

TABLE 163-3 ELEVEN-QUESTION STD/HIV RISK ASSESSMENT

Framing Statement:	
In order to provide the best care for you today and to understand your risk for certain infections, it is necessary for us to talk about your sexual behavior.	
Screening Questions:	
(1) Do you have any reason to think you might have a sexually transmitted infection? If so, what reason?	
(2) For all adolescents <18 years old: Have you begun having any kind of sex yet?	
STD History:	
(3) Have you ever had any sexually transmitted infections or any genital infections? If so, which ones?	
Sexual Preference:	
(4) Have you had sex with men, women, or both?	
Injection Drug Use:	
(5) Have you ever injected yourself ("shot up") with drugs? (If yes, have you ever shared needles or injection equipment?)	
(6) Have you ever had sex with a gay or bisexual man or with anyone who had ever injected drugs?	
Characteristics of Partner(s):	
(7) Has your sex partner had any sexually transmitted infections? If so, which ones?	
(8) Has your sex partner had other sex partners during the time you've been together?	
STD Symptoms Checklist:	
(9) Have you recently developed any of these symptoms?	
For Men	For Women
(a) Discharge of pus (drip) from the penis	(a) Abnormal vaginal discharge (increased amount, abnormal odor, abnormal yellow color)
(b) Genital sores (ulcers) or rash	(b) Genital sores (ulcers), rash, or itching
Sexual Practices, Past 2 Months (for patients answering yes to any of the above questions, to guide examination and testing):	
(10) Now I'd like to ask what parts of your body may have been sexually exposed to an STD (e.g., your penis, mouth, vagina, anus).	
Query about Interest in STD Screening Tests (for patients answering no to all of the above questions):	
(11) Would you like to be tested for HIV or any other STDs today? (If yes, clinician can explore which STD and why.)	

Source: Adapted from JR Curtis, KK Holmes, in KK Holmes et al (eds): *Sexually Transmitted Diseases*, 4th ed. New York, McGraw-Hill, 2008.

Chlamydia-negative cases. Fewer studies than in the past have implicated *Ureaplasma*; the ureaplasmas have been differentiated into *U. urealyticum* and *Ureaplasma parvum*, and a few studies suggest that *U. urealyticum*—but not *U. parvum*—is associated with NGU. Coliform bacteria can cause urethritis in men who practice insertive anal intercourse. The initial diagnosis of urethritis in men currently includes specific tests only for *N. gonorrhoeae* and *C. trachomatis*; it does not yet include testing for *Mycoplasma* or *Ureaplasma* species. The following summarizes the approach to the patient with suspected urethritis:

1. **Establish the presence of urethritis.** If proximal-to-distal "milking" of the urethra does not express a purulent or mucopurulent discharge, even after the patient has not voided for several hours (or preferably overnight), a Gram's-stained smear of an anterior urethral specimen obtained by passage of a small urethrogenital swab 2–3 cm into the urethra usually reveals ≥ 5 neutrophils per 1000 \times field in areas containing cells; in gonococcal infection, such a smear usually reveals gram-negative intracellular diplococci as well. Alternatively, the centrifuged sediment of the first 20–30 mL of voided urine—ideally collected as the first morning specimen—can be examined for inflammatory cells, either by microscopy showing ≥ 10 leukocytes per high-power field or by the leukocyte esterase test. Patients with symptoms who lack objective evidence of urethritis may have functional rather than organic problems and generally do not benefit from repeated courses of antibiotics.

2. **Evaluate for complications or alternative diagnoses.** A brief history and examination will exclude epididymitis and systemic complications, such as disseminated gonococcal infection (DGI) and reactive arthritis. Although digital examination of the prostate gland seldom contributes to the evaluation of sexually active young men with urethritis, men with dysuria who lack evidence of urethritis as well as sexually inactive men with urethritis should undergo prostate palpation, urinalysis, and urine culture to exclude bacterial prostatitis and cystitis.
3. **Evaluate for gonococcal and chlamydial infection.** An absence of typical gram-negative diplococci on Gram's-stained smear of urethral exudate containing inflammatory cells warrants a preliminary diagnosis of NGU, as this test is 98% sensitive for the diagnosis of gonococcal urethral infection. However, an increasing proportion of men with symptoms and/or signs of urethritis are simultaneously assessed for infection with *N. gonorrhoeae* and *C. trachomatis* by "multiplex" NAATs of first-voided urine. The urine specimen tested should consist of the first 10–15 mL of the stream, and, if possible, patients should not have voided for the prior 2 h. Culture or NAAT for *N. gonorrhoeae* may yield positive results when Gram's staining is negative; certain strains of *N. gonorrhoeae* can result in negative urethral Gram's stains in up to 30% of cases of urethral infection. Results of tests for gonococcal and chlamydial infection predict the patient's prognosis (with greater risk for recurrent NGU if neither chlamydiae nor gonococci are found than if either is detected) and can guide both the counseling given to the patient and the management of the patient's sexual partner(s).
4. **Treat urethritis promptly while test results are pending.**

TREATMENT URETHRITIS IN MEN

Table 163-4 summarizes the steps in management of sexually active men with urethral discharge and/or dysuria.

In practice, if Gram's stain does not reveal gonococci, urethritis is treated with a regimen effective for NGU, such as azithromycin or doxycycline. Both are effective, although azithromycin may give better results in *M. genitalium* infection. If gonococci are demonstrated by Gram's stain or if no diagnostic tests are performed to exclude gonorrhea definitively, treatment should include parenteral cephalosporin therapy for gonorrhea (**Chap. 181**) plus oral azithromycin, primarily for additive activity against *N. gonorrhoeae* given concerns about evolving antibiotic resistance. Azithromycin also treats *C. trachomatis*, which often causes urethral co-infection in men with gonococcal urethritis. Ideally, sexual partners should be tested for gonorrhea and chlamydial infection; regardless of whether they are tested for these infections, however, they should receive the same regimen given to the male index case. Patients with confirmed persistence or recurrence of urethritis after treatment should be re-treated with the initial regimen if they did not comply with the original treatment or were reexposed to an untreated partner. Otherwise, an intraurethral swab specimen and a first-voided urine sample should be tested for *T. vaginalis* (currently done by culture, although NAATs are more sensitive and are approved for the diagnosis of trichomoniasis in women). If compliance with initial treatment is confirmed and reexposure to an untreated sex partner is deemed unlikely, the recommended treatment is with metronidazole or tinidazole (2 g by mouth in a single dose) plus azithromycin (1 g by mouth in a single dose); the azithromycin component is especially important if this drug has not been given during initial therapy.

EPIDIDYMITIS

Acute epididymitis, almost always unilateral, produces pain, swelling, and tenderness of the epididymis, with or without symptoms or signs of urethritis. This condition must be differentiated from testicular torsion, tumor, and trauma. Torsion, a surgical emergency, usually occurs in