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INTERNATIONAL EDITION

ACUTE DRUG ABUSE EMERGENCIES

A TREATMENT MANUAL

EDITED BY

PETER G. BOURNE, M.D.

Drug Abuse Council
Washington, D. C.

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D. Kleber
L. Klingler, Jr.
Knott
S. Latteri
. Lerner
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. Lubash
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R. Wesson

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MANAGEMENT OF ACUTE PANIC REACTIONS AND FLASHBACKS RESULTING FROM LSD INGESTION

J. Thomas Ungerleider and Ira M. Frank

I. Introduction

The use of LSD appears to be declining since the peak period of 1966–1967. This is in large part due to widely publicized reports of bad trips and possible chromosomal damage and to the decreased availability of pure LSD. Nonetheless, adverse LSD reactions now present an even greater challenge to the physician because even allegedly pure LSD is frequently adulterated with stimulants such as methedrine, cocaine or strychnine to produce an additional "kick." The dosage is no longer carefully controlled and varies unpredictably from capsule to capsule, and the patient may have taken LSD along with other drugs whose identity may or may not be known. In addition, drugs sold as THC, STP, mescaline, or other exotic substances are frequently found on analysis to contain LSD or LSD mixed with an adulterant. Furthermore, there is a tendency for only the more severe acute panic reactions

and flashbacks to present for medical treatment. The milder reactions are more commonly treated by nonmedical persons within the community.

Acute reactions to LSD may be divided into acute panic reactions, recurrent flashbacks and other acute adverse (toxic) reactions. We will describe our treatment of acute panic reactions and flashbacks in this chapter. Treatment of the other acute toxic reactions will be covered in the following chapter.

II. Acute Panic Reactions

A. Definition

In addition to its sympathomimetic effects upon the body, which include dilation of the pupils, an increase in the pulse rate and an increase in blood sugar, LSD typically produces profound changes in perception, judgment, time sense, spatial orientation, concentration, body image, and mood. Although they are sought after and enjoyed by most users, these effects sometimes become so frightening and so overwhelming that the person panics, feels totally helpless, and is afraid of losing control or fears that he is going crazy. The acute panic reaction, therefore, is a reaction to these typical LSD effects.

Acute panic reactions may be distinguished from the acute toxic reactions which result from an overdose of LSD, where the typical LSD effects become so intense that the patient may require medical treatment. Acute toxic reactions present with varying combinations of (*a*) somatic symptoms, e.g., palpitations, blurring of vision, or depersonalization; (*b*) perceptual changes, such as illusions and pseudohallucinations (images, usually of geometric forms and figures, which the subject realizes are not really there); (*c*) confusion and disorientation; (*d*) anxiety and depression; and (*e*) paranoid thinking, wherein the patient becomes suspicious of his friends, parents or doctors (Ungerleider, 1968). Acute panic reactions may also present with varying combinations of these symptoms but anxiety will be the main presenting complaint and may seem out of proportion to the other LSD effects.

B. Differential Diagnosis

LSD reactions may be difficult to distinguish from reactions to other hallucinogenic drugs such as mescaline, psilocybin, and DMT. Clinically they are treated very similarly. On the other hand LSD reactions must be differentiated from reactions to amphetamines, belladonna derivatives, and schizophrenic reactions.

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LSD and amphetamines produce sympathomimetic effects upon the body including dilation of the pupils, sweating and an increased pulse rate. These physical signs are usually much more prominent in the LSD reaction. The amphetamine user may have needle marks and appear malnourished, thin, and complain of not being able to sleep. He will often present with a clinical picture very similar to that of acute paranoid schizophrenia with paranoid delusions, loose associations, inability to concentrate, and inappropriate affect. He may appear very agitated or even assaultive and report vivid hallucinations. These hallucinations, like those in acute schizophrenia, will be predominantly auditory in contrast to the much more frequent visual illusions and pseudohallucinations of the LSD patient. Moreover, the chronic patient suffering from an amphetamine psychosis will often be unable to differentiate his hallucinations from reality, in contrast to the LSD patient whose apperception will be reasonably intact. Analysis of a urine sample from the amphetamine patient will remain positive for up to 72 hr after use.

The patient who has ingested a belladonna preparation such as Asthmador will also present with severe confusion, disorientation, inability to concentrate or to express a complete thought. In contrast to the amphetamine or LSD patient, his pupils will be completely dilated and will not react to light or accommodation. His skin will be warm, dry, and flushed; his mouth parched; and his body temperature may be severely elevated (Goldsmith, Frank, and Ungerleider, 1968).

We feel that a good history is essential. Since the patient comes to the physician for help he will usually reveal what he has taken or what he thinks he has taken. The patient's parents and friends will usually try to help if confidentiality is assured. A sample of the substance taken and of the gastric contents may be submitted for analysis. A sample of the patient's urine should be analyzed for the presence of amphetamines.

C. Treatment

In our experience, treatment of acute panic reactions should be directed towards relieving the patient's overwhelming anxiety. He should be taken to a warm, comfortable, quiet room away from noise, often anxious friends and relatives, and other disturbing stimuli. The physician, nurse or aide should then discuss his fears and his fantasies in a warm, calm, confident tone, reassuring the patient that he is not losing his mind and has not suffered irrevocable brain damage but that he is simply experiencing the effects of a drug which will gradually wear off. If the patient is confused and disoriented, reorienting statements are helpful such as "Today is Tuesday and you are in the UCLA

emergency room." He is encouraged to try to relax and enjoy the experience, to "flow with it." If a calm, supportive friend or relative is available whom the patient trusts, he should remain with the patient. In any event, the patient should not be left alone (Ungerleider and Frank, 1971).

If the patient is severely agitated and medication is necessary, Valium is both safe and effective. Dosages range from 15–30 mg orally (or intramuscularly, if the patient is unable to swallow) repeated every hour or every few hours as necessary until the patient is calm. This is especially true if the patient may have taken a combination of drugs or if the drug ingested cannot be identified. Chlorpromazine (Thorazine), 50–100 mg orally (or intramuscularly, if necessary), repeated every hour until the patient is calm, should be reserved for the most severely agitated patients who do not respond to Valium. The patient should then be lying down, and the pulse rate and blood pressure should be taken at frequent intervals. A vasopressor such as norepinephrine, Aramine, or Neo-Synephrine should be available for possible hypotensive reactions. Epinephrine should be avoided as it may produce paradoxical hypotension.

We feel that physical restraint should be avoided if at all possible as it usually accentuates the patient's anxiety and paranoia. Nonetheless, the patient must be protected against hurting himself or someone else. Hospitalization is usually not necessary but should be available. Once the acute reaction has subsided, the patient should have a psychiatric evaluation to determine whether individual or family psychotherapy would be helpful.

III. LSD Flashbacks

Flashbacks may occur many months after ingestion of any hallucinogenic drug. They are most commonly seen after taking LSD and frequently are enjoyed as a "free LSD trip" or experienced with minimal discomfort. Horowitz estimated that one out of every 20 LSD users experiences flashbacks, mostly perceptual distortions. Only the most severely distressing reactions present for medical treatment (Horowitz, 1969).

A. Definition

Flashbacks are spontaneous recurrences of the original LSD experience long after the acute effects have worn off. They may occur suddenly and unexpectedly with full intensity, although more typically

they are brief and attenuated. They usually last for only a few minutes but may last several hours. Patients may experience flashbacks after a single LSD trip but usually there is a history of many LSD ingestions. They may recur occasionally or as frequently as several times per day.

Shick and Smith (1970) divide flashbacks into three categories: perceptual flashbacks, somatic flashbacks, and emotional flashbacks. The perceptual flashbacks are the most common and the somatic and emotional flashbacks are the most distressing. They almost always are accompanied by an acute panic reaction. The perceptual flashbacks are most often visual although any sensory modality may be affected. Visual phenomena include intensification of colors, visual illusions such as halo effects, shimmering, pseudohallucinations (the appearance of geometric forms and figures which the patient realizes are not really there), and occasionally true hallucinations of insects or animals. Patients may experience frequent spontaneous visual imagery.

Somatic flashbacks are less common but much more disturbing. They consist of feelings of depersonalization in which the patient's body or body parts may feel unnatural, unreal, or foreign to him and may be accompanied by numbness, parathesias, or pain. Emotional flashbacks are often most upsetting and consist of a recreation of very distressing emotions originally associated with the acute LSD reaction. These emotions include loneliness, panic, or depression and may be so intense that the patient may become suicidal.

B. Differential Diagnosis

Flashbacks resulting from ingestion of LSD or other hallucinogenic drugs must be differentiated from prolonged LSD psychoses, from schizophrenic reactions, and from organic brain disease. Flashbacks occur long after the acute effects have worn off. They may occur spontaneously or be precipitated by smoking marihuana. They are usually fleeting although the onset is sudden. Patients are asymptomatic during the intervals between flashbacks. The chronic LSD reaction, in contrast, consists of prolonged psychosis or severe depression continuous with the original LSD experience. Neither the onset nor the cessation of symptoms occurs suddenly, as in the case of flashbacks. Patients with chronic LSD reactions or with schizophrenia are more likely to have a significant history of emotional disturbance prior to ingesting LSD and their illnesses tend to be unremitting. Patients with organic brain disease may initially present with symptoms resembling flashbacks but they eventually present a more severe organic brain syndrome with disturbance of judgment, orientation, memory, intellect, and emotions.

C. Treatment

LSD flashbacks are usually self-limiting and tend to diminish in frequency, intensity and duration with time. The patient should be reassured that he has not suffered brain damage and that he is not losing his mind. If he is very anxious or panicky, he should be treated like the patient experiencing an acute panic reaction. He should be taken into a quiet room and reassured in a calm, confident tone. Medication is usually unnecessary, but Valium, 10–20 mg, orally, may be given to allay the patient's anxiety. He may take Valium, 5 mg, orally, at the first sign of a recurrence. He should be cautioned against taking any hallucinogenic substance, including marihuana, as these substances may precipitate flashback reactions.

If flashbacks persist or become more intense, the patient should have a thorough psychiatric and neurological evaluation to determine if he has any additional underlying organic or emotional pathology. Since stress may play a very important part in precipitating flashbacks, psychotherapy is frequently helpful.

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