

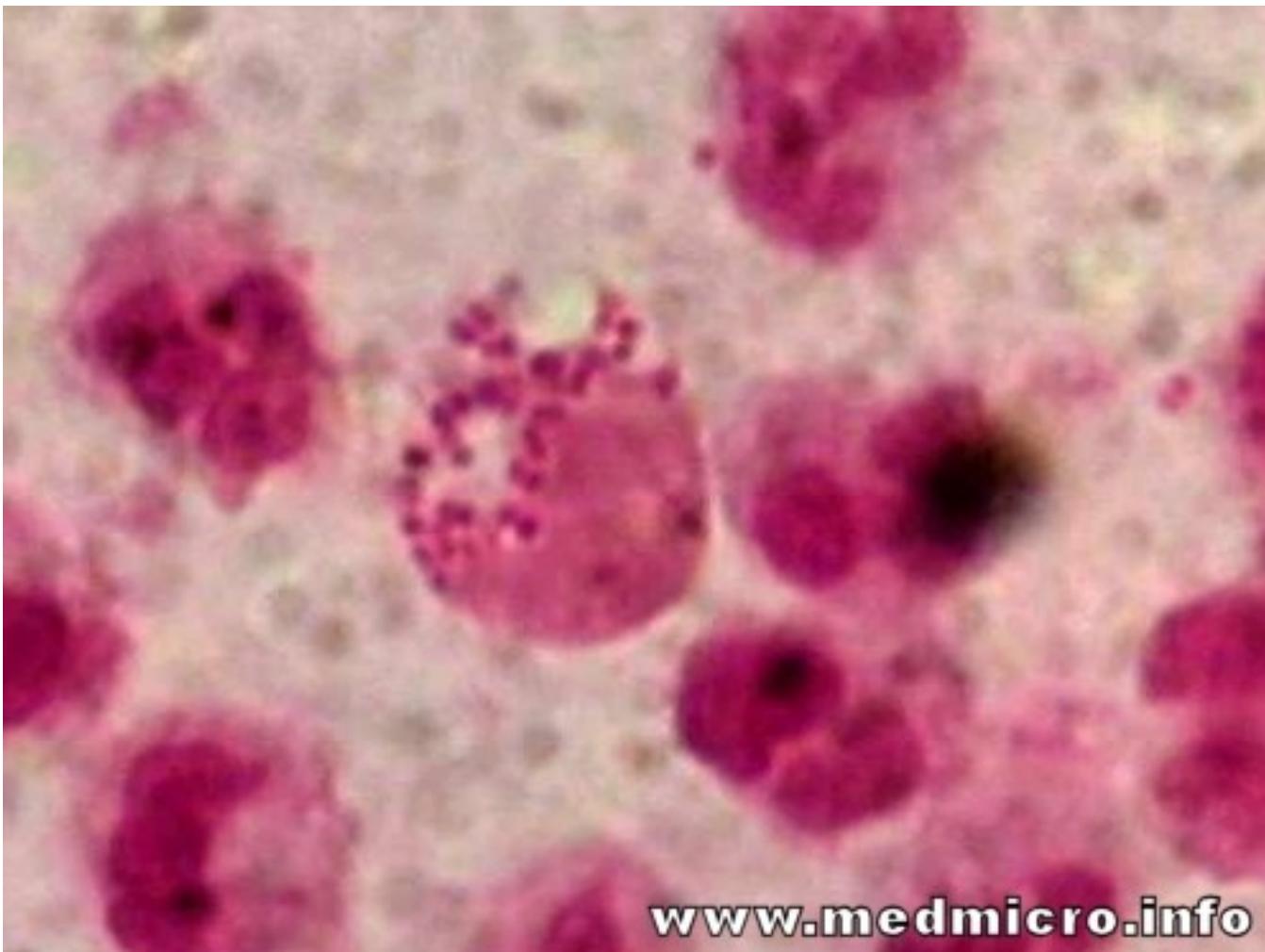
**Institute for Microbiology, Medical Faculty of Masaryk University  
and St. Anna Faculty Hospital in Brno**

# **Agents of classical venereal infections**

# Classical venereal infections

- Gonorrhoea      *Neisseria gonorrhoeae*
- Syphilis            *Treponema pallidum*
- Chancroid          *Haemophilus ducreyi*
- Lymphogranuloma venereum  
*Chlamydia trachomatis* L<sub>1</sub>, L<sub>2</sub>, L<sub>2a</sub>, L<sub>3</sub>

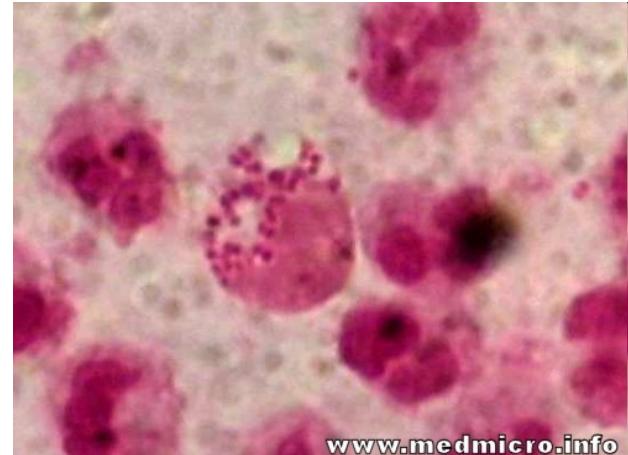
# *Neisseria gonorrhoeae*



[www.medmicro.info](http://www.medmicro.info)

# GO: infections of the UGT

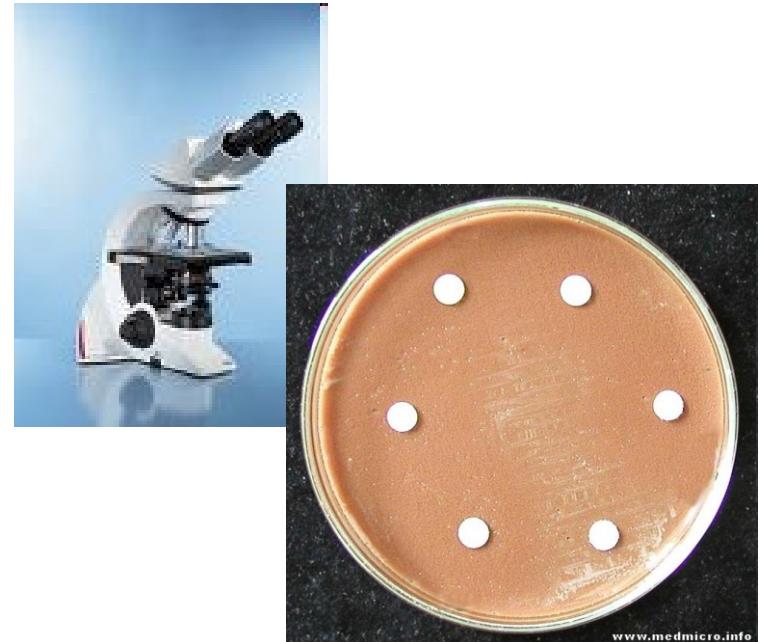
- **Urethritis**
- **Epididymitis**



- **Cervicitis**
- **Urethritis**
- **Bartholinitis**
- **Endometritis**
- **Salpingitis, adnexitis (PID, pelvic inflammatory disease) → sterility!**

# GO: laboratory diagnostics – I

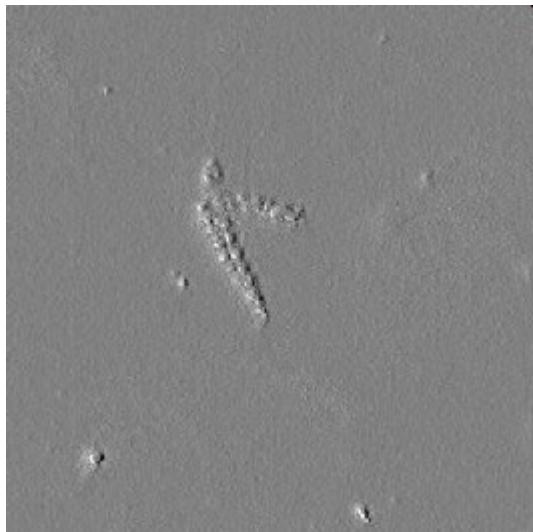
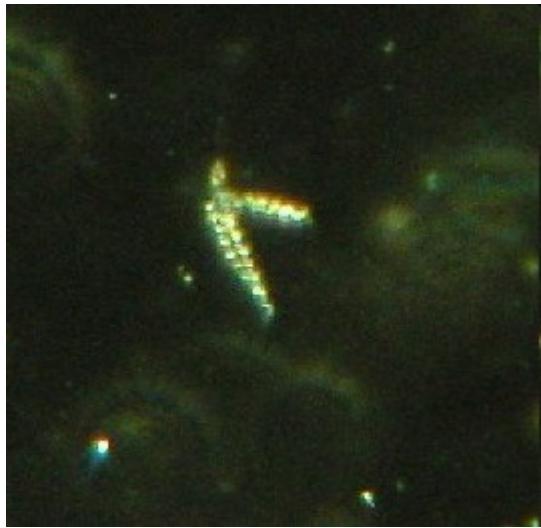
**Direct detection only:**  
**microscopy**  
**culture**  
**molecular biology tests**



**Sampling places:**  
**urethra**  
**cervix, urethra, rectum, pharynx (if necessary)**



**Ceftriaxone or ciprofloxacin**  
usually a single dose, potential concurrent *Chla*  
*trachomatis*: plus doxycycline or azithromycin



Author: MUDr. Petr Ondrovčík

# The course of syphilis

A) Early syphilis: primary (ulcus durum)

secondary (mostly rash)

early latent

B) Late syphilis: latent

terciary (gummas, aortitis, neurological)

C) Congenital syphilis: early and late

- Hutchinson s teeth
- mulberry molars

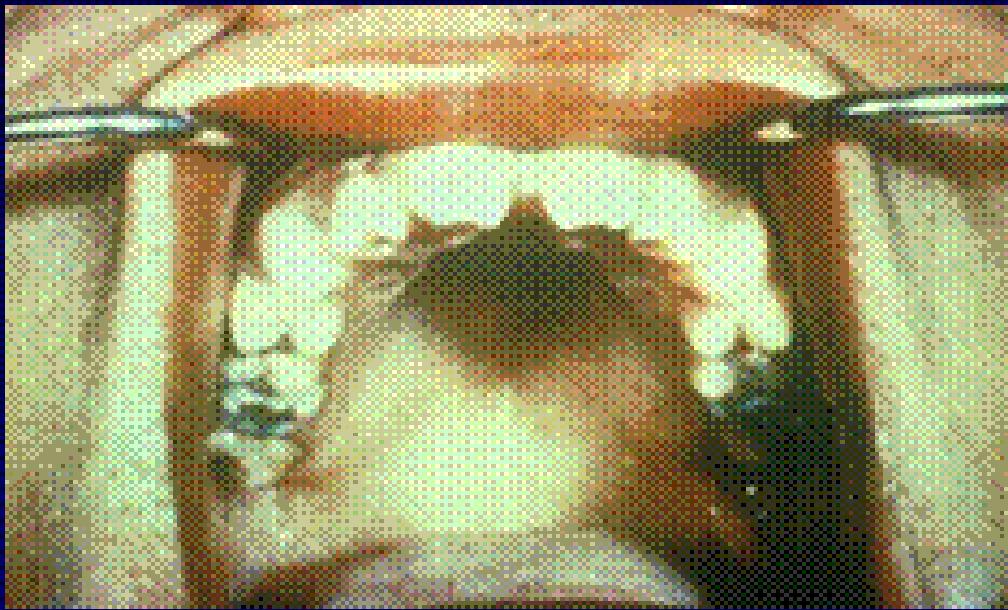
# Hutchinson incisors

screwdriver-shaped central incisors seen in congenital syphilis

Syphilis Curriculum

Clinical Manifestations

## Congenital Syphilis - Hutchinson's Teeth



Source: CDC/ NCHSTP/ Division of STD Prevention, STD Clinical Slides





**Hutchinson incisors  
(left)**

**mulberry molars (right)**

- a first molar tooth whose occlusal surface is pitted due to congenital syphilis with nodules replacing the cusps

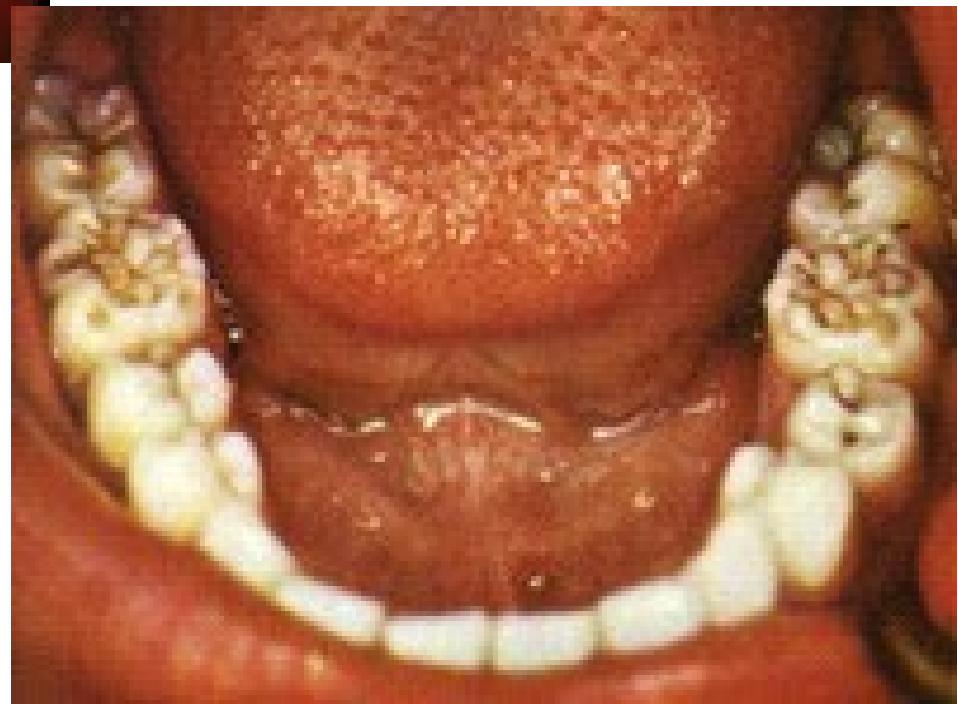


Photo: Křemenová S, Zákoucká H, Křemen J. Problematika vrozené syfilis v posledních dvaceti letech. II. Klinický obraz. Klin mikrobiol inf lék 2006;12(2):50-57



# Syphilis: laboratory dg – I

## Direct detection

From lesions (mostly *ulcus durum*)

darkfield examination

PCR

immunofluorescence

## Indirect detection (serology)

with nonspecific antigen (**cardiolipin**)

with specific antigen (***Treponema pallidum***)



# **Syphilis: laboratory dg – II**

**Nontreponemal:**

**RRR, VDRL, RPR**

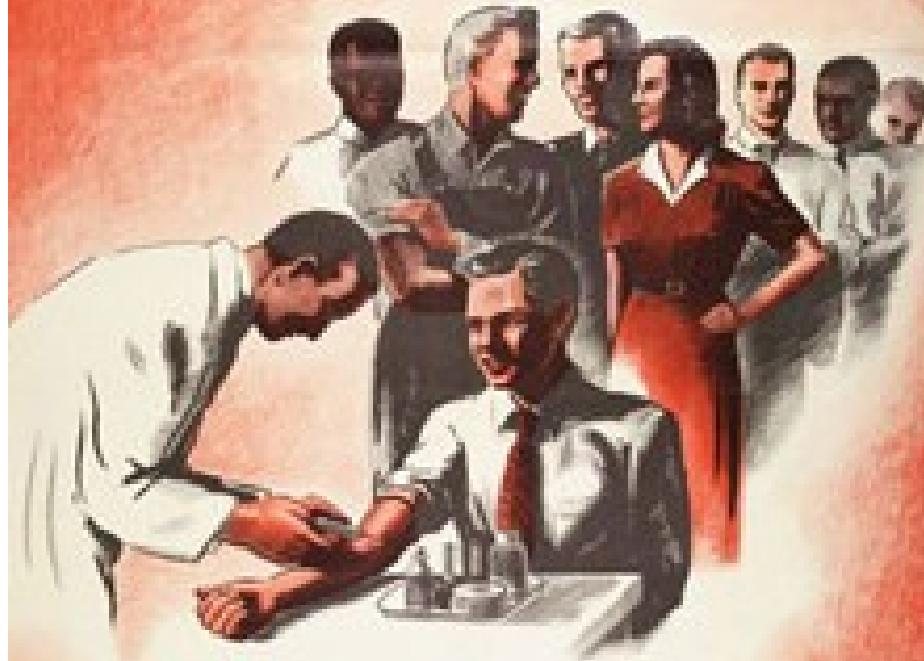
**biologically false positive**

**Treponema :**

**TPHA, ELISA, WB, FTA-ABS, TPIT**

**sensitive, specific, positive for life**

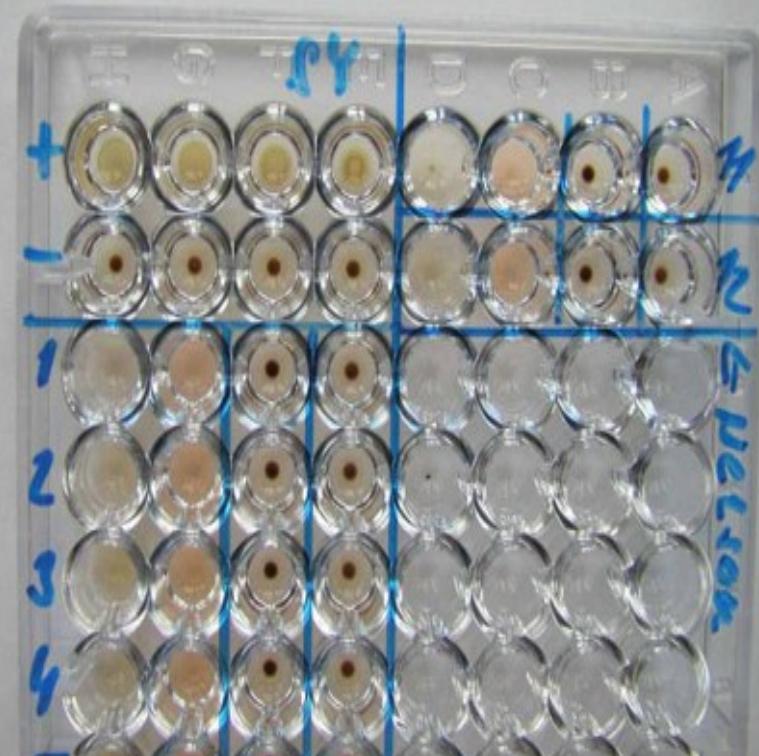
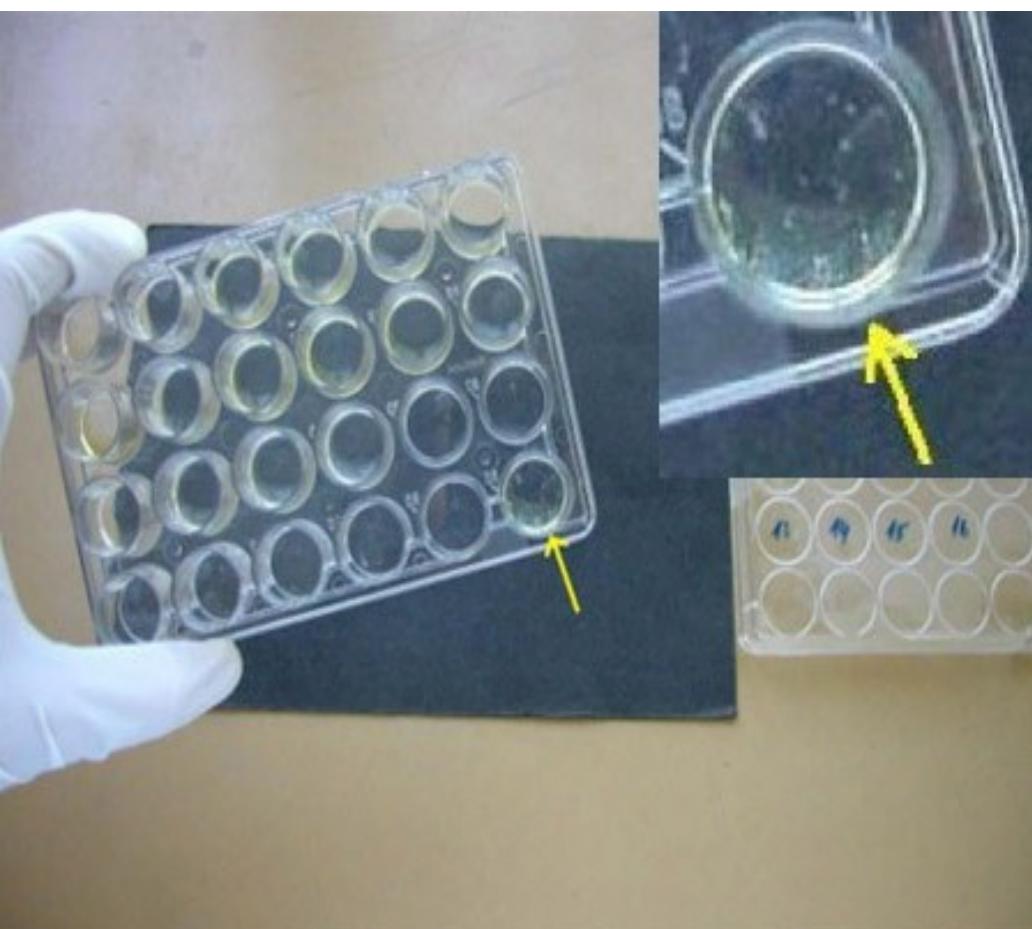
a Blood Test for all



PROTECTS YOU  
against Syphilis

Poster, 1940

# Screening: **cardiolipin test (RPR) + TPHA**



# Gerrit van Honthorst (1590-1656): Dentist (1622)

