AIDS and Cocaine: A Deadly Combination Facing the Primary Care Physician

Stephen P. Weinstein, PhD, Richard L. Brown, MD, MPH, and Ronald D. Serota, MD
Philadelphia, Pennsylvania

If one were to attempt to nominate the major social calamities of the 1980s, two of the most likely candidates would be acquired immune deficiency syndrome (AIDS) and cocaine abuse. Currently the devastation caused by both AIDS and cocaine abuse is continuing to worsen. Both the spread of cocaine use and the numbers of nonhomosexual AIDS cases are growing rapidly, and these two phenomena of the 1980s are becoming increasingly intertwined. Since the first documentation of AIDS in a gay man in 1981[1] and the recognition that the disease could be transmitted by means of the needle sharing and sexual contacts of intravenous drug users,[2] the public has associated AIDS with these two highly stigmatized groups.[3] The scientific community has consistently recognized that the AIDS infection could be spread through the heterosexual activities of intravenous drug abusers.[4] This concern is heightened by reports of marked increases in the intravenous use of cocaine.[5,6]

Until recently intravenous drug use was considered to be a characteristic method of heroin use, while cocaine was believed to be a drug that was snorted or smoked (as crack or freebase). Speed-balling, or the combining of heroin and cocaine in an injection, was known but not generally thought to be very widespread. As a result of these apparent disparities, little connection was seen among intravenous drug use, cocaine, and AIDS. This perspective is changing with the growing awareness that cocaine is being used intravenously. A report from the National Institute on Drug Abuse (NIDA)[5] indicates that most intravenous drug users are now polydrug users, injecting a variety of drugs and combinations of drugs. In their study 93% of a sample of intravenous drug users not in treatment had injected cocaine in the previous 6 months.[5] Cocaine injection is associated with a number of high-risk behaviors such as visiting "shooting galleries," sharing paraphernalia with more partners, not using sterile or bleach-cleansed needles, injecting more frequently, and drawing more blood into syringes when injecting.[5–7]

Furthermore, despite widely supported educational efforts at both institutional and street levels, many male and female drug abusers, particularly cocaine users, continue to participate in sexual practices (eg, sex with intravenous drug users, infrequent condom use, bartering sex with multiple partners for drugs) that place them at risk for AIDS.[5,8] The sharp increases in the use of smoking cocaine (crack) and its connection to trading sex for drugs has led to dramatic rises in other sexually transmitted diseases in regions with high concentrations of crack use.[6,7] In addition, among the severely addicted, concerns about personal safety and survival become secondary to drug procurement and use, and their range of acceptable behaviors expands (ie, random sex, sex without condoms, and so on).[7,9] These behaviors are at least in part responsible for the increased incidence of other sexually transmitted diseases as well as AIDS,[6,7,10] and are targeted in programs for AIDS prevention as well as drug treatment and prevention.[11]

The prevalence of the human immunodeficiency virus in the drug-abusing population has reached alarming levels. At least one half of New York area intravenous drug abusers applying for treatment were estimated to harbor the human immunodeficiency virus (HIV) antibody.[12] The proportion of new AIDS cases occurring among intravenous drug abusers in the United States jumped from 16% in 1987 to 26% in 1988.[4,13,14] Among blacks and Hispanics, AIDS cases have occurred at more than three times the rate of the white population, an excess that has been associated with intravenous drug use in these populations.[14]

The continuing AIDS epidemic has led to increased support for voluntary routine screening and early identification and intervention programs for high-risk as well as HIV-infected individuals. The stigma of the disease and

Submitted, revised, February 6, 1990.

From the Department of Psychiatry and Human Behavior, and the Department of Family Medicine, Jefferson Medical College of Thomas Jefferson University, Philadelphia, Pennsylvania. Requests for reprints should be addressed to Stephen P. Weinstein, PhD, Department of Psychiatry and Human Behavior, Jefferson Medical College, 1201 Chestnut Street, 15th Floor, Philadelphia, PA 19107.

the potential financial, insurance, interpersonal, medical, and psychological ramifications of an AIDS diagnosis[3,15] underscore the need for testing to be voluntary,[16] with informed consent,[15] and for maintenance of confidentiality safeguards. Rhame and Maki,[16] in presenting a strong case for routine voluntary HIV testing, indicate that many, if not most, HIV-infected Americans either do not know of their infections or deny initial symptoms. Such patients present a risk not only to society but to themselves, since they cannot benefit from early medical monitoring or pharmacological treatment. For example, in patients with HIV antibody, azidothymidine treatment may slow the progression to AIDS, and aerosolized pentamidine may inhibit *Pneumocystis* infection. Thus physicians in all settings should screen their patients for high-risk behaviors[16] including sexual contact with intravenous drug users and homosexual or bisexual men, intravenous drug use, needle sharing, and multiple unsafe heterosexual contacts. Physicians should recommend HIV antibody testing to patients whose screening results are positive for high-risk behaviors. Appropriate counseling and, when indicated, medication regimens must accompany such screening. Persons who are not infected but are engaging in high-risk behaviors should be counseled about behavioral changes directed at reducing their risk of future infection. Those already infected should be counseled toward continuing their medical care, the use of medication to slow the progression of the disease, the value of good nutrition and general health maintenance, and the means of reducing the risks of infecting others.

For drug abusers, especially severe cocaine addicts, voluntary testing and direct intervention represent steps in a positive direction but may be rather elusive goals to attain. The lifestyle associated with the active crack or intravenous cocaine addict does not lend itself to adequate or routine medical care. If, however, HIV antibody testing is perceived by the drug-using community as routine, widespread, readily available, and accepted, there is likely to be an increase in their willingness to volunteer for testing, perhaps during medical visits for unrelated concerns about themselves or their children. Follow-up could be a problem, and certainly not all drug users appear in a medical office or clinic, but by making HIV testing a routine procedure, a larger proportion of this high-risk population may be reached and an earlier intervention made more feasible.

Neither cocaine abuse, with its consequent high-risk patterns of sexual activity and intravenous drug use, nor the spread of AIDS into the general population seem to be abating. Health care professionals, particularly primary care physicians, must attend more vigilantly to preventing, identifying, and offering treatment options for drug abuse problems. At the same time, physicians should also be focusing on screening for and counseling about high-risk behaviors, advocating for voluntary HIV antibody testing for patients at high-risk, and counseling both HIV-infected and high-risk patients and their partners on measures to prevent HIV transmission. By broadening the approach to recognition, intervention, and treatment in these two critical areas, the primary care physician can apply emerging knowledge to the prevention and treatment of this immense individual and social calamity.

References

1. Centers for Disease Control: *Pneumocystis* pneumonia—Los Angeles. MMWR 1981; 20:250–252
2. Centers for Disease Control: Acquired immunodeficiency syndrome (AIDS) update—United States. MMWR 1983; 32:309–311
3. Herek GM, Glunt EK: An epidemic of stigma: Public reactions to AIDS. Am Psychol 1988; 43:886–891
4. Fineberg HV: The social dimensions of AIDS. Sci Am 1988; 259: 128–134
5. National Institute on Drug Abuse: NIDA outreach demonstration projects provide insight into AIDS risk behaviors. NIDA Notes, Spring/Summer 1989; 4:3–10
6. Chaisson RE, Bacchetti P, Osmond D, et al: Cocaine use and HIV infection in intravenous drug users in San Francisco. JAMA 1989; 261:561–565
7. Weiss SH: Links between cocaine and retroviral infection. JAMA 1989; 262:607–608
8. Adler J: Crack. Newsweek, November 28, 1988, pp 64–75
9. Gawin FH, Ellinwood EH: Cocaine and other stimulants: Actions abuse and treatment. N Engl J Med 1988; 318:1173–1182
10. Goldsmith MF: Sex tied to drugs-STD spread. JAMA 1988; 260: 2009
11. Howell DL (ed): Addicts alter patterns of drug use easier than they do sexual habits. Drugs Drug Abuse Educ Newslett 1988; 19(8):71–76
12. Weinberg DS, Murray HW: Coping with AIDS: The special problems of New York City. N Engl J Med 1987; 317:1469–1473
13. Heyward WL, Curran JW: The epidemiology of AIDS in the U.S. Sci Am 1988; 259:72–81
14. Hahn RA, Onorato IM, Jones TS, Dougherty J: Prevalance of HIV infection among intravenous drug users in the United States. JAMA 1989; 261:2677–2684
15. Swartz MS: AIDS testing and informed consent. J Health Politics Policy Law 1988; 13:607–621
16. Rhame FS, Maki DG: The case for wider use of testing for HIV infection. N Engl J Med 1989; 320:1248–1254