Anorectal Sexually Transmitted Infections in Men Who Have Sex with Men—Special Considerations for Clinicians

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ABSTRACT

Men who have sex with men have special health-care issues and are at high risk for sexually transmitted infections. In managing their anorectal health it is important to modify the history and physical and handle patients in a nonjudgmental fashion. It is important to understand behavioral patterns including recreational drug use, unprotected sex, and HIV infection. Screening and counseling play important roles in effective management of these patients.

KEYWORDS: Men who have sex with men, homosexuality, anal health

Objective: Upon completion of this article, the reader should be familiar with the medical concerns of men who have sex with men.

In the “politically correct” world we all aspire to live in, we would try to blur distinctions between different peoples and treat all as one. In medicine, however, we have long realized that all people are not the same and that different racial and ethnic groups have their own needs. Medicine is also coming to understand that just as ethnicity and race play important roles in health-care requirements and our effectiveness to provide care, so too does sexual orientation. As a sign of political correctness we no longer classify patients as homosexual, but as lesbian, gay, or bisexual. If we as physicians are to offer effective care to these patients, especially with respect to sexually transmitted infections (STIs), it is important to understand various ways in which this patient population requires modifications to our standard approach.

The first and most basic nuance when evaluating men is to move beyond the terms “gay,” “bisexual,” or

“straight.” While most men are heterosexual, a significant number will have had sex with other men. They may not self-identify as homosexual but the fact that they have had sex with other men admits them to this group of individuals with select health-care needs.¹ For this reason it is best to categorize “homosexual men” as “men who have sex with men” (MSM). When treating MSM it is also important to modify, where appropriate, the history and physical examination to fully access their special health-care issues, especially when focusing on the area of anorectal health. A basic understanding of sexual practices and behavioral patterns will also help practitioners administer optimal patient care.

TAKING THE HISTORY

As health-care providers, we all understand how important a patient history is to understanding illness. In fact,

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the physical examination often confirms the diagnosis we made with the history. MSM have health-care risks related to sexual practices (most notably HIV infection), making sexual orientation an integral component of the medical history. It is also important to understand how hard it is for a patient to divulge his sexual orientation to a physician. The question may be presented as "Have you ever had sex with men, women, or both?" Some men might initially balk, but adding "I ask all my patients this question" may put them at ease. Or you may prefer to preface this portion of the history by informing the patient that you need to ask personal questions—questions that you ask all your patients. Do not assume that all MSM have anal-receptive sex. Anal sex is certainly common in the MSM community, but the practice is not universal.² When inquiring about sexual practices you must also ask about condom use. There is a growing incidence of unprotected sex (see below) in the MSM community and protection must be ascertained for all sexual activities, including masturbation and oral sex.^{3,4}

It is also important to understand your patient's sexual practices. Many STIs like gonorrhea, chlamydia, syphilis, and human papillomavirus (HPV) are spread by skin-to-skin contact and don't require ejaculation.⁵ The patient may, therefore, have protected anal sex and be relatively safe from HIV, but be exposed to STIs during foreplay or unprotected oral sex.

Understanding a patient's exposure risk is essential to a good history and crucial information may be obtained with the following two questions: "Do you have a partner?" and "Are you monogamous?" If MSM have partners and are monogamous, it is important to determine whether or not the partner carries HIV as well as other STIs. Many MSM are in what we call "serodiscordant" relationships where one partner is HIV-positive while the other partner is not. Serodiscordance between partners implies risks that couples who are seroconcordant don't face. In addition to HIV, HIV-positive MSM are more likely than HIV-negative MSM to carry other STIs including herpes, HPV, gonorrhea, and syphilis that may not be readily apparent.^{5,6}

The high prevalence of STIs in MSM has led the Centers for Disease Control and Prevention (CDC) to issue new guidelines in 2002 for screening MSM. They recommend that at least annually all MSM (even when asymptomatic) have an HIV serology (if status previously negative or unknown), syphilis serology, urethral culture or urine sample for DNA amplification for both chlamydia and gonorrhea, pharyngeal culture for gonorrhea, and anal culture for gonorrhea and chlamydia. While the CDC advises more frequent screening for higher-risk MSM (those with drug use, anonymous sex, or unprotected sex), the recommendations for anal and oral cultures pertain only to those MSM who engage in those types of sex.⁵

Recreational drug use is a growing problem within the MSM community. Some researchers report that crystal methamphetamine use is reaching epidemic proportions in large cities on both coasts of the United States. Although crystal methamphetamine is extremely dangerous in and of itself, research shows that those who use recreational drugs are more likely to combine drugs. These drugs, including crystal, ecstasy, cocaine, and ketamine, are associated with unprotected anal sex, sex with multiple partners, and prolonged sexual encounters. This has translated to increased risk in contracting STIs including HIV.⁷ In clinical practice this information becomes important when treating MSM with STIs in that an exploration of possible recreational drug use helps identify behavior that places patients at risk for infection.

PHYSICAL EXAMINATION

When examining MSM for STIs, keep in mind that when a patient has one infection he is more likely to have another infection as well. It is also true that multiple sites can be infected with different types of infections. If you suspect an STI of the anorectum you should also screen the patient's oral cavity and genitourinary tract. Health-care providers may consider routine culture of these areas, as even patients who deny anal sex may have rectal infections transmitted during foreplay or by finger or toy insertion.

Patients with a perianal STI or anorectal symptoms suggestive of an STI need anoscopic examination to accurately assess extent of disease, as the treatment of external disease alone, as in the treatment of external anal warts, will not be sufficient.⁷ Because of the high incidence of anal HPV in MSM and the prevalence of anal dysplasia in MSM with condylomata, anal Pap smears and destruction of even asymptomatic condylomata are recommended. MSM, even those who have anal-receptive sex, can develop anal pathology unrelated to sexual practice such as hemorrhoids, fissures, proctitis, dermatitis, fistulae, abscess formation, and many other conditions unrelated to sexual practice or STIs.

Urogenital screening for gonorrhea and chlamydia can be achieved with polymerase chain reaction DNA analysis of a urine sample. The test is more sensitive than standard culture methods, but does not test for quinolone resistance as the standard culture does, so patients must be retested to insure cure.

The importance of STI testing is illustrated by a review of 261 MSM from the author's practice (SEG) undergoing routine screening for HPV or other ano/rectal pathology, who were tested for gonorrhea and chlamydia of the oropharynx, anus, and genitourinary tract. We found 13.2% of HIV-negative patients and 4.0% of HIV-positive patients were positive for gonorrhea. Chlamydia was found in 4% of HIV-negative

patients and 4.8% of HIV-positive patients. Most patients had asymptomatic infections (unpublished data). Had these patients not been screened for STIs, most infections would have been missed.

Given these data, it is critical that all MSM with what would ordinarily be considered benign anorectal symptomatology or pathology be screened for STIs. Classic proctitis may be seen on anoscopy, but cultures are necessary to rule out infection from herpes, gonorrhea, or chlamydia. Cultures direct appropriate antibiotic therapy, as “standard” antibiotic treatment may not be adequate. Inappropriate “shotgun” antibiotic therapy may suppress the infection enough to ameliorate symptoms, providing a false sense of security. Finally, partial treatment makes recurrence, resistance, or spread to others more likely.

SEXUAL PRACTICES AND ANAL HEALTH

Many (but not all) MSM view their anus as a sexual organ. Understanding this helps when trying to anticipate the patient's concerns and needs. However, anal sex is not just the province of MSM. Many women have anal sex, although it tends to be more episodic (spur of the moment) and infrequent, whereas for MSM it is more likely to be a regular part of sexual practices. For heterosexuals, anal sex is often unprotected as there is no concern of pregnancy and this raises the risk of HIV transmission. Young girls, especially those in lower socioeconomic groups, may have anal sex rather than vaginal intercourse as a means of birth control and to preserve virginity. Heterosexual men may also enjoy anal penetration with fingers or toys that may spread STIs.^{8,9}

Anal sex can be performed safely. Clearly the anus is not a vagina so sexual technique must be adjusted. If entry is forced the internal and external sphincter muscles will contract and the anoderm or even sphincter muscles may tear. Lubricants are commonly used but lubricants with nonoxynol-9 should not be used as these cause irritation and may increase the chance of HIV transmission.^{2,10,11}

Some patients will feel they are too tight for anal sex, especially if they have had ano/rectal surgery and scarring. For these patients, a course of rectal dilators can gradually loosen sphincter muscles and stretch scar tissue.

Two papers have examined the effect of receptive anal intercourse on sphincter function. Miles and colleagues¹² compared a variety of sphincter function parameters between men who have had anoreceptive sex with a purportedly matched group of those who had not. They found that while there was a statistically significant reduction in anal sphincter maximum resting pressure, there was not a difference in maximum squeeze pressure between the two groups. There was no difference between groups in minimum sensory volume,

rectoanal inhibitory reflex volume, or maximum tolerable volume. They did report that those who had anoreceptive sex were more likely to complain of minor defects of anal continence. The major failing of the comparison between groups, however, is that most men who had anoreceptive sex were HIV-positive and this was not the case with those men who had not had anoreceptive sex. Differences between the groups with respect to continence might be explained by this major factor as men with HIV have alterations in perirectal fat and are more prone to diarrhea and other bowel problems.

The second paper, by Chun and associates,¹³ compared sphincter function in 14 MSM who had anoreceptive sex with 10 age-matched controls who did not. The study found that while resting pressures were significantly lower in the subjects who had anal sex, there was no significant difference in mean maximum squeeze pressure. Neither group, however, reported incontinence and there was no injury to the internal or external sphincters identified by endoanal ultrasonography.

Condoms protect against HIV but are ineffective in preventing the transmission of many other STIs that spread by skin-to-skin contact. A condom doesn't cover the base of the shaft, pubic region, or scrotum, which are all places STIs can reside and spread during intimate contact.⁵ Moreover, condoms are often put on just for penetration and many STIs pass during foreplay when close contact or other types of sex occur. Patients should be counseled that they should be in a secure monogamous relationship with a seroconcordant partner before abandoning condom use. STI testing is often advised to be sure that no infections are present. Concurrent HIV testing of both partners is important as recent studies have documented that many MSM have never been HIV tested and merely assume that they are not infected. Moreover, multiple studies document that many MSM have been tested, but did not return to learn their results.^{14,15}

Patients may also insert dangerous objects into their rectum for erotic stimulation. In addition to the inherent risks of tearing, perforation, or losing the object, patients must also be aware of the risk of STIs that can spread when partners share toys. It is not uncommon for MSM to use (and occasionally abuse) enemas for hygiene or autoerotic activity. These practices and others may perforate or tear the delicate tissues in the anus and rectum and the patients should be counseled accordingly.

Problems such as external hemorrhoids, tags, and anal fissures are often treated conservatively. While this may work for most patients, some may request minor surgery to remove a tag or hemorrhoid for cosmetic reasons because they or their partners don't like the way it looks. Some MSM confuse external hemorrhoids with HPV and are reticent to have anal sex with a partner who

has them. Patients might also complain of bleeding during anal sex from an irritated hemorrhoid or a fissure that repeatedly opens. While they might be symptom-free during bowel movements, their sex life is affected. If conservative therapy does not solve the problem, surgery might be necessary.

PSYCHOSOCIAL ISSUES OF STIs

Many MSM will have experienced a past history of psychological or physical abuse as a result of their sexuality. Homophobia directed at oneself, while not readily apparent externally, can often be internalized in MSM. Sitting in your office, a patient may seem at ease with his sexuality—until you tell him that he has an STI. Many MSM were taught by religious leaders, family members, physicians, and society in general that their sexual practices will ultimately cause harm. The STI you just diagnosed can be seen as a manifestation of this prophecy of doom and feelings of self-hate and homophobia may come boiling to the surface.

Partner notification is required for many STIs but varies depending on which state you live in; nonetheless, patients must be counseled about the importance of partner notification and treatment. In addition to partner notification, you must also disclose to the patient that various STIs require reporting to the state health department. Syphilis, gonorrhea, chlamydia, and AIDS are always reported, while HIV and chancroid are reported in only some states.³ Although the infection requires reporting, the results are kept in strictest confidentiality.

Treating patients for STIs must also include prevention counseling. Studies have shown that even brief counseling covering high-risk behavior can reduce the incidence of future STIs by 25 to 40%.⁵ When speaking with MSM, explain that STIs are highly prevalent infections and do not necessarily imply promiscuity. Some men are just unlucky and acquire an STI after safe and infrequent sexual encounters. However, the diagnosis of an STI is an excellent time for a patient to examine his behavior in an effort to determine if something he is doing is placing him at increased risk for infection. Ancillary health-care providers (nurse, physician's assistant) may be used effectively to reinforce important risk reduction principles. All MSM should be vaccinated against hepatitis A and B because they represent STIs in this patient population and they are preventable.⁵

And last, but certainly not least, screening for STIs should always include a recommendation for an HIV test. MSM with an STI are at increased risk for also having HIV. Recent troubling data point to increased rates of new HIV infections.^{11,16} Studies have also demonstrated that presence of an STI in either sexual partner can increase risk for transmission of HIV be-

tween them.⁵ Requirements for HIV testing and reporting of a positive result vary between states, and providers should familiarize themselves with requirements specific to their location. Patients may need to give written consent for testing after counseling has been provided, which includes discussion of the ramifications of a positive test such as deportation of non-US citizens. Patients should try to anticipate how they would potentially deal with a positive test result on both emotional and physical levels. Moreover, patients should return for HIV test results (whether negative or positive). You can also recommend various "at home" HIV tests which are available at many pharmacies. The patient sends a sample to a laboratory and then calls for a result. This type of test is anonymous and may appeal to patients. While not as ideal as a test that offers face-to-face counseling and result notification, it still is an accurate test. The important point is to encourage HIV testing in MSM patients and work with them to find the type of test they feel most comfortable with. If the patient does have HIV he should be referred to a provider experienced in HIV treatment. No matter what the results, any HIV test discussion should also review safe sex principles and risk reduction.

SUMMARY

MSM are at high risk for STIs. Behavioral patterns, including recreational drug use, unprotected sex, and HIV infection, can increase the likelihood that they will have either symptomatic or asymptomatic infections. Screening in this population for HIV, gonorrhea, chlamydia, and syphilis should occur on an at least annual basis and possibly more frequently if the situation warrants. When evaluating and treating MSM for STIs, clinicians must be nonjudgmental and make the patients feel that any answer will be handled with respect and compassion. Counseling plays an important role in effective treatment as it can reduce risk for subsequent infections.

REFERENCES

1. Boulton M, Fitzpatrick R. Bisexual men in Britain. In: Agleton P, ed. *Bisexualities in AIDS: International Perspectives*. London, UK: Taylor & Francis; 1997
2. Goldstone S. *The Ins and Outs of Gay Sex: a Medical Handbook for Men*. New York, NY: Dell; 1999:1-22
3. Halkitis PN, Parsons JT, Wilton L. Barebacking among gay and bisexual men in New York City: explanations for emergence of intentional unsafe behavior. *Arch Sex Behav* 2003;32:351-357
4. Koblin BA, Chesney MA, Husnik MJ, et al. High-risk behaviors among men who have sex with men in 6 U.S. cities: baseline data from the EXPLORE Study. *Am J Public Health* 2003;93:926-932

5. [No authors listed.] Sexually transmitted diseases treatment guidelines 2002. Centers for Disease Control and Prevention. MMWR Recomm Pap 2002;51(RR-6):1–78
6. Kim AA, Kent CK, Klausner JD. Risk factors for rectal gonococcal infection amidst resurgence in HIV transmission. Sex Transm Dis 2003;30:813–817
7. Halkitis PN, Parsons JT, Stirratt MJ. A double epidemic: crystal methamphetamine drug use in relations to HIV transmission among gay men. J Homosex 2001;41:17–35
8. Stubblefield PG. Contraception. In: Copeland LJ, Jarrell JF, eds. Textbook of Gynecology. Philadelphia, PA: Saunders; 2000
9. Michael RT, Gagnon JH, Laumann EO, Kolata G. Sex in America. New York, NY: Little Brown Co; 1994
10. Richardson BA. Nonoxynol-9 as a vaginal microbicide for prevention of sexually transmitted infections. JAMA 2002; 287:1171–1172
11. Patton DL, Cosgrove Sweeney YT, Rabe LK, et al. Rectal applications of nonoxynol-9 cause tissue disruption in a monkey model. Sex Transm Dis 2002;29:581–587
12. Miles AJG, Allen-Mersh TG, Wastel C. Effect of anoreceptive intercourse on anorectal function. J R Soc Med 1993;86:144–147
13. Chun AB, Rose S, Mitrani C, et al. Anal sphincter structure and function in homosexual males engaging in anoreceptive intercourse. Am J Gastro 1997;92:465–468
14. [No authors listed.] Centers for Disease Control and Prevention. Unrecognized HIV infection, risk behaviors, and perceptions of risk among young black men who have sex with men—six U.S. cities, 1994–1998. MMWR Morb Mortal Wkly Rep 2002;51:733–736
15. Erdbelding EJ, Chung S, Zenilman JM. Following-up for HIV test results: what limits return in an STD clinic population? Int J STD AIDS 2004;15:29–32
16. Centers for Disease Control and Prevention (CDC). Increases in HIV diagnoses—29 states, 1999–2002. MMWR Morb Mortal Wkly Rep 2003;52:1145–1148