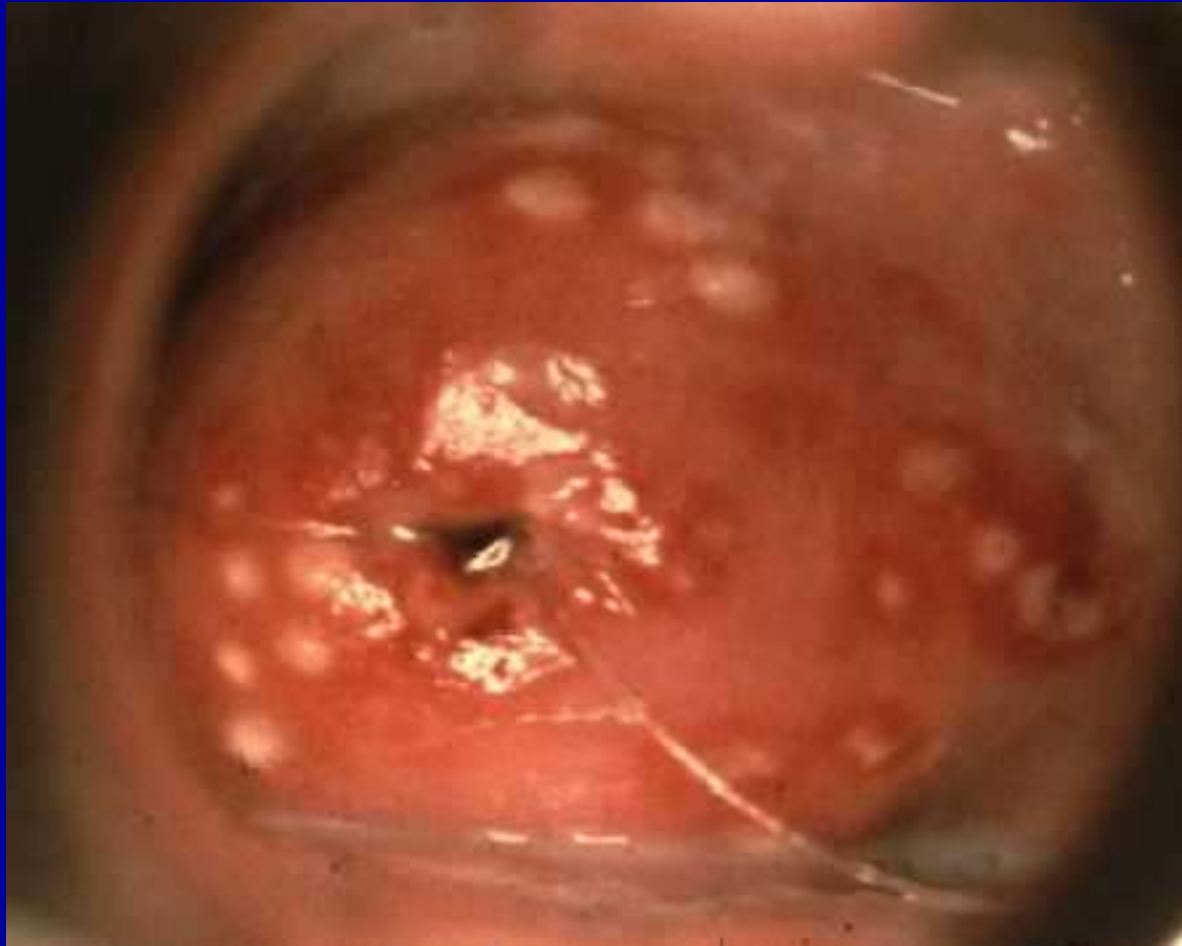
Genital Herpes

- Characterized by multiple, painful vesicles grouped together
- First episode - Bilateral
- Recurrences - Unilateral

Genital herpes - First episode



Genital herpes - recurrent



Genital herpes - recurrent



Genital herpes - recurrent



Chancroid

- Cause: *Haemophilus ducreyi*
- Single or multiple ulcers on the labia, vagina, or anus with or without swollen inguinal lymph nodes and cervicitis.
- May be co-infected with HIV, herpes, or *Treponema pallidum* (syphilis)
- Refer

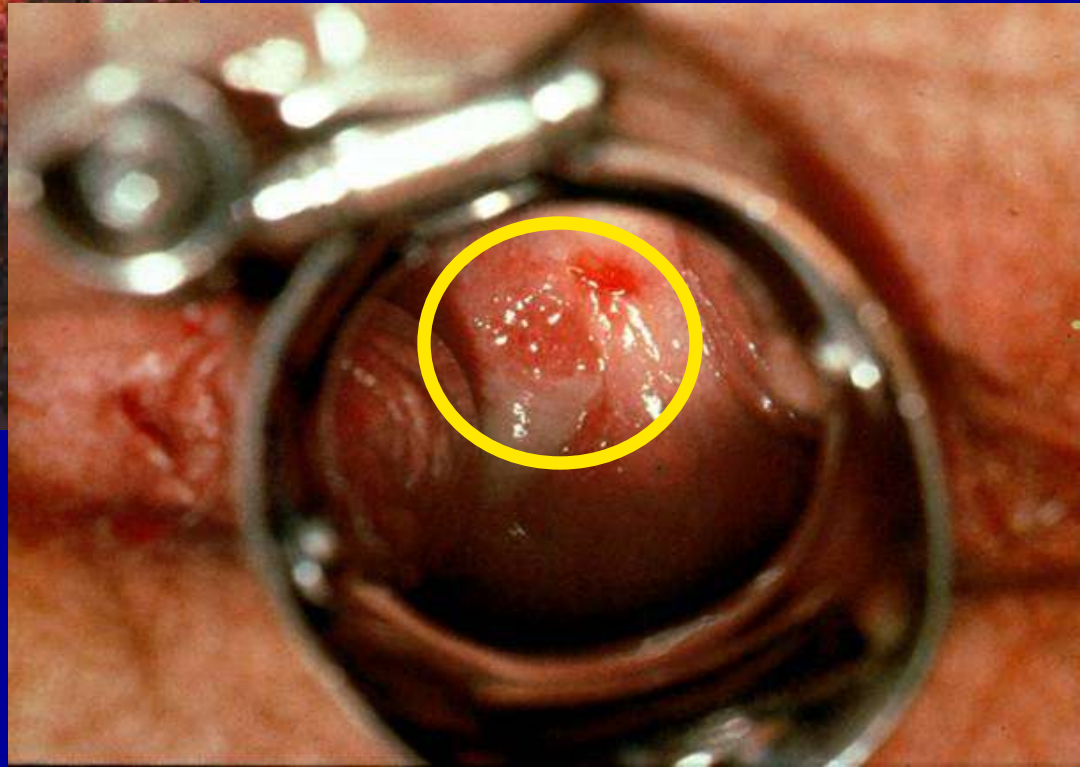
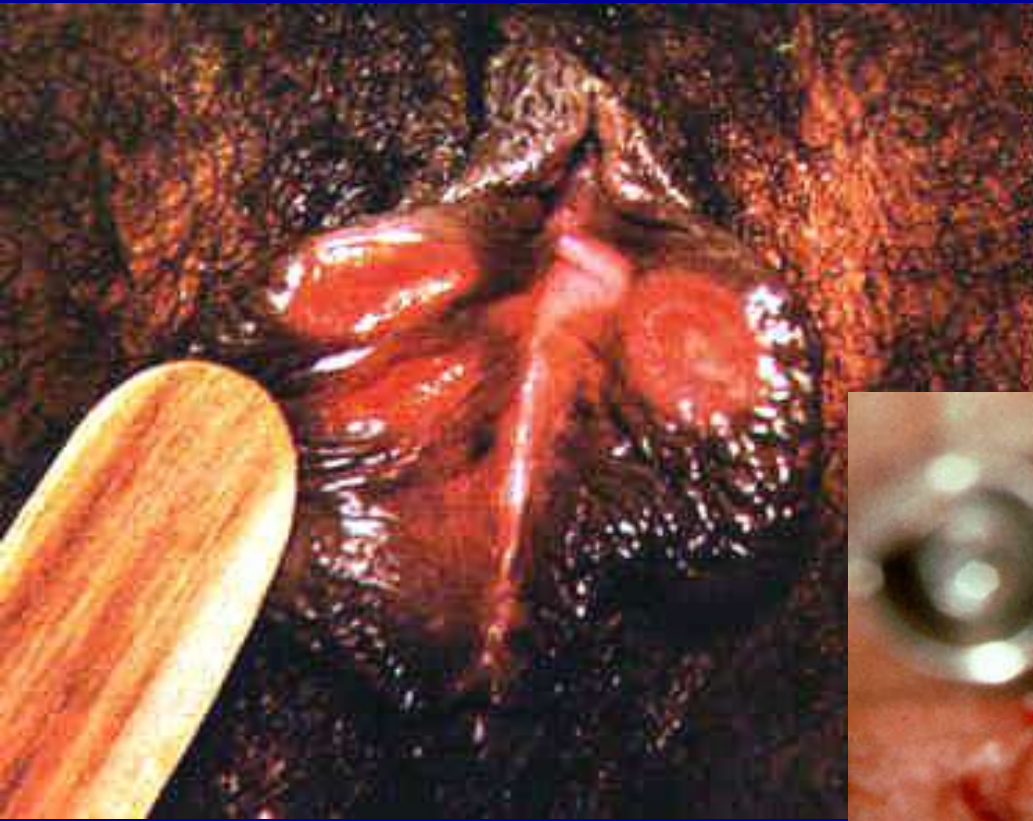
Chancroid



Syphilis

- Cause: *Treponema pallidum*
- Characterized by painless ulcer or chancre on the vulva, vagina, or cervix
- Co-infection with HIV is common
- Refer

Syphilis



Evaluation – Page 1 of 2

1. The syndromic approach to STI treatment:
 - (a) Identifies patients for treatment based on signs and symptoms
 - (b) Does not require laboratory confirmation of diagnosis
 - (c) May result in overtreatment
 - (d) All of the above

2. The most common sexually transmitted cervical infections are:
 - (a) *T pallidum* infection
 - (b) Herpes virus infection
 - (c) Gonococcal and chlamydial infection
 - (d) *G. vaginalis* infection

Evaluation – Page 2 of 2

3. Patients with ulcerative genital lesions should be:

- (a) Observed closely
- (b) Treated with Fluconazole alone
- (c) Treated with Zidovudine (ZDV) alone
- (d) Referred to a physician for further evaluation and treatment

4. Patients with acute abdominal pain and signs of peritonitis should be:

- (a) Referred for urgent physician evaluation and treatment
- (b) Treated with analgesics and discharged home
- (c) Treated with a single dose of Doxycycline
- (d) Discharged home and ask to return for re-evaluation in 48 hours

Evaluation Score

- Congratulations!
- You passed this evaluation with a score of

- Please click on the CERTIFICATE button below to print your certificate. Be sure to print & sign your name before submitting the certificate to your supervisor.

CERTIFICATE