

ORIGINAL CONTRIBUTION

Cocaine Psychosis and AIDS: A Contemporary Diagnostic Dilemma

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Abstract—*This article examines some of the differential diagnostic considerations associated with the interaction between advanced cocaine psychosis and the neuropsychiatric manifestations of AIDS-Spectrum Disorders. A clinical case is presented to illustrate the potential for institutional countertransference in the treatment of substance abusing patients. The role of a multi-dimensional hypotheses testing model in cocaine related cases is discussed.*

Keywords—AIDS, ARC, cocaine, psychosis, diagnosis, assessment.

INTRODUCTION

THIS ARTICLE WILL examine some of the differential diagnostic issues revealed by the relationship between advanced cocaine psychosis and the neuropsychiatric manifestations of AIDS-Spectrum Disorders. To begin, we will briefly review some of the concerns associated with cocaine abuse and the psychiatric aspects of AIDS.

Cocaine Abuse

Recently there has been much media attention and organized public effort to stop cocaine use and abuse (Anderson, 1983; Gladwell, 1986). As distributors of cocaine have ingeniously changed their marketing strategies, the U.S. Government estimates that there are now 5,000 new, first time users of cocaine each day (Kozel & Adams, 1985). Previously portrayed by the media as the "champagne of drugs," cocaine is now recognized as a substance capable of producing a variety of adverse reactions (Smith & Wesson,

1985). These include cardiac arrest, generalized seizures (Isner et al., 1986), cocaine psychoses (Post, 1975) and addictive behavior patterns (Newcomb & Bentler, 1986). Biological and behavioral complications are due to both increased levels of cocaine use as well as a shift toward more potent intravenous (IV) and inhalation routes of administration (e.g., shooting or freebasing cocaine and/or smoking crack).

Contemporary events involving lethal reactions have captured the imagination of the electronic and print media alike. The strident interest of the public has put pressure on clinicians to take a more active role in the "war" against cocaine. Indeed, clinicians, educators, and politicians have all been exposed to the same sensationalization of the issue (Gladwell, 1986) and the result may be that it is difficult to sort scientific fact from fantasy.

This current social setting and the attendant media blitz can be expected to diminish prejudice-free diagnosis of the cocaine involved patient. Zinberg (1974, 1984) has described the important influence of social setting on drug taking behavior and drug effects. The social setting can also influence the complex process of diagnostic judgment (e.g., Shaffer, 1986a). This paper is designed to help clinicians recognize and distinguish the differential diagnostic issues associated with advanced cocaine abuse, cocaine psychosis, and the early neuropsychiatric effects of the Acquired Immune Deficiency Syndrome (AIDS). Each of these issues will be discussed in the sections that follow.

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The Spectrum of Cocaine Abuse: From Euphoria to Psychosis. The progressive stages of cocaine abuse typically begin with euphoria, leading over time to dysphoria, paranoia, and cocaine psychosis (Post, 1975). The psychiatric signs and symptoms associated with the latter stages often include depression, delusional thinking, visual and auditory hallucinosis, and paranoia; after the individual ceases to use the substance, these signs usually remit within several days. It is when a patient denies continued drug use and the apparent drug related symptoms fail to clear that clinicians may perceive those patients with a substance abuse history to be suffering from the "disease of denial." Denial of drug use may be perceived by clinicians as actual *evidence* of such use. The notion that substance abuse is a disease of denial is often confirmed by patients' claims that they have discontinued or diminished their drug use. In the case of cocaine, this state of affairs is very difficult to verify as this substance only remains detectable in blood and urine for up to approximately 9 and 24 hours respectively.

Considering substance abuse and dependence a "disease of denial" can be an extremely prejudicial posture for diagnosticians. Clinicians are unable to distinguish denial as *evidence* from denial as *fact* without testing hypotheses specifically related to the underlying condition. For example, can the patient's problem be explained by some disorder other than substance dependence? Only when all of the available alternative hypotheses are exhausted should denial be accepted as evidence of substance dependence—even then only with a certain amount of uncertainty. Sargent, Shaffer, and Lawford (1986) have noted that it is the cognizance of the need to test hypotheses regarding behaviors that are difficult to understand and interact with that safeguards the clinician from both misdiagnosis and distortion during the assessment process.

Neuropsychiatric Effects of AIDS-Spectrum Disorders

In a different but related context, Perry and Jacobsen (1986) address the potential for countertransference¹ problems in the treatment of individuals who are in high risk categories for AIDS and AIDS Related Complex (ARC), and who may present with neuropsychiatric manifestations of AIDS-spectrum disorders (Faulstich, 1987). Because these individuals often represent diverse and deviant groups such as IV drug addicts,

psychiatric reactions are not viewed by clinicians as unusual. Moreover, in some cases atypical and inconsistent psychiatric symptoms may be perceived by clinicians as evidence that the patient is malingering (Perry & Jacobsen, 1986).

Recent findings (e.g., Faulstich, 1987; Perry & Jacobsen, 1986), however, suggest that neuropsychiatric complications may appear as manifestations of AIDS, ARC, or direct central nervous system involvement of HIV itself. These complications may predate seropositivity for HIV and mimic many functional psychiatric disorders ranging from mild chronic dysphoria to acute psychosis. Early symptoms of such complications include many of the same experiences associated with advanced cocaine psychosis: depression, impaired memory, agitation, panic attacks, anorexia, tachycardia, seizures, impaired concentration, insomnia, delusional and/or disoriented thinking, and hallucinations (Faulstich, 1987).

Perry and Jacobsen (1986) contend that organicity should be suspected in the mental changes of all AIDS and ARC patients. Marmor, Des Jarlais, Friedman, Lyden, and El-Sadr (1984) reported data about the seroepidemiology of AIDS among New York intravenous drug abusers. They found that 58% of patients entering a drug detoxification program had antibodies to the core protein of lymphadenopathy associated virus (LAV/HIV). Although lower rates of seropositivity may be found elsewhere, HIV is expected to be found in an increasing number of IV drug abusers (Knox, 1987). The complications in accurately distinguishing between and diagnosing both AIDS related dementia and cocaine psychosis converge to misdirect further that same assessment process which is already clouded by countertransference. The following case illustrates this burgeoning diagnostic dilemma, exacerbated first by the expectations of the clinicians involved and then by the lack of a rigorous hypotheses testing model (e.g., Sargent et al., 1986).

THE CASE OF MS. DARC²

Ms. Darc, a 36 year old white female with no previous history of major mental illness, thought disorder, schizoid personality or psychotic episodes, presented at an outpatient drug treatment program with a series of psychotic signs and symptoms. Ms. Darc had been admitted to this narcotics treatment program two months earlier for a long-standing intravenous narcotics dependence and had been maintained on 50 milligrams (mgs.) of methadone since that time. She now reported renewed use of heroin and, in an effort to detoxify herself from her street habit, had begun

¹We recognize that "countertransference" is a term traditionally applied to specialized psychotherapeutic interactions. In this case we believe that the term is relevant to the powerful feelings that often emerge during the provision of health care services in general and the treatment of AIDS, ARC, and substance abusing patients in particular.

²Certain non-essential information has been changed in order to protect confidentiality. Any likeness of this case to persons living or dead is strictly coincidental.

daily intravenous use of cocaine. Ms. Darc's chronic depression was exacerbated by her accelerating cocaine use. She escalated this cocaine use as her perceived need to manage her depression in this way mounted. In addition to depression she also reported severe insomnia, impaired concentration and memory, visual "hauntings" and auditory hallucinosis involving "poltergeist" experiences in her home. Further, Ms. Darc evidenced intense paranoia regarding the visual and auditory images which she experienced as demonic persecutors.

Because Ms. Darc refused hospitalization and was able to reduce her cocaine use, outpatient treatment was continued for several weeks. Ultimately, however, her cocaine abuse and paranoid experiences continued unabated; consequently, she was voluntarily admitted to an inpatient hospital unit for cocaine detoxification with methadone maintenance continued at 50 mgs. per day.

Restricted to an inpatient setting for three weeks, Ms. Darc was completely detoxified from cocaine as evidenced by self report and daily, supervised urinalysis. Nevertheless, her psychiatric symptoms failed to clear. At times she complained that these symptoms actually became more intense and dysphoric. The hospital staff observed and reported her growing distress. In spite of her continued biological exigency, Ms. Darc's behavior remained as the primary and confirmatory evidence that she had experienced a cocaine induced psychotic process for which she still required treatment.

Testing Clinical Hypotheses

The hospital staff's first hypothesis regarding Ms. Darc's puzzling non-response to treatment was consistent with the model generated by the initial formulation of cocaine psychosis. It was assumed that Ms. Darc was in the advanced stages of this "disease of denial." It was further assumed that, somehow, she still must be using cocaine and her continued psychotic behavior provided ongoing evidence of sustained cocaine abuse. Concurrent with Ms. Darc's psychiatric signs were a curious series of apparently unrelated physical complaints for which Ms. Darc had resisted seeking treatment despite her outpatient therapist's active concern.

Preoccupied with her psychotic experience, both Ms. Darc and the hospital staff began to attend to her physical condition only when it deteriorated further; this circumstance led to a shift in clinical focus. Additional examinations and blood work were ordered and the staff began to consider the new hypothesis that some endogenous biological cause was responsible for the variety of observed systemic problems. Six months after Ms. Darc first presented with multiple signs and symptoms, she was tested and found to be seroposi-

tive for HIV; subsequently, she was diagnosed with ARC. Six additional months after her completed detoxification from cocaine, Ms. Darc continued to experience the psychotic episodes that we now understand to be manifestations of a very different disease, as discussed in the section above on neuropsychiatric effects of AIDS spectrum disorders. At a ten month follow-up evaluation, this formulation was reaffirmed by the continued presence of psychotic experiences in the absence of cocaine or other psychoactive drug abuse.

DISCUSSION

Set, Setting, and Clinical Reflection

Sargent et al. (1986) caution drug treatment clinicians against the sort of static labeling of patients [as contrasted to Bandler and Grinder's (1975) notion of a process oriented view] which often arises from institutional countertransference. Zinberg's (1974, 1984) concepts of set and setting can be applied here to describe a kind of cybernetic relationship between Ms. Darc's own static labeling of her experience and the hospital staff's failure to generate sufficiently diverse hypotheses during the assessment process. Within a drug treatment facility, given the confluence of a patient's documented history of cocaine abuse and the extant staff ambivalence associated with HIV serum testing, it became difficult for treatment specialists to consider alternative hypotheses. The staff and Ms. Darc became functionally constrained by the formulation of cocaine psychosis; indeed, they appeared to be without a guide that required clinical reflection (e.g., Schon, 1983). Periodic and routinized self-reflection affords professionals the opportunity for diagnostic modification by providing the clinical decision-making context within which clinicians can challenge their professional epistemology.

Substance Abuse and AIDS: Interactive Factors

While it is recognized that there may be one or more cofactors responsible for an individual's progression from HIV positive to AIDS or ARC, there is a paucity of research investigating the degree to which drugs and alcohol are causal cofactors (Siegel, 1986). Siegel (1986) laments this dearth of data showing the relationship between AIDS and drug abuse, and in a series of recommendations he suggests that chemically dependent patients be given special priority for prevention, intervention and treatment strategies by drug treatment providers. It is our intention to underscore and add to this charge by suggesting a crucial link for clinicians: Cocaine abuse may not only increase an

individual's chances of becoming HIV positive and/or developing AIDS-spectrum disorders by virtue of (a) its immuno-suppressive effects and (b) the potential for repeated exposure to HIV through the sharing of contaminated needles, but the symptomatology of advanced cocaine psychosis may, in some cases, closely resemble and thereby mask the manifestations of the true cause of a patient's psychopathology, that is, HIV.

SUMMARY

From the recent surveys of HIV seroepidemiology (e.g., Knox, 1987; Marmor et al., 1984) we can estimate that the number of new cases of AIDS among IV drug abusers will increase rapidly in the next five years. We do not know as yet how many of these patients will present with neuropsychiatric complications of the disease, nor how many have already presented with such signs and were diagnosed and treated only for cocaine psychosis—if they were diagnosed and treated at all. Given the social and psychological ambivalence associated with the decisions that surround serum testing for HIV, it is important for health care providers to routinely consider this option to test when confronted with high risk patients who evidence relevant symptoms. However, it is imperative that clinicians also provide pre and post test counseling and support services to patients facing the decision to test and to those who have elected to test; in this way, clinicians can ethically utilize advancing technology to the benefit of patients in the midst of personal crises.

As our understanding of cocaine abuse, AIDS-spectrum disorders and clinical bias evolves, clinicians must remember that paradigms are not permanent definitions of fact, but continually shifting templates through which clinicians view people and behavior (e.g., Cohen, 1985; Shaffer, 1986b). In order to minimize diagnostic errors, we must adhere rigorously to a multi-dimensional assessment model (e.g., Shaffer, 1986a); in this way, world views can facilitate rather than obscure a beneficial understanding of intra and interpersonal events, their causes and the people upon whose lives these formulations impact.

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