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Paradoxical Responses to Chlorpromazine After LSD

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Chlorpromazine has been used as one of the standard antidotes to LSD, but there have been a few reports of failures in responses and of adverse reactions. Ungerleider, J. T. et al.[1] reported one case which did not improve with high doses of oral or intramuscular chlorpromazine. Malitz, S. et al.[2] noted "increased motor restlessness, mounting anxiety, and brief intensification of visual hallucinations" following intravenous administration of chlorpromazine to terminate the LSD experience in experimental subjects. Abramson, H. A.[3] using a subjective questionnaire technique, reported that oral chlorpromazine produced "in some instances an apparently enhanced reaction to LSD"; this reaction was not reported after intramuscular injections.

The following two cases observed by the author would appear to support these impressions:

Case I.—A 33-year-old voluntary patient who had been in a mental hospital for the previous nine months with a diagnosis of pseudoneurotic schizophrenia was administered 100 micrograms of LSD-25 intravenously and was observed over the next four hours. He exhibited marked fluctuations in mood ranging from silly euphoria to extreme anxiety with subjective feelings of panic. The interview was terminated by giving him 25 mgm of chlorpromazine intravenously. This immediately produced extreme anxiety and he shouted "Where am I? Take me out of this. Don't ever make me go through this again." He thought he had been given another injection of LSD "to put me back into it and make me talk." He settled and slept overnight, but about half an hour after being given a 25 mgm tablet of chlorpromazine next morning, he experienced another episode of anxiety and accused the nurse of having given him "another dose of that stuff." He had similar reactions to oral chlorpromazine when two other 25 mgm tablets were given to him that day, but did not report any side-effects to the drug on the second and third days after the LSD experience.

Case II.—A 22-year-old university student reported to the Health Services three weeks after his third LSD "trip." The first two had been uncomplicated, but on the third one he had experienced panic, felt terrified, and had visual hallucinations of "people's guts all over the place . . . black hands coming out of nowhere." Over the next three weeks he had had several spontaneous recurrences of anxiety and visual hallucinations. He was given a prescription for chlorpromazine 25 mgm t.i.d. When seen again two weeks later he reported that the recurrences seemed to be less frequent over the past week, but indicated that he had felt little improvement during the first week. When asked about the medication he stated he had stopped taking it after the first two days, because it seemed to make him feel worse. He stated "In fact, I know it sounds funny, but I got quite paranoid after the first pill and wondered what kind of a game you were playing with me." He likened his subjective state after taking the chlorpromazine to the earlier spontaneous recurrences, and specifically recalled re-experiencing the "black hands" hallucination.

Any explanations of the above phenomena do not yet seem possible, and they appear open to psychological and biochemical theories. A psychological theory would have to rest somewhat on coincidence and would have to explain how the first patient reacted in a similar manner to intravenous and oral forms of the same drug when he did not appear to have any direct knowledge of their similarity. If a biochemical theory were entertained it would have to be rather complex and explain why such reports are so rare when chlorpromazine is so widely used as an antagonist of LSD. It may be that certain individuals are somehow susceptible to chlorpromazine which produces a non-specific mild akathisia with associated anxiety on which is superimposed the psychological component derived from the recent LSD experience. Such a response to chlorpromazine might also be explained on the basis that the dose was too low to counteract the LSD state or the symptoms of the recurrences.

On the other hand, the frequency with which spontaneous recurrences are reported does lead to the suspicion that LSD or some

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metabolite is still present in the brain for some time after the ingestion of LSD. Such recurrences often seem to be preceded by a mild state of anxiety, and it may be that some neurohormonal mechanism is called into play which interacts with an LSD residue. That apparently similar phenomena can occur in association with the administration of another chemical compound, i.e. chlorpromazine, lends further support to the possibility of a biochemical mechanism being involved.

It should also be borne in mind that knowledge about the tranquilizing value of phenothiazines is widely circulated in the lay psychedelic literature and it may be that some of the so-called "spontaneous" recurrences in people who take LSD informally may, on direct enquiry, turn out to be associated with the ingestion of chlorpromazine.

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There is some evidence that psychotherapists who dedicate themselves to special schools possess needs which the theoretical doctrines of the schools appear to satisfy, or cherish personality traits which coordinate with the school's methodological trajectories. Under such circumstances, the postulates of a school will provide the therapist with an anchor to stabilize him in the unchartered sea of treatment. His abiding faith in his system will enable him to approach with assurance the problems of his patient. It will give him confidence in the patient's capacities to benefit from treatment. At the same time the school's technical maneuvers, appealing to his logic, permit him to operate spontaneously and "genuinely" to heighten the patient's expectations of cure. These maneuvers are designed to deal with the presenting problem in terms of the assumptions and credos treasured by the particular school. . . . The fact that in the hands of skilled practitioners, patients get well through the use of any of the approaches . . .would seem to indicate that the psychotherapeutic experience encompasses factors other than those assigned to it by the different theoretical schools . . .

—LEWIS R. WOLBERG, M.D., *The Technique of Psychotherapy*, Grune and Stratton, New York, 1967.