

# Neisseria gonorrhoeae

## General:

*Neisseria gonorrhoeae* (Gram-negative cocci bacterium) is the microorganism of the most frequent sexual transmitted disease (STD), the so called gonorrhoea. Gonococci contain pili by which they can stick to epithelial cells. They cause purulent infections with excessive granulocytosis. Purulent infection and swelling of the urethral officium as well as burning during urination are noticed in men after an incubation period of 2-5 days. It results in purulent discharge in which the microorganisms can be isolated to a massive extent. If untreated the infection can ascend and cause prostatitis with tenesmus in micturition after a few weeks.

Further complications are epididymitis (infertility), urethral strictures; in women adnexitis (infertility), rarely monarthrits, endocarditis. In newborns infection of the conjunctiva is rare (Credé's prophylaxis).

**Differential diagnosis** of other STD microorganisms (sexually transmitted diseases): *Treponema pallidum*, *Chlamydia trachomatis*, *Haemophilus ducreyi*, *Mycoplasma hominis*, *Ureaplasma urealyticum*; Herpes simplex type 2, Hepatitis B, Cytomegaly virus, Human Papilloma virus, HIV1 and 2; *Candida* spp., *Phthirus pubis* (pubic louse), *Sarcoptes scabiei* (scabies), in homosexuals also *Shigella/Salmonella* spp., *Entamoeba histolytica*, *Lambliia intestinales* and others.

The following tests are available:

- ***Neisseria gonorrhoeae*, DNA detection (PCR)**

Indication: Suspicion of GO

Material: Dry swab

Preanalytics: collection of material using a dry swab, do not use medium containing swabs for PCRs. The material can be kept in the refrigerator for 2 days.

TAT: 1-2 days, FML

Method: PCR

Ref.- range: negative

- **Neisseria gonorrhoeae, cultural detection**

Indication: suspicion of GO, suspicious Gram stain

Method: microscopic preparation and cultural growth.

Men: urethral secretion, prostate gland secretion; urethral smear test, sperms. The swabs must be sent to the laboratory as fast as possible. Do not keep below 20 degrees

Women: cervix and urethral smear test, vaginal secretion. The swabs must be sent to the laboratory as fast as possible. Do not keep below 20 degrees.

sepsis: blood culture; suspicion of blenorrhea: eye smear test; at suspicion of meningitis: CSF

TAT: 2-3 days, FML

Method: microscopic preparation and cultural growth

Ref.- range: negative

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>