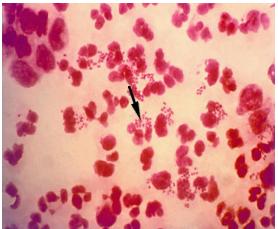
# STI – Sexually transmitted infections

- **ANAMNESIS:** Male 22 yrs.old comes to the outpatient department of urologic clinic with not specified troubles during urination.
- Subjective feeling of burning and cutting during urination, worse in the morning, subfebrile temperature, previous urine cultivation negative.
- Described symptoms have persisted for longer time. Time to time the patient also observes whitish discharge from urethra. The patient admits unprotected sexual contact with several women partners (6 – 7 women partners within last 3 months).
- Sampling: pus for cultivation + microscopic examination Results of microscopy: mass of leucocytes, gramnegative cocci in pairs





Questions:

- 1.Which microorganism is a suspected causative agent of infection according to microscopic morphology?
- 2.Is there any other method of detection of this infectious agent available?
- 3. Why the cultivation of urine was negative?
- 4. What are the factors of virulence that enable to give rise to the illness?
- 5.What the ATB therapy will be like?
- 6.Do you recommend any further examination to this patient?

- 20-yrs. old woman comes to the hospital with intesified pain in lower abdomen (2 days) and fever of 38,7°C.
- She has got yellowish discharge for a week, she has got one sexual partner
- Gynaecological examination: palpable painfulness of both adnexas
- Sampling: endocervical swab for microscopy and culture
- Microscopy: epithelia, leucocytes, miscellaneous microflora, sporadic lactobacilli

Questions:

- 1. What is the suspected diagnosis?
- 2. What is the most frequent etiology of described disease?
- 3. How the collected sample will be processed?
- 4. MVP (Microscopic vaginal picture common findings, *N. gonorrhoeae* negative in culture; which microorganism is then suspected as a causative agent?
- 5. Will the only betalactam ATB therapy be effective?
- 6. Which other disease can this microorganism cause?
- 7. Which complications of this disease can occur?

ANAMNESIS: 35 yrs. old man comes to the outpatient department of dermatovenerologic clinic where his GP sent him with a hardening and ulcer on his penis that is not painful and not itching

The patient found a papule on his penis few days ago and "bumps" in his inguina several days after (enlarged inguinal lymphatic nodes) also not painful
Patient admits unprotected sexual contact with his new sexual partner he met few weeks ago
No travel anamnesis abroad

Sampling: swab from penis lesion for microscopy and cultivation

Collection of blood for serologic examination



### • Questions:

- 1. How the collected samples will be processed? Microscopy, cultivation, serologic examination?
- 2. Which microorganisms can cause described symptoms?
- 3. Microscopy: g+cocci in clusters+, g+cocci in chains sporadically
- Cultivation: coagulase negative staphylococci, viridans streptococci, sporadically candida = common microflora of the skin

Why the significant pathogen was not detected by common cultivation?

5. Which examination will prove the diagnosis?

Questions:

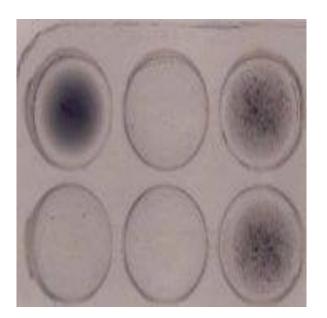
- 6. What are the phases of this illness?
- 7. Which serologic examinations are necessary to be performed to determine the diagnosis and for differential diagnosis?
- 8. Which therapy will be effective?
- 9. Which other microorganisms can cause similar disease and which examinations will prove them?
- 10. In which persons preventive examinations are mandatory and which preventive examinations are there?

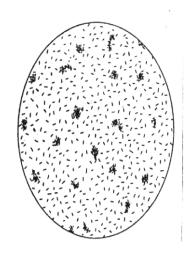
Staining with silver, spirochetes



#### RRR test – positive reaction

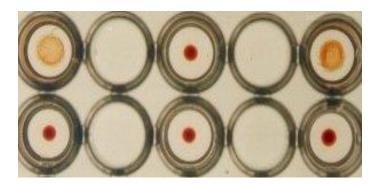
| Control - | Control +          |
|-----------|--------------------|
|           | Patient<br>serum + |





#### **TPHA test – positive result**

| Control + | Patient serum - | Patient serum + |
|-----------|-----------------|-----------------|
| Control - | Patient serum - | Patient serum - |



FTA - ABS



- ANAMNESIS:
- 19 yrs. old girl comes to the gynaecologist for several days lasting unpleasantly smelling vaginal discharge of whitish to yellowish colour as well as the feel of itching and burning during urination
- She met her recent partner 1 month ago, he has no symptoms of genital infection
- Objective gynaecologic examination red uteral cervix and significant secretion of yellowish smelly secretion with bubles
- Sampling: swab from cervix for microscopy and cultivation

### Photo: cervicitis



- Questions:
- 1. How will the collected samples be processed microscopy, cultivation?
- 2. Which microorganisms can cause described symptoms?
- 3. Microscopy: g+cocci in clusters+, g+cocci in chains sporadically
- 4. Cultivation: coagulase negative staphylococci, viridans streptococci, candida sporadically = common skin flora Why the significant pathogen was not determined by the common cultivation?
- 5. Which examinations will prove the diagnosis?
- 6. Which other microorganisms can cause similar diseases and which examinations can prove them?
- 7. What therapy will be indicated?

### Microscopy – *Trichomonas vaginalis*, Giemsa staining



#### • ANAMNESIS:

- 35 yrs. old man comes to infectious diseases clinic with GP recommendation with suspicion of mononucleosis of unknown etiology
- Excessive fatigue for several weeks, cough, diarrhoea, fever, absence of appetite, great weight loss
- He found enlarged lymphatic nodes on the neck and axilla
- He is a homosexual man having a constant partner already for 2 years, in the beginning of their life together he still had risk behaviour with risk accidental sexual contacts
- Very thin man, soor in oral cavity, temperature 38,5°C, lymphadenopathy, auscultation findings on lungs
- Objective:
- Sampling: swab from oral cavity, sputum for microscopy and cultivation, blood for serological examinations

#### • Questions:

- 1. How will the collected samples be processed microscopy, cultivation?
- 2. Which microorganisms can cause described symptoms?
- 3. Microscopy: g+cocci in clusters+, g+cocci in chains, candida massively in oral cavity, similar findings in sputum
- 4. Cultivation: coagulase negative staphylococci, viridans streptococci, *Candida glabrata* massively
- 5. Which examinations will prove the diagnosis? What is so called "dg. window"?
- 6. What are the phases of this infection? Why to examine BAL for which pathogen?
- 7. What is the therapy suggested?
- 8. What is the prevention of this disease?