Response to “Effects of Caffeine on Behavior of Schizophrenic Inpatients”

by Alexander P. Hyde

Abstract

This article addresses itself to the apparent conflict between those reports indicating that caffeine affects schizophrenic behavior and the present study which failed to show substantial behavior or medication changes with caffeine. It is suggested that there are important subgroups of schizophrenic patients who are unusually sensitive to caffeine's apparent psychotogenic actions as reported in case reports and data on violence and destruction. It is also suggested that there are subgroups of schizophrenia which seem to require increased medication doses to "cover" caffeine effects.

The recent study by Koczapski et al. (1989) was important and relevant because of its findings that (1) many schizophrenic patients do not seem to respond dramatically to changes in caffeine intake and (2) high-intake caffeine users' levels are lower, presumably due to tolerance, than might be expected.

However, there seem to be subgroups whose behaviors do seem to be sensitive to caffeine. For instance, several articles report a major worsening of behavior of psychotic patients after caffeine intake (Greden et al. 1978; DeFreitas and Schwartz 1979) or the precipitation of severe psychotic symptoms with large caffeine doses (Zazlov et al. 1988).

In addition, at Napa State Hospital in California, Zazlov et al. (1987) have reported a 25 percent decrease in physical assaults against staff and other patients and a 50 percent decrease in destructiveness following the decaffeination of coffee and other soft drinks available to patients by purchase.

Here at the South Carolina State Hospital, we regularly encounter what we believe are clear-cut indications of high doses of caffeine that induce major behavioral change. Typically, a patient receives an 8-ounce jar of powdered caffeinated coffee which is consumed (by the patient alone or with others) within a few hours. The resulting behaviors range from physical violence and fighting to hyperactive, noisy, intrusive nighttime behaviors that upset the whole ward and often require seclusion. Symptoms usually subside within 24 hours, but if these patients were in the community, these caffeine-induced behaviors would certainly be severe enough sometimes to precipitate an admission.

We also hear stories from families about personality change and agitated psychotic behaviors to any caffeine in their schizophrenic family member. A book publisher said, for instance, that he became interested in a book written by a psychiatrist mainly because it reported caffeine hypersensitivity with personality and behavioral change in schizophrenic patients. He had reported these changes in his family member to several psychiatrists, all of whom scoffed at him.

One study suggests that heavy caffeine users require much more antipsychotic medication to "cover" their psychoses that nonusers (Shisslak et al. 1985), which is entirely consistent with my clinical experience. Clinically, these higher

Reprint requests should be sent to Dr. A.P. Hyde, G. Werber Bryan Psychiatric Hospital, 220 Faison Dr., Columbia, SC 29203.
doses of antipsychotics seem to dull affect and initiative and, over time, patients appear to improve remarkably when they are persuaded to stop their caffeine habit with a consequent lowering of antipsychotic doses.

Clinical experience seems to reinforce the notion that, while steady caffeine intake in balance with appropriate antipsychotic doses may at worst dull many patients, it does not seem to produce radical changes in their psychotic status.

To sum up, there seems to be a small subgroup of schizophrenic patients who do appear to become behaviorally and often psychotically worsened in response to large doses of caffeine and who come to our attention because they cause much violence and destruction. I believe there are at least two clinical subtypes of patients in this group: (1) Schizophrenic patients who are impulsive and substance abusing, and (2) a small group of patients who are supersensitive to caffeine and whose clinical condition dramatically deteriorates under the influence of caffeine. Koczapski et al. (1989) are to be applauded for a careful, thoughtful study in a clinically important but confusing area.

References


The Author

Alexander P. Hyde, M.D., is Psychiatric Service Chief and Director of Medical Education, G. Werber Bryan Psychiatric Hospital, and Assistant Clinical Professor in Psychiatry, South Carolina School of Medicine, Columbia, SC.