

Vaginal Discharge

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Block 11

Introduction

- ◆ Common complaint in general and gynaecological practice
- ◆ Can be physiological or pathological
- ◆ Poor predictor of concurrent sexually transmitted infection (STI)

Infectious/ Non-infectious causes

◆ INFECTIOUS

- ◆ Bacterial vaginosis
- ◆ Candidiasis
- ◆ Trichomoniasis
- ◆ Atrophic vaginitis with 2nd bact. Inf.
- ◆ Foreign body with 2nd bact. inf, .

◆ NON-INFECTIOUS

- ◆ Chemical
- ◆ Allergic
- ◆ Traumatic
- ◆ Atrophic vaginitis
- ◆ Foreign body

Classification Vaginal Discharge

Diffuse

- Physiological
- Infectious
- Atrophic
- Irritants and allergens

Classification Vaginal Discharge

◆ Localised

- Foreign body
- Fistula
- Neoplasm

Classification Cervical Discharge

- ◆ Physiological
- ◆ Pathological
 - Endocervicitis
 - Neoplasm

The History

- ◆ Type
 - Offensive
 - Associated itching or dyspareunia
 - Association with menstrual cycle
- ◆ Reproductive stage of patient
- ◆ Sexually active? Partner symptoms?
- ◆ Personal habits
- ◆ Medication use

Examination

- ◆ Temp, pulse lymph nodes
- ◆ Abdominal tenderness
- ◆ Gynaecological examination
 - Vulva: rash, ulcers, atrophy
 - Vaginal speculum to determine origin
 - Cervix : signs of inflammation, smear
 - Adnexae: masses, tenderness

Side Room Investigations

- ◆ pH
- ◆ Whiff test
- ◆ Wet smear microscopy
 - Saline
 - 10% KOH

Laboratory Tests

- ◆ Cervical smear
- ◆ Endocervical smear for Gonorrhoea and Chlamydia
- ◆ RPR
- ◆ HIV

Physiological Discharge

- ◆ Fluctuates with menstrual cycle
- ◆ Clear or white
- ◆ Whiff test negative
- ◆ Not irritating or itching
- ◆ Epithelial cells with Lactobacilli

Physiological Discharge

◆ Causes

- Endocervical mucus, exfoliated epithelial cells and vaginal transudate
- Amount increases due to oestrogen
- Lactobacilli

◆ Management

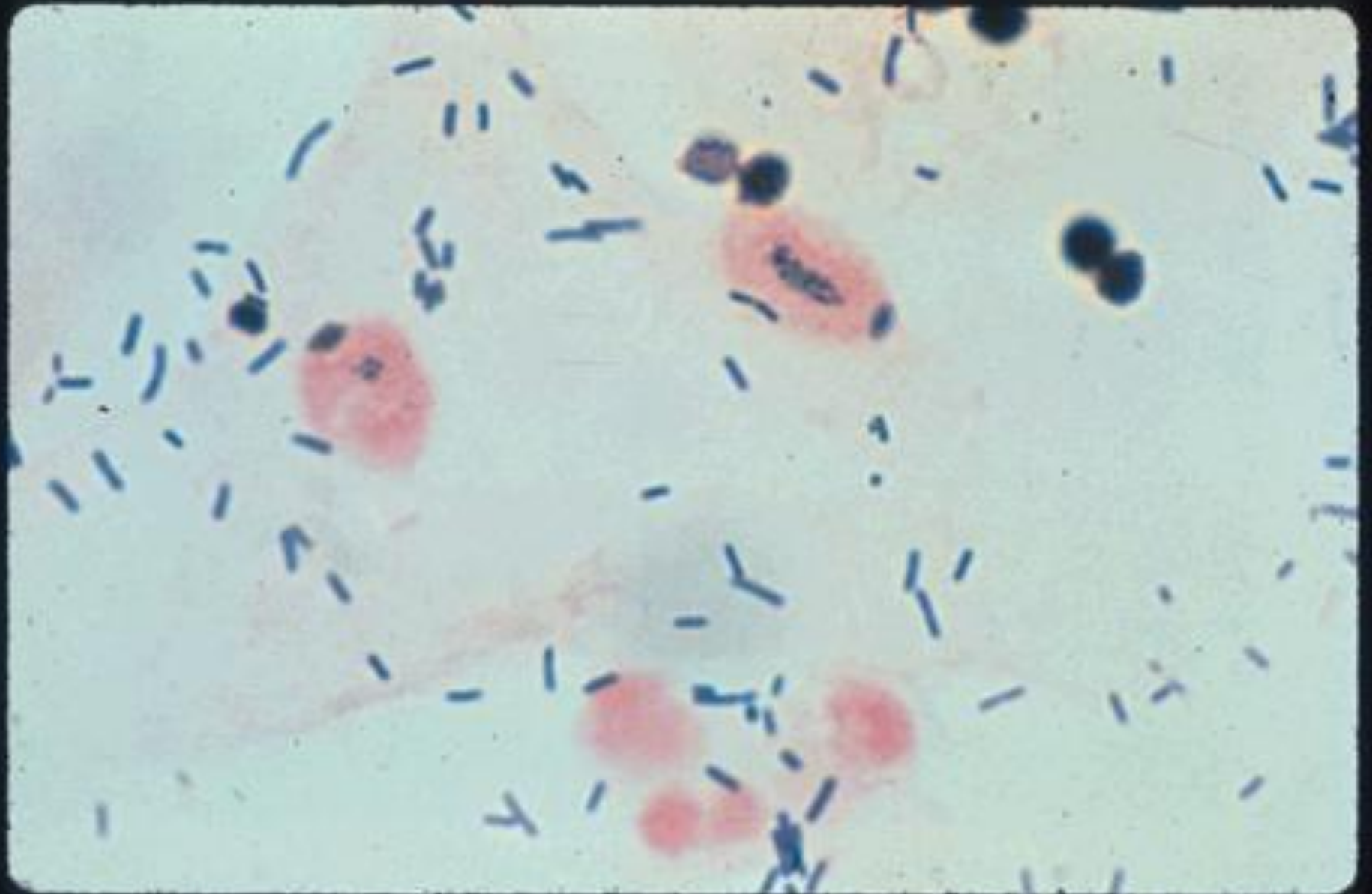
- Reassure
- **Don't treat**

Physiological

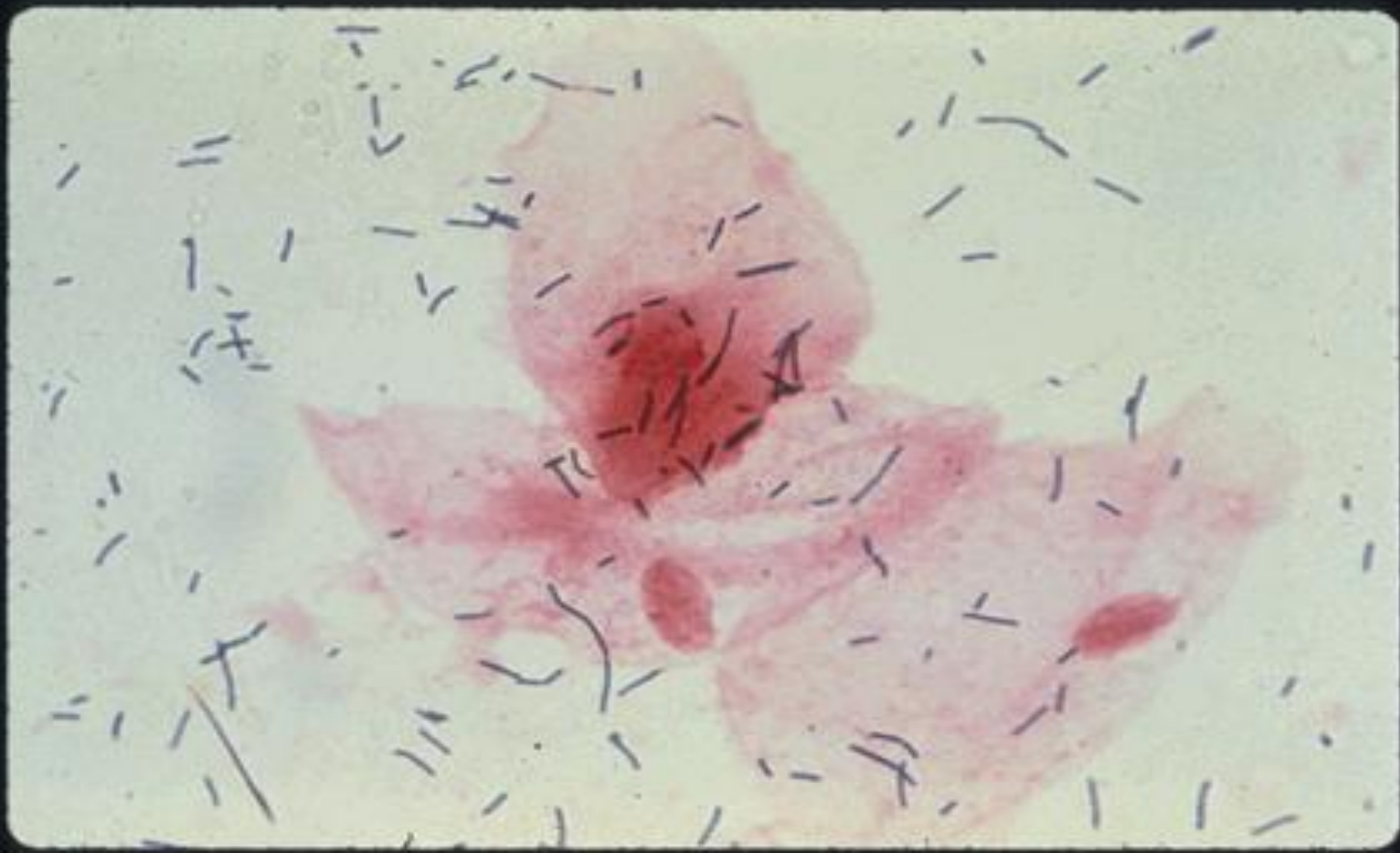
◆ Lactobacilli

- Produces hydrogen peroxide and lactic acid
- Maintains low pH
- Keep the vagina clean
- Protects against vaginal infections

Lactobasilli



Lactobasilli



Atrophic Vaginoses

- ◆ Postmenopausal
- ◆ Genital atrophy
- ◆ Wet smear: epithelial and puss cells. No Lactobacilli
- ◆ ↓ Oestrogen → ↓ glycogen →
↓ Lactobacilli → secondary bacterial invasion

Atrophic Vaginoses

◆ Management

- Cervical smear
- Consider endometrial biopsy
- Local or systemic oestrogen therapy
- No antibiotics

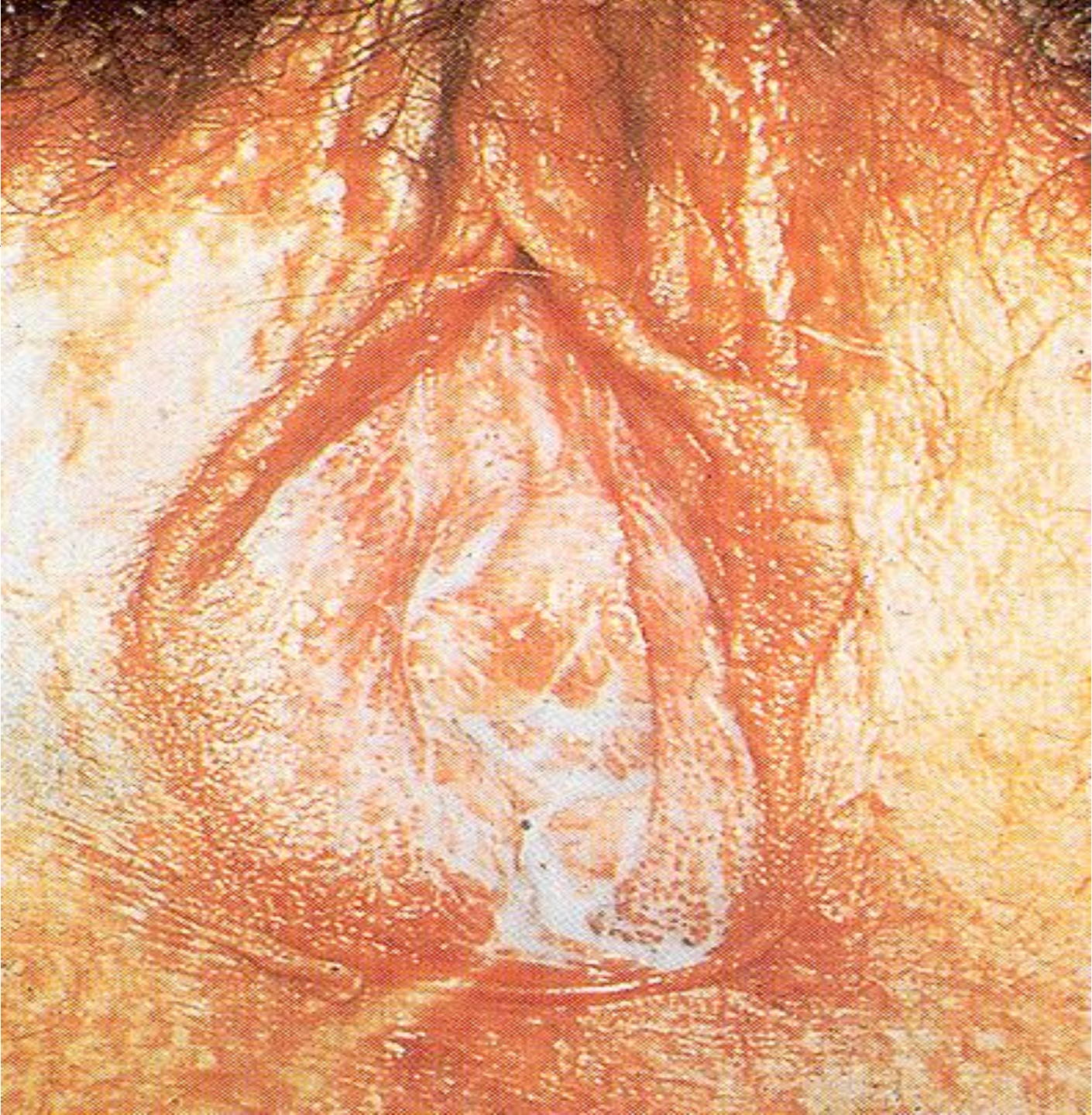
Infectious Vaginal Discharge

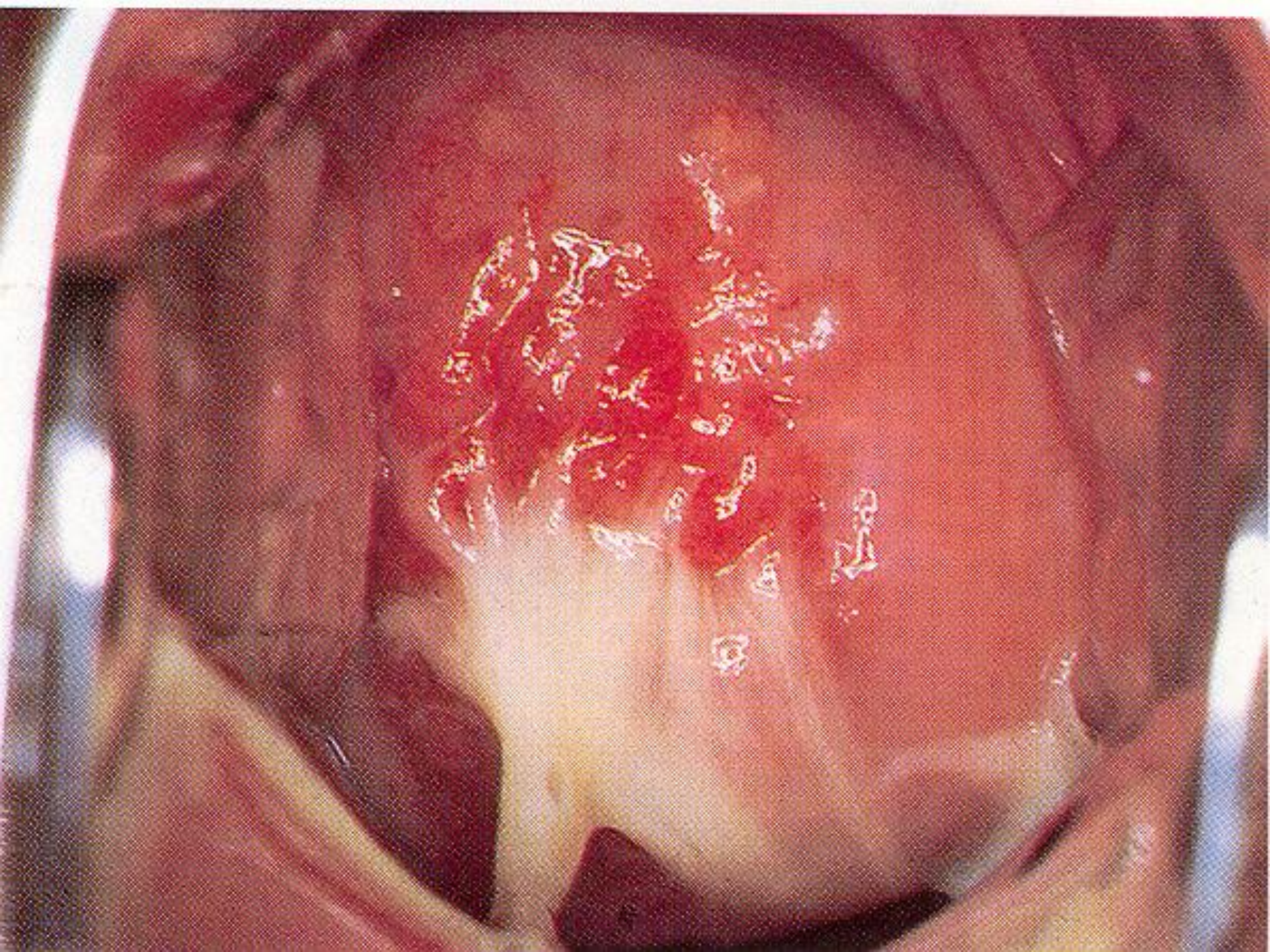
◆ Vaginitis

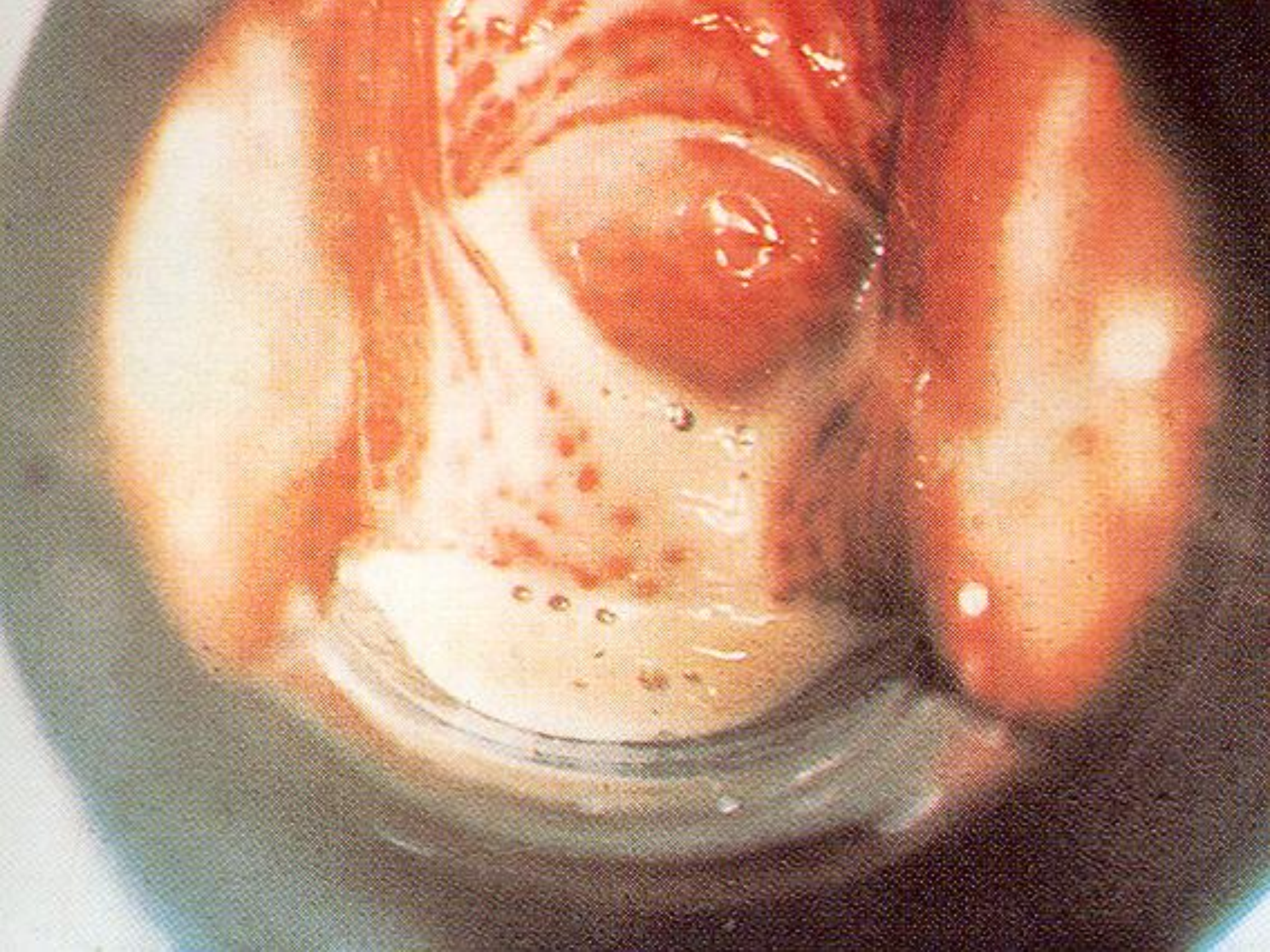
- Trichomonas vaginalis
- Candida
- Bacterial vaginosis

◆ Endocervicitis

- Neisseria gonorrhoea
- Chlamydia trachomatis







Trichomonas vaginalis

- ◆ Malodorous discharge
- ◆ Pain, dyspareunia, dysuria and frequency
- ◆ Profuse discharge. Grey-white to yellow-green, can contain bubbles
- ◆ pH >5
- ◆ Red vagina and cervix, oedematous
- ◆ Diagnosis confirmed on wet mount smear

Gonorrhoea

- ◆ Purulent discharge
- ◆ Intermenstrual or post coital bleeding
- ◆ Yellow/white discharge from male partner
- ◆ Treat with ciprofloxacin or ofloxacin or ceftriaxone



Leukocyte nuclei

Neisseria gonorrhoeae

Trichomonas



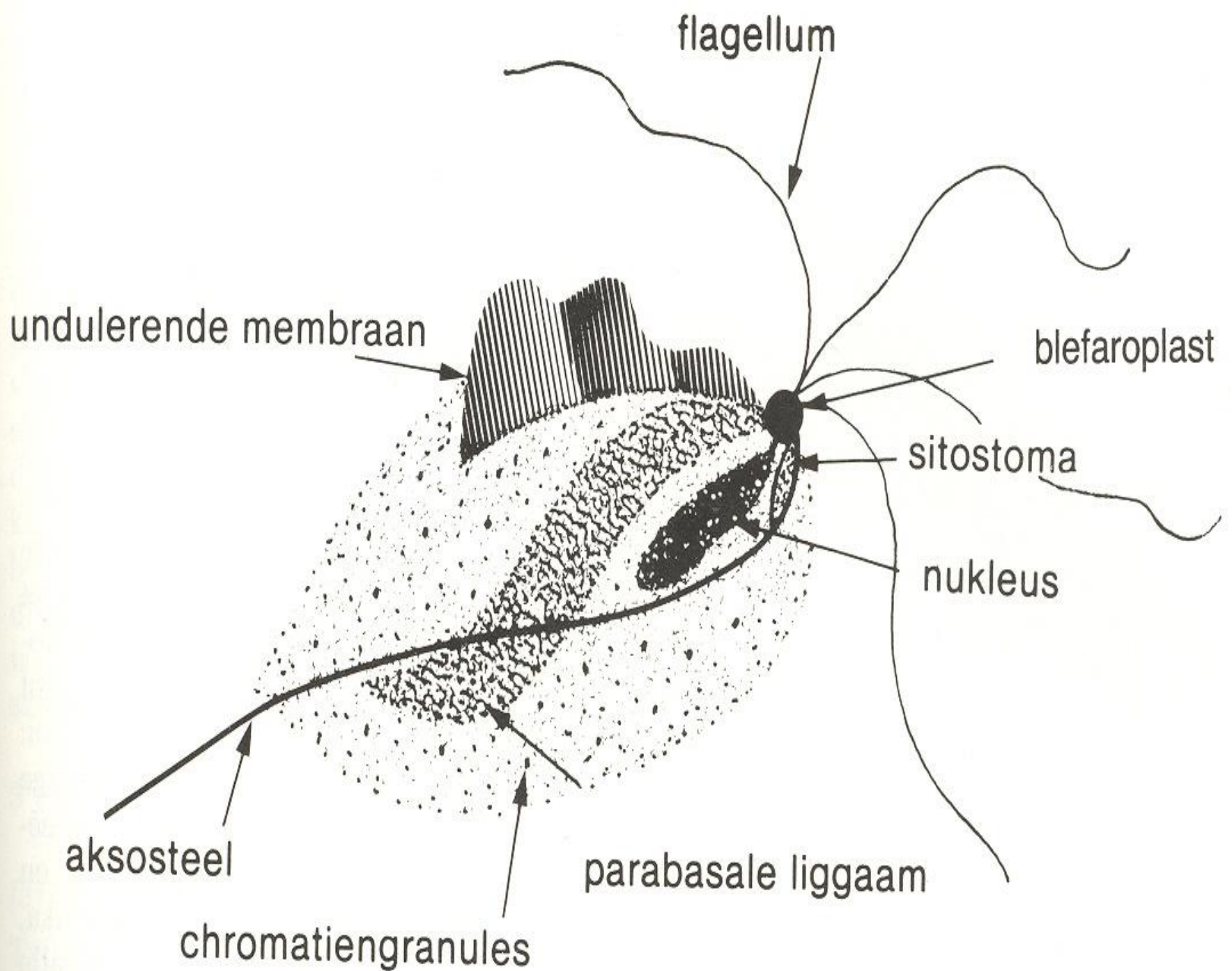
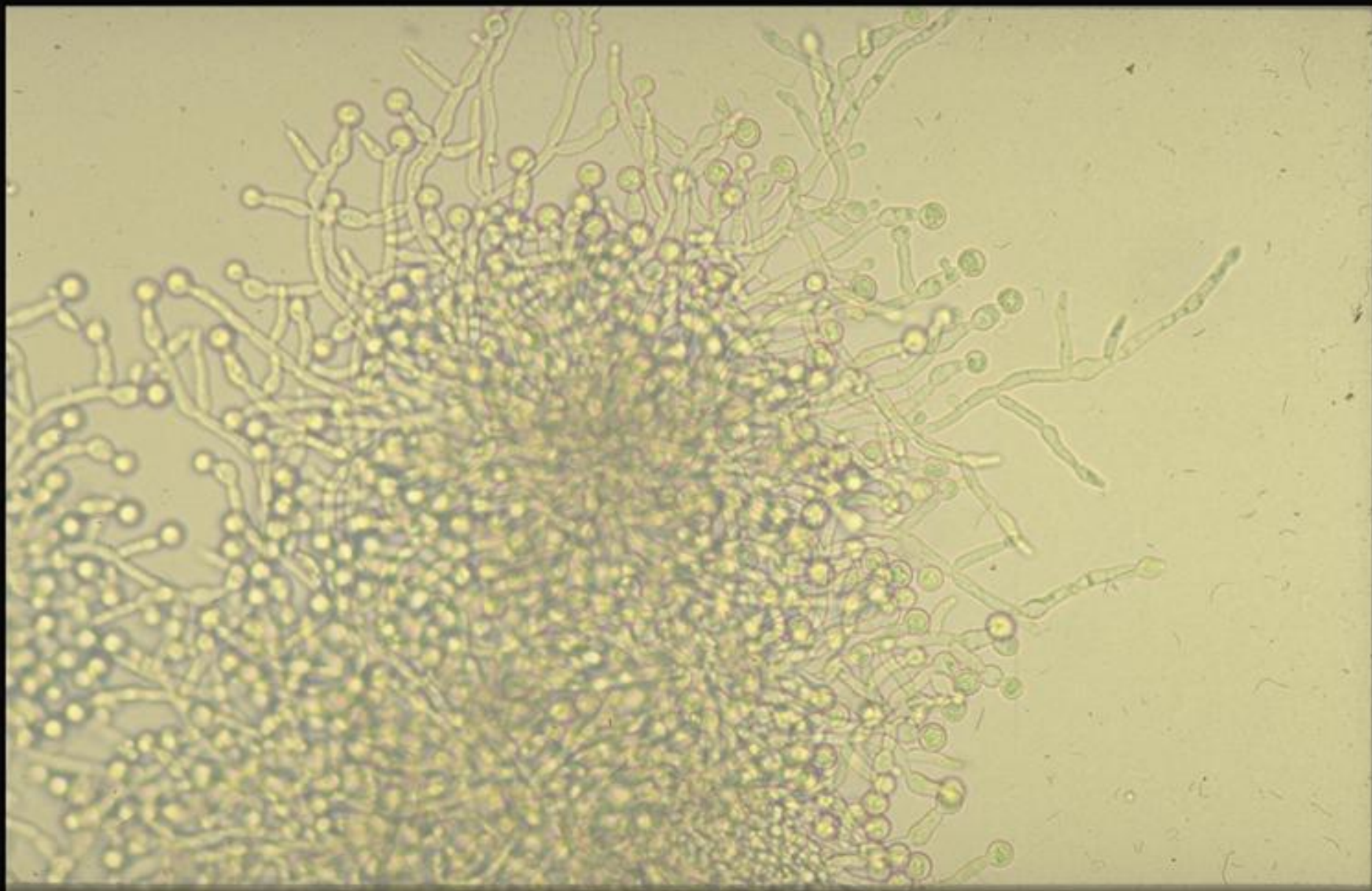


FIGURE 2

Candida

- ◆ White discharge
- ◆ Thin to very thick cheesy appearance
- ◆ Vulvar pruritis
- ◆ Vulval and vaginal redness
- ◆ pH < 5
- ◆ Diagnosed on KOH wet smear

Candida Albicans





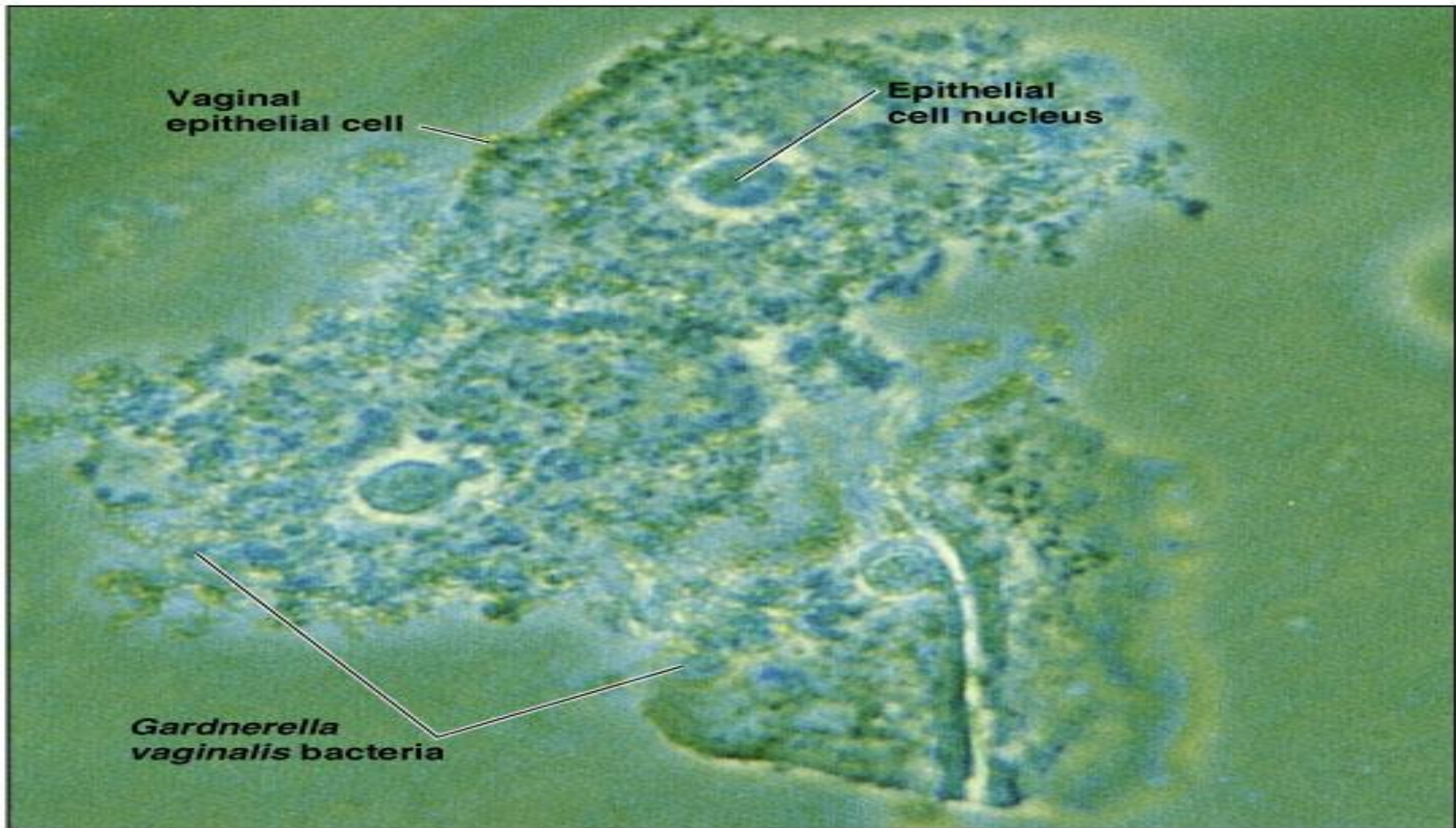
BV- Diagnosis & Treatment

- ◆ Amsel criteria: 1. Fishy d/charge
- ◆ 2. pH > 4.5
- ◆ 3. Clue cells on wetmount
- ◆ 4. + amine test
- ◆ Presense of clue cells= most reliable predictor[>90%]
- ◆ Treat with Metronidazole[no difference if partner is treated]

Bacterial Vaginoses

- ◆ Thin malodorous discharge
- ◆ White to grey
- ◆ pH > 5
- ◆ Whiff test positive
- ◆ Usually no vaginal or vulvar redness
- ◆ Wet smear shows clue cells

Clue cell



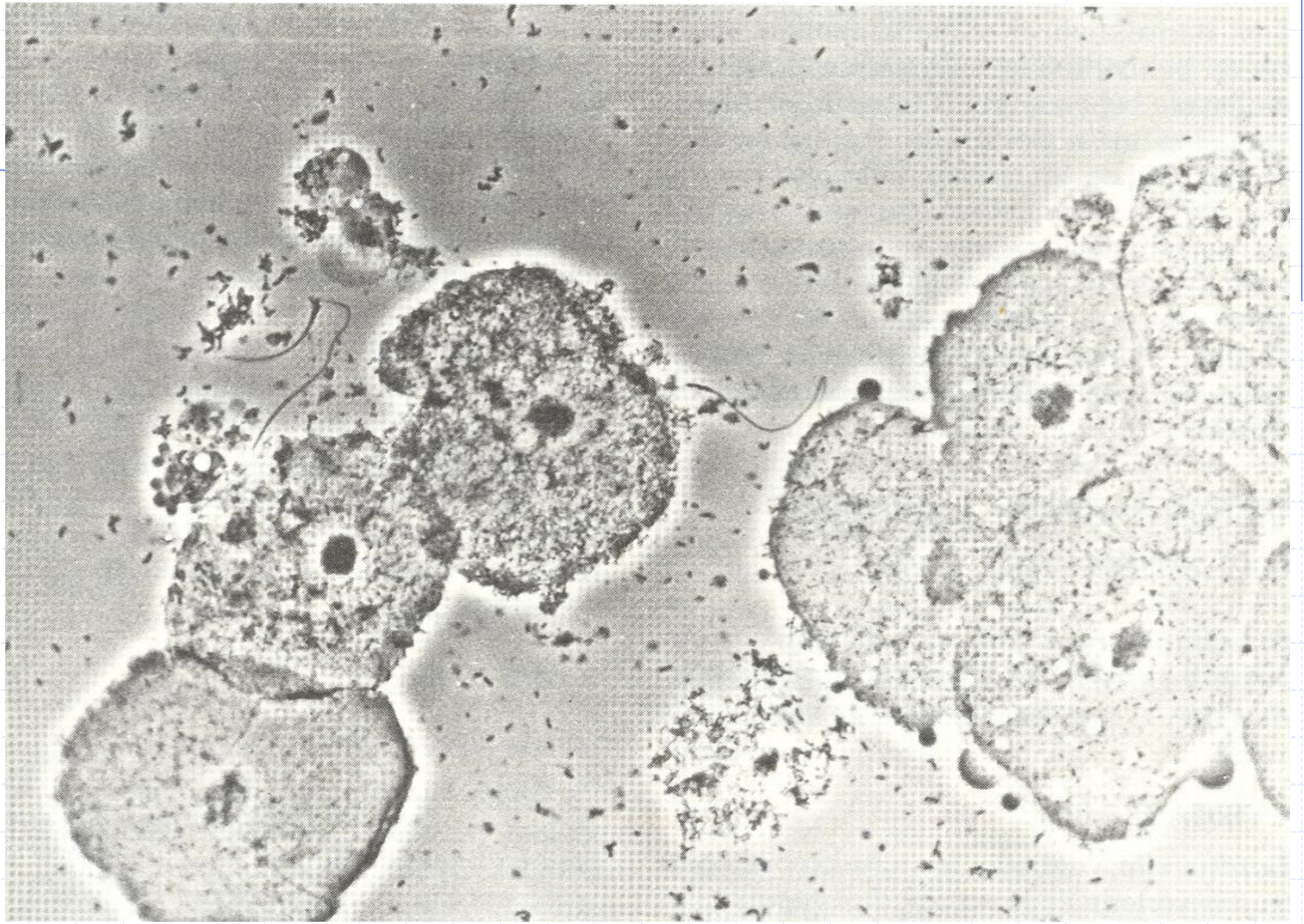
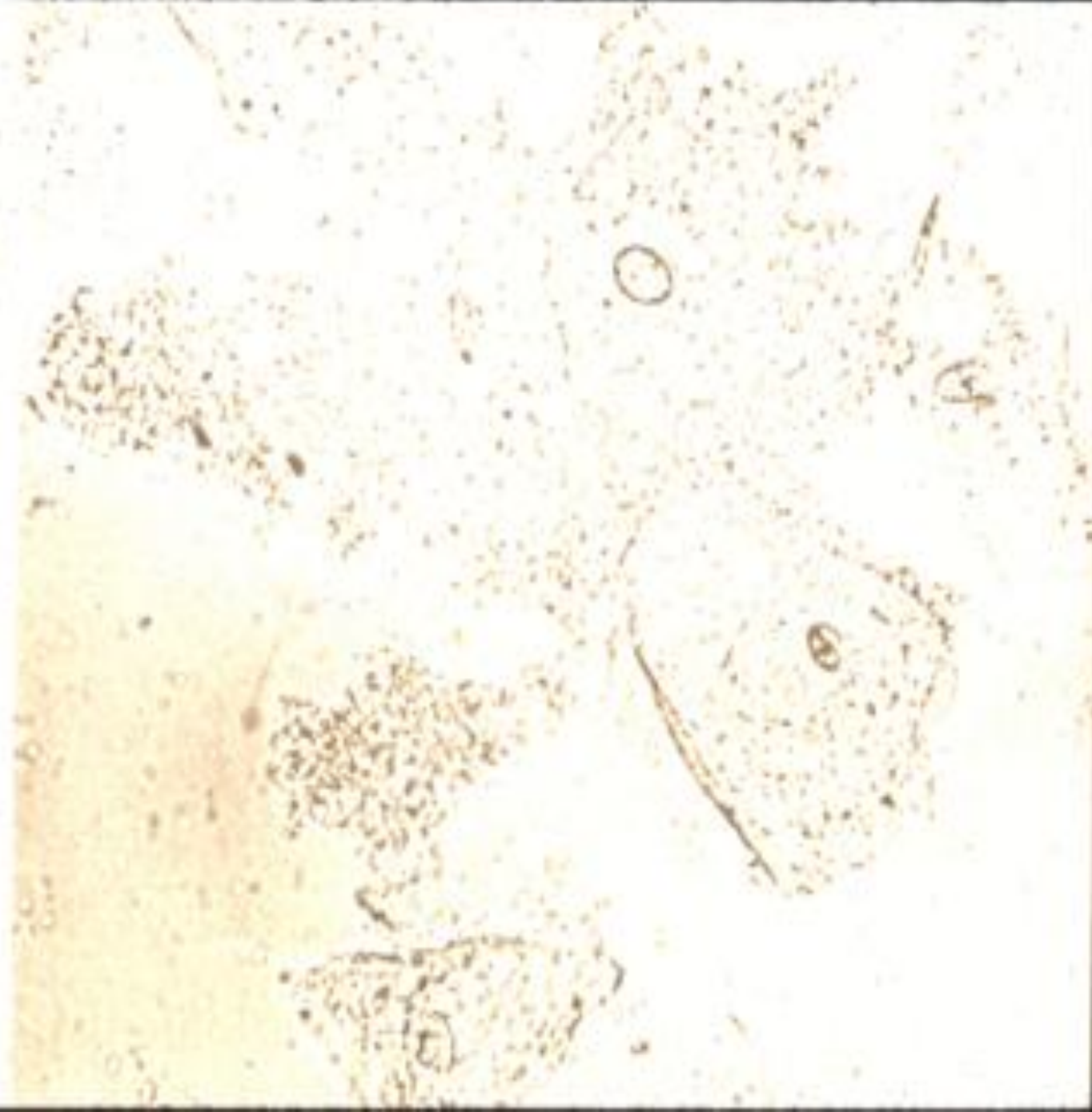


Fig. 2. 10. Striped cucumber fruit of *H. xanthocarpa* var. *virgatus*.





Bacterial Vaginoses

- ◆ Associated with adverse pregnancy outcome
 - Prematurity
 - PPRM
 - Postpartum endometritis
- ◆ Not an STI in many cases

Foreign Bodies

- ◆ Watery and profuse
- ◆ Malodorous
- ◆ Foreign body visible on examination
- ◆ History not always reliable
- ◆ Management
 - Removal
 - Antibiotics not necessary

Irritants or Allergens

- ◆ History of use of possible irritants
 - Soaps, lubricants, spermicides, perfumed toilet paper, other feminine hygienic products
- ◆ Discharge not very prominent
- ◆ Vulva and vagina inflamed and red
- ◆ Whiff test negative
- ◆ Wet smear normal

Neoplasia

- ◆ Discharge can be post-coital
- ◆ Poor response to other therapies
- ◆ Watery, malodorous, can be bloody or any other colour

Management of Vaginal Discharge

- ◆ Always try and make a diagnosis
- ◆ History and examination is important
- ◆ Wet smear is very helpful tool
- ◆ Not all discharge will respond to syndromic treatment approach
- ◆ Antibiotic will worsen some discharges

Trichomonas

- ◆ Metronidazole 2g stat per os and avoid alcohol + partner as well
- ◆ Counsel about risks for other STI
- ◆ RPR and HIV
- ◆ Condom use

Candida

- ◆ Anti fungal preparations
 - Clotrimazole, miconazole or econazole intra vaginally
 - Fluconazole orally
- ◆ Avoid irritants
- ◆ Suspect immunosuppression when recurrent

Bacterial Vaginoses

- ◆ Treat symptomatic as well as asymptomatic pregnant patients
- ◆ Metronidazole 400mg tds for 7 days

Irritants and Allergens

- ◆ Identify and avoid culprit
- ◆ 1% hydrocortisone cream bd for 7days

Neoplasia

- ◆ Smear if cervix normal
- ◆ Biopsy of suspicious lesions
- ◆ Treat cause

Fistulas

◆ Causes

- Obstetric trauma, malignancy, surgery, irradiation

◆ Incontinence of stool or urine

◆ Usually identified at examination

◆ Refer for management

Thank you

