Passport to Partner Services

Urethral Gonorrhea in Men

The primary site of infection in heterosexual men is the urethra, but oral sex can also lead to infection of the pharynx. In men who have sex with men, the pharynx and rectum are commonly infected. The incubation period may range from a minimum of one day to a maximum of 14 days, or even longer. The majority of men develop symptoms within an average of two to five days, and many men never develop symptoms.

Signs and Symptoms

Most symptomatic men have a scanty to profuse mucopurulent discharge, usually with frequent and painful urination ("dysuria"). In some men, painful urination is the predominant symptom, and a discharge may be mild or absent. In rare cases, the head of the penis may become swollen and sore ("bull-headed penis").

Complications

If the infection is not treated, a wide range of complications may develop. Untreated gonorrhea can spread to other organs such as the Cowper's glands, the prostate (causing prostatitis), and the epididymis (causing epididymitis). Before antibiotics were discovered, chronic gonococcal infections of the Cowper's glands, prostrate, and epididymis were terrible infections for men to have, producing chronic discharge and pain. As these infections resolved over months, scarring of the urethra or epididymis often resulted, and difficulty with urinating because of urethral strictures and infertility were consequences.

Diagnosis

When urethral gonococcal infection is suspected, a specimen of urethral secretions can be collected for a Gram stain, whether or not the man has symptoms or signs of infection. A Gram's stained smear is less likely to be positive when urethral gonorrhea produces little or no discharge, because these infections have fewer organisms than do those in men with symptoms. Only about 50-70% of men with asymptomatic gonorrhea will have a positive Gram's stain (vs. 90-95% of men with symptoms).

If gram-negative intracellular diplococci cannot be identified on smear, nucleic acid amplification tests [NAATs]) should always be obtained at the site of exposure. Local labs may have different availability of NAAT testing at rectal and pharyngeal sites. Similarly, if typical gram-negative diplococci are found only extracellularly, NAAT should be collected because extracellular diplococci may not be gonococci. Ideally, all persons with suspected gonorrhea should be tested with culture or NAAT to confirm infection, even if the Gram's stained smear is positive.

In many clinics, specimens from smear-positive patients are tested with culture or NAAT as a quality check on laboratory procedures. When antibiotic resistance is suspected, a culture is necessary regardless of the results of the Gram's stain, since antimicrobial resistance can only be assessed by testing of culture specimens.

Testing in Legal Cases

In legal cases, e.g., child abuse or rape, cultures or FDA-cleared NAATs for *N. gonorrhoeae* should be used when testing. NAAT testing for gonorrhea is FDA approved for use on urethral and cervical specimens, but not on specimens from extra-genital (pharyngeal or rectal) sites. In legal cases, all presumptive isolates of *N. gonorrhoeae* (from culture) should be confirmed in the laboratory using two different confirmation methods. This is true for males or females.