Lysergic Acid Diethylamide (LSD-25) as a Facilitating Agent in Psychotherapy

ARTHUR L. CHANDLER, M.D., and MORTIMER A. HARTMAN, M.D., Beverly Hills, Calif.

Our use of drug-facilitated psychotherapy has been to aid repressed material to become conscious and to increase insight. Any method or tool which facilitates these processes has the possibility of being a valuable psychotherapeutic tool. Certain drugs on which we have done research, such as mescaline, ALD-52, ibogaine, psilocybin, Ditran (N-ethyl-3-piperidyl cyclopentylphenyl glycolate HCl), and lysergic acid diethylamide (LSD-25), have the capacity to broaden the patient's spectrum of awareness. If a patient uses this enhanced capacity to look inward, he is often enabled, particularly in the case of LSD-25, to see and experience many affects, childhood memories, conflicts, and impulse strivings which were previously blotted out by the repressive forces.

The present study was conducted in an attempt further to evaluate the use of LSD-25 as an aid to psychotherapy and to develop procedures and techniques for its most effective utilization with those patients for whom it appears most appropriate.

A. Description of Patient Group

The present report covers work done with 110 patients with whom LSD-25 was utilized as an aid in their treatment program. These patients ranged in age from 15 to 62 years, with an average of 37 years and 3 months. In terms of sex distribution, 62 of the patients were male and 48 were female. Table 1 shows the distribution of patients' primary psychiatric diagnoses according to the classification system of the American Psychiatric Association ("Diagnostic and Statistical Manual of Mental Disorders").

Submitted for publication Aug. 18, 1959.

ALD-52, psilocybin, and LSD-25 were supplied by Sandoz Pharmaceuticals.

TABLE 1.—*Distribution of the Patients of the Study According to Their Primary Psychiatric Diagnosis*

Diagnosis		No. of Cases
Psychoneurosis		44
Anxiety reaction	27	
Compulsive-obsessive reaction	3	
Phobic reaction	3	
Depressive reaction	9	
Conversion reaction	1	
Dissociative reaction	1	
Personality disorder		25
Schizoid	10	
Paranoid	3	
Compulsive	8	
Cyclothymic	4	
Personality trait disturbance		11
Passive-aggressive personality	7	
Inadequate personality	3	
Emotionally unstable personality	1	
Sociopathic disorder		22
Sexual deviant, homosexual	2	
Antisocial reaction	3	
Addiction, alcohol and/or narcotic	17	
Adult situational reaction	6	6
Miscellaneous		2
Schizophrenic reaction, residual type	1	
Physiological disturbance, gastrointestinal type	1	
Total	110	

The 110 patients in this group had a total of 690 sessions with LSD-25. Each session was approximately four to four and a half hours in duration. The number of sessions per patient was 1 to 26, with an average of 6.2 sessions per patient. This represents roughly about 30 therapy hours per patient. This figure includes many patients still in therapy, and consequently it does not represent the number of sessions for completed therapy. The sessions with the drug occurred at intervals of from one to five or six weeks, with an average interval of approximately two weeks. All of the patients had sought psychotherapy in a private practice setting of their own volition for help with their personal problems and symptoms. Thus

all patients showed at least a modicum of insight and motivation. Because of limited financial circumstance, 10 of the patients in the group were treated without charge. This group of 10 free patients was given more intensive therapy and received about twice as many sessions per patient as the paying group. Most of them were referred by Alcoholics Anonymous or Narcotics Anonymous. This group had more serious symptoms than the average patient, but had shown motivation toward eliminating their symptoms, indicated by joining these two organizations. Several outstanding therapeutic successes belong to this subgroup, but they required more therapy hours than the paying group.

B. Procedures

The procedures described below were originally based on the work of other investigators who have used LSD-25 therapeutically (the work of Cohen and Eisner was particularly helpful), with certain modifications based upon our own experience.

1. *Diagnostic and Screening Procedures.*

A number of patients were selected for the work with LSD-25 from patients already in nondrug therapy with us or with a close associate. The remainder, approximately 60 persons, were new patients who applied specifically for treatment in the LSD-25 program. For these an intake interview was held in which the nature of the LSD-25 work was described to the patient and his reasons for wanting treatment were evaluated. If a patient appeared to be a possible candidate for the treatment, a detailed psychiatric examination and evaluation followed. This included a detailed case history, mental examination, the formulation of a psychiatric diagnosis, and an estimate of the patient's suitability for work in a drug-assisted psychotherapy. The chief basis for the exclusion of a patient was the presence of an active psychosis, suicidal depression, or, in most cases, prepsychosis, especially with the history of an overt psychotic breakdown. As will be noted in Table 1, only one case of a psychosis in remission was included in the study.

2. *Preparation of the Patient.*—After a patient had been accepted, he was seen by the person who was to be his chief therapist in order to establish a therapeutic relationship. For new patients it was often felt desirable to see them a number of times before beginning work with the drug in order to prepare them for working with unconscious material. This included more detailed information as to what might be expected to occur during the sessions. It was found helpful to give patients some specific examples of the kinds of experience which they might have with the drug, as well as a brief description of the unconscious and its language of symbolism.

Such discussions help to allay the anxiety which the patient might otherwise have when confronted with the projections of the unconscious under LSD-25. The discussions help to support the conscious ego in its reaction to the previously unconscious material now elicited under LSD and to encourage tolerance and acceptance of previously unacceptable aspects of the unconscious. We have found that the more the patient understands about the procedures, the experience, and the rationale of the process the better is his therapeutic response. Originally an almost totally unstructured LSD response was elicited. This was found to slow down therapy considerably. Patients who are not oriented as to the type of emotional content, fantasies, and other unconscious material eventually bring forth the typical therapeutic material, but there are more blocks, delays, and anxieties encountered before and after the material is elicited. Fear that such discussions would aid the intellectualizing defenses has proved unwarranted. Care is taken to avoid any intellectual approach in the discussions with the patients. No psychiatric terminology is used, and no psychological system is presented to the patient. Patients who have had previous psychoanalysis or whose reading has brought them into contact with analytical terms will fre-

quently use these terms to describe their experiences, but they are encouraged to describe the experience in terms of their own feelings, using ordinary English. The intensity and genuineness of the affect accompanying the material produced can be taken as a measure of the freedom from such intellectualizing defenses. When it was felt by the therapist that the patient was ready to begin work with the drug, he was given more detailed instructions regarding certain "mechanical" features for the conduct of the sessions. Some of the more important of these points are itemized below.

(*a*) No sedatives, tranquilizers, or analgesics for at least 24 hours prior to each LSD-25 session.

(*b*) No food for four hours preceding the session. (This was to increase the absorption rate for the drug.)

(*c*) No driving of an automobile during the day and evening following a session.

(*d*) Arrangements for the patient to be picked up and to remain in the company and under the supervision of a responsible and congenial person during the remainder of the day and evening following a session. (It is not considered advisable to leave a patient on his own after a session.)

(*e*) A telephone check with the therapist some time during the evening following the session to report on any after-effects.

3. *Procedures for Conducting the Drug Sessions.*—The psychotherapy sessions with LSD-25 lasted from four to four and a half hours. The drug takes anywhere from 15 minutes to 2 hours to take effect. Depending on experience with the individual patient, 15 minutes to an hour is allowed for the drug to take effect. If it has not taken effect within an hour, the beginning of the session is devoted to psychotherapy, the probing of current problems, transference, and the patient's expectations and goals for the current session. At this time the therapist may call attention to areas which he feels have not been worked through. The frequency of the drug sessions varied from twice a week to once a month or so, depending upon the patient's rate of progress, the difficulties encountered in his regular psychotherapy between sessions with the drug, and certain practical considerations. The average interval between sessions is two weeks, with several hourly psychotherapeutic sessions between. The time interval between LSD sessions was increased as the patient made progress in the therapy.

(*a*) Dosage and Use of Antagonist Drugs: The technique of a gradual build-up in dosage from one session to the next was routinely utilized. The usual dose for a first session was 50μg., although some patients who showed a readier accessibility of the unconscious were started out with a 25μg. dose. The second session was generally conducted at a dosage level 25μg. higher than the first, unless the first reaction was so minimal as to indicate the need for a 50μg. step-up. Thus, by the fourth or fifth session the patient was usually receiving about 150μg., the amount depending upon his responsiveness to the drug. The main goal in the manipulation of dosage is to facilitate access to the unconscious without causing a "flooding," with its attendant intensification of anxiety and weakening of the ego structure. A very high dosage, or even a moderately high dosage too early in the series, can in some patients be such a stimulus to the emergence of unconscious material as to precipitate an actual state of panic. These states, which usually last about 15 to 20 minutes, and which most frequently occur about one to one and a half hours after ingestion of the drug, can usually be controlled by reassurance or interpretation, but occasionally the reaction may need to be interrupted with one of the antagonist drugs. Such panic experience is very painful for the patient, may make him so cautious that the productivity of the remainder of the session is impaired, and may sour him on the method of treatment altogether. The gradual build-up in dosage from one session to the next helps one to avoid this problem. The patient can more easily learn to "go with the drug"

and to make use of it, rather than be overwhelmed by it.

After the patient has learned to work cooperatively with the drug, it is very often desirable to drop back to the 100μg., or even the 75μg. dose. With these doses he is still able to let a great deal of unconscious material come through and may be better able to integrate it as it is emerging than he would be with a higher dose. At times, when an overwhelming amount of unconscious material evokes a too passive or a too disorganized ego reaction, pipradrol (Meratran) hydrochloride, 5 mg., methylphenidate (Ritalin) hydrochloride, 10 mg., or one of the amphetamines, 10 mg., may be given. This slightly decreases the LSD effect and stimulates the integrative cerebral activity in handling the material from the unconscious. About half an hour or so before time to terminate the session an antagonistic drug is administered. Although much of the LSD reaction has frequently worn off by the end of four or five hours, the antagonist was administered to almost all patients to prevent an after-perseveration of the experiences of the session. The antagonists that we have used have been secobarbital (Seconal) sodium, 1½ grains (100 mg.) and/or chlorpromazine (Thorazine) hydrochloride, 50 mg. Patients were also given a 1½ grain (100 mg.) capsule of secobarbital sodium to take home with them to be taken at bedtime if they were still feeling "keyed up" or experienced difficulty in falling asleep. About a third of our patients reported feeling no need for this additional sedation.

Fluctuating feelings of well-being, mild euphoria, depression, and anxiety were the commonest difficulties following LSD sessions. These feelings can be uncomfortably pronounced for several hours to several weeks. For those patients who experience unusual anxiety or uncomfortable fluctuations in mood we have prescribed prochlorperazine (Compazine) ethanedisulfonate, 10 mg. or chlorpromazine hydrochloride, 50 mg., t.i.d. until the symptoms subsided. In cases in which depression has occurred as part of the after-reaction to a session, pipradrol, 2.5 mg., or methylphenidate, 20 mg., t.i.d., has proved to be an effective agent. Methylphenidate has usually been the more effective. Depressive patients may experience an alleviation in their depressive mood for several days following a session, especially if they have been successful in discharging some of the guilt and hostility associated with their depression; but depressive feelings may be increased, particularly if the repressed hostility has not been adequately ventilated. Occasionally a conscience reaction to the hostility uncovered may result in a temporary increase of depressive feelings.

(*b*) Description of Therapeutic Setting and Techniques: Our therapeutic sessions which constitute the basis for the present report were conducted in regular psychotherapy rooms, which were comfortably furnished and conducive to relaxation. An effort was made to avoid the suggestion of the coldly aseptic "medical" atmosphere. The rooms were carpeted and furnished with easy chairs, a phonograph, and a couch. The patient was encouraged to lie on the couch and keep his eyes closed. A "sleep shield" was used to encourage attention to the subjective psychic processes. At times wax-and-cotton pellet ear plugs were also used further to reduce attention to external stimuli. Several patients who had been showing little or no reaction to the drug, even after two or three hours, were able to go very deeply into the reaction within several minutes after the insertion of the ear plugs.

Our observations confirm those of Cohen and Eisner[1] that music can be an effective stimulus in helping to bring out affectively charged memories and fantasies. We have found classical music generally best, although a great variety of different kinds of music can be effective, especially if the music can be selected in terms of specific aspects of the patient's emotions and background. Music was played throughout the sessions, sometimes as "background" and sometimes with

the instruction to "go with the music" and to have fantasies suggested by the music. The role of the therapist during the session is that of any friendly, interested, analytically oriented therapist. His task is to encourage, guide, and interpret. He must firmly encourage the patient to go against his neurosis in his everyday life, to utilize his new insights in the handling of his problems and interpersonal relations, and to strive for more maturity in his reactions to his environment. Transference is more easily analyzed with LSD-25 because of the intensification of affect which occurs, so that the patient finds it harder than usual to conceal his feelings toward the therapist, such as embarrassment, distrust, fear of criticism, hostility, and feelings of dependency. Greater availability of early memories and childhood emotions toward the parents which so frequently parallel the transference reactions also facilitate analysis of the transference. The material produced lends itself to the therapist's interpretations of the nature and operation of the less adaptive defenses. Patients more readily grasp interpretations because of their greater capacity for insight and reactivity. In a very real sense, the patient becomes much more "flexible" under the drug. This is because his capacity for spontaneous insight is greatly increased. It is obvious that the activity, sensitivity, and skill of the therapist are at least as important in LSD therapy as in other methods of psychotherapy. LSD-25 is at its best an aid to, and not a substitute for, skillful therapeutic technique. In fact, the emotional as well as the technical demands upon the therapist are greater than in other forms of therapy because of the greater prominence of the "primary process" type of material with which he must deal. The intensification of affect and the fact that the impulse life presents itself in much thinner disguise, or as none at all, may touch off unconscious problems in the therapist if his own analysis and his exploration of his unconscious under LSD had been inadequate. A therapist working with LSD-25 should have had extensive personal analysis himself, as well as a series of at least 20 to 40 sessions with the drug, to explore all aspects of his unconscious and to become familiar with all the typical symbols, indentifications, projections, and transference reactions. It is not enough to have taken it once or twice "just to see what it's like," for, as patients themselves almost invariably report, each session is progressively unfolding and different from the one before. The sessions appear to constitute a developmental series of experiences.

(*c*) Description of Usual Reactions to LSD and Material Elicited: Other methods of the therapeutic use of LSD or the nontherapeutic use of LSD may elicit different reactions and material. The following is a brief description of the typical reactions and material elicited within the framework of our method.

1. Effects upon the ego functions

From the standpoint of gross clinical observation, the drug does not appear to produce any serious or marked impairment in the major ego functions when used in proper dosage and in an active therapeutic relationship. The patient remains oriented for person, place, and time. He does not appear to lose contact with everyday reality but, rather, seems to gain contact with other levels of his own psyche and to be freer to direct his attention to the emotions and projections of his unconscious. With encouragement he can withdraw his awareness from the physical reality of the moment and allow his attention to become completely absorbed by the phenomena at the deeper psychic levels, but he retains the ability to focus his awareness back on to external objective reality whenever he chooses.

There is little amnesia for the events of the session. The patient can recall most of his experiences in rather full detail. Patients are required to write up the sessions 24 to 48 hours later in a free associative manner. No technique similar to posthypnotic suggestion is used. The patient's notes are compared with the therapist's to see the amount of re-repression which has oc-

curred. The portions forgotten may be re-repressed until compared with the notes made by the therapist. Reference has been made previously to the fact that the "primary process" is much more in evidence during the sessions. The emotions are more intensely felt, and primitive impulses are raised to conscious awareness. However, because the basic ego functions are retained, these impulses are expressed through imagery and fantasy, or just as simple awareness, rather than acted out in physical reality. Here the proper and conservative dosage is an important factor, as well as the nature of the therapeutic relationship. Occasionally a pillow will be pounded or thrown or a magazine torn up, but the patient limits his acting out to what is acceptable to a very permissive therapist. No physical assaults or property destruction has occurred. One final indication that the ego is not seriously impaired is the continued activity of the ego defenses. The defensive systems of the patient show up more clearly under the drug, so that the patient frequently is spontaneously aware of their functioning. This increase in the awareness of the operation of the defenses appears to give the patient a genuinely greater freedom of choice to "let go," to give up the defense, or at least to proceed in the therapeutic exploration in spite of the defense.

Reference is often made to the "hallucinations" produced by LSD-25. The most obvious difference between the imagery and fantasy which occurs with LSD-25 and hallucination is the factor of insight. Under LSD-25 the patients know that they are merely experiencing a "waking dream" or remembering some experience from the past. They do not believe that it is actually happening. With the eyes open and with sufficient encouragement, the patient may experience visual illusions, such as apparent changes in the facial appearance of the therapist; but the patient knows that these are not objectively real. Such distortions are more properly classified as illusions than as hallucinations. Occasionally a patient with a very weak ego structure temporarily "believes in" his imagery or waking dreams. When this occurs, direct discussion is usually sufficient to correct the false interpretation being made by the patient. Another difference between the LSD-25 illusions and psychotic hallucinations is that, far from being overwhelmed by the illusions, most patients under LSD-25 actually need to exert a certain amount of effort to offset the usual ego attitude of objective reality orientation. They must actually work cooperatively with the drug in order to achieve such imagery and illusions. Relaxing of the "letting-go" subjective orientation usually results in a return of the objective reality orientation and disappearance of the illusions.

We discuss at some length with the patient the distinction between psychic reality and objective reality. We encourage patients to live through and affectively experience their fantasies without trying at the time to evaluate their objective validity. Such evaluations are left until the end of the session or until the interviews between the drug sessions. The patient is told that in the world of psychic reality a great many things appear to be true which may have no correspondence to facts in the objective world. However, he is encouraged fully to experience these psychic realities, since they may be the very ones which, when repressed, give him trouble in his dealings with the objective world.

2. Dissociative responses

The majority of the responses to LSD can be classified as dissociative responses. Almost all types of dissociative defenses are met with in LSD therapy, including dissociations from reality, dissociations from self, and dissociations between affect and content. This does not mean that LSD biochemically causes dissociation. It is just as reasonable to assume that LSD causes such an upsurge of unconscious material that the dissociative defenses are universally called upon to meet this threat, even in normal human subjects.

3. Somatic reactions

The body can be an important vehicle for the communication and expression of unconscious content. The great majority of patients (70%-75%) show some kind of somatic reaction during one or more of their drug sessions. On the motor side these reactions include muscular tensions, twisting, trembling, posturing, wringing of hands, laughing, crying, and curling up into a fetal-like position. The patient is encouraged to go along with any impulses to motor movement or posturing which he feels. If he can do this, the fantasy or memory associated with the movement will usually come into awareness. On the sensory side, the somatic reactions include sensations of cold and warmth, hypersensitivity to sounds, general sensuous feelings of well-being throughout the body, sexual sensations, various paresthesias, such as tingling, numbness, and throbbing, and, lastly, pain. Pain is of frequent occurrence. It may be in any part of the body and is occasionally rather severe. It is an expression of a repressed affect, at times associated with the memory of some trauma. It frequently occurs with a fantasy which is only partially made conscious. One male patient was encouraged to go along with some abdominal pains he was having. The pains became severer and were accompanied by an assumption of the position of a woman in childbirth. Finally he became aware of a very clear fantasy of himself, as his mother, giving birth to one of his younger siblings. The patient is always encouraged to go along with the pain and to let it become more intense, until the fantasy with which it is associated breaks through into awareness. When this occurs, the pain usually disappears immediately. When it does not, it may be because the same pain represents more than one conflict. Sometimes a particular pain will symbolize several conflicts, each at a different level of the unconscious. So a pain may disappear for a while only to return again until its deeper meaning has been made conscious. One may even think of such psychosomatic pain as a defense against an affect, memory, or fantasy. In cases of prolonged clinging to such a pain and use of the complaints about it to forestall further work, it becomes necessary to point out the defensive value of such pains. There are few motor somatic reactions specific to LSD-25 itself. The only sensory reactions which occur commonly enough to attribute them to the operation of the drug per se are some slight feelings of chilliness as the drug begins to take effect and a feeling of mild twitching or tingling in the muscles, although the latter is by no means a uniform reaction, occurring in only about 40% of the cases. In addition to the disappearance of the somatic reactions as soon as proper interpretation has released the underlying unconscious affect, memory, or fantasy, the most convincing evidence of the essentially psychic nature of the LSD-25 somatic reactions comes from work with "waking dreams." Both of us have frequently observed that with many patients no drug is necessary to achieve symbolic fantasies and affective experiences similar to those which occur with LSD-25. The use of encouragement, certain suggestions as to how to turn their attention inward, the use of a sleep mask, and music are sufficient to produce deep fantasy material in patients who have never been exposed to any drug. Other patients, after sufficient experience with deep fantasy in LSD, can easily be encouraged to produce the same type of material, using only the sleep mask and music. Patients who are successful in this drugless deep fantasy therapy can then carry on their therapy successfully without the use of LSD-25. More recently we have found that a number of workers in Europe, particularly Desoille, in France, and Asagoli, in Italy, have been utilizing a similar "waking-dream" technique for years. It is not our intention to present a detailed discusson of "waking-dream" therapy. We have introduced it here in order to point out that all of the somatic symptoms occurring with LSD have also been observed to occur during drugless waking dreams as well. The most striking confirmation was the finding that patients whose somatic reac-

tion pattern under LSD was known showed exactly the same pattern of bodily symptoms or complaints when working with deep unconscious material under the "waking-dream" condition without any drug. The somatic symptoms under LSD are due almost entirely to the opening up and experiencing of the deep unconscious, rather than to the effects of the drug per se.

D. Kinds of Fantasy Content Obtained

A brief description of the types of fantasy material obtained in terms of content may be of help to those who intend to do work with the drug. The outline below attempts to be descriptive and to avoid reflecting any particular theoretical frame of reference. Work at the deep fantasy levels produces such a variety of material that a therapist with any particular theoretical orientation will find it easy to observe content which confirms his own pet theoretical system. The outline below is meant to be descriptive, and not explanatory.

1. *Recent Memories.*—Repressed current emotions, attitudes, or memories may be unrepressed and the experience emerge into awareness, usually with accompanying insight.

2. *Childhood Memories.*—It is very common for early childhood memories that have been repressed or forgotten to emerge, usually with great clarity of recall. In fact, the term "reliving" describes the more intense experiences better than the term "recall." Scenes may be pictured with great vividness of color and other detail, and the patient feels himself to be back in the situation and experiences the affects in all the original intensity. Some patients describe it by saying that it is as though a 3-D film tape were being run off in the visual field. Such material can at times be seen to contain elements of childhood wishful or fearful fantasies, mixed with what appears to be actual memories. Several patients have checked with parents concerning incidents or certain details, such as household furnishing, with striking confirmation, especially when it is considered that some of the memories dated back as early as the first year of life.

3. *Story-Drama Fantasies.*—In these fantasies the patient reports experiences that reflect his life problems, but with a change in locale, persons, or time. For example, a patient reported seeing Disney-like characters squabbling and having a fight. This later reminded him of the family situation with his brothers and sisters. We have found it best for the therapist to delay interpretation. It is best to let the fantasy unfold its own meaning by encouraging the patient to go along with it and see it through to the end. The defenses will operate during such fantasies. It is quite possible for the patient to deny affective involvement in or meaning to the fantasy or to rationalize its occurrence on some intellectualized basis while it is occurring on the visual screen. The selective operation of the defenses is observed in the degree of psychological "distance" from the action in the fantasy. Most defensively, the fantasy may be seen as "merely cartoon characters." Less defensively, the patient will see the figures as real people but through the eyes of a nonparticipating observer. Least defensively, there is actual involvement as one of the participants and a full affective experiencing of the episode.

4. *Humanity Identification.*—This refers to those fantasies in which the patient seems to feel some affect, such as love, grief, loneliness, or physical suffering, as though he is experiencing it as it has been felt by all people at all times and places. He feels the identity of his emotions with those of either all, or at least many, other human beings. He may see whole periods of history passing by on the screen of the mind. These usually represent projections of his more personal problems.

5. *Symbolic, Religious, Mystical, and Mythological Content.*—Various mythological characters and figures occur in the fantasies. Dragons, witches, fairies, satyrs, Japanese devil gods, etc., may occur, with strong affective significance. There is fre-

quent occurrence of religious symbols and myths. There may be fantasies of seeing God and the Devil "locked in mortal cosmic combat," or a visualization of details of the Crucifixion scene, or a fantasy of Moses and the Tablets. Such religious fantasies are just as frequent among scientifically and intellectually sophisticated patients with a strictly materialistic orientation as among more naïve patients. The resistance against religious emotions and thoughts is equal in intensity to the usual analytical resistances against forbidden content or affect, particularly in the more sophisticated patients.

6. *Philosophical Content.*—Many persons experience "philosophical" insights. The patient may report that he has become spontaneously aware of certain basic meanings, relationships, or broad generalizations concerning life, love, and hate. This may occur even in the case of poorly educated and unsophisticated subjects.

E. The Role of the Therapist

The therapist encourages the fullest experiencing of affect and "going with" the fantasies. He analyzes the resistances, especially those that show up in terms of transference reactions. Although the patient's contact with external reality is at least partially maintained, his fantasies may be experienced as "more real than reality." Patients are encouraged to accept such an experience as a "waking dream" and to seek to understand it in terms of its emotional meaning rather than to worry about its objective validity. If the patient seems confused about relation between objective reality and his psychic experiences under LSD, the nature of unconscious symbolization and the defensive, as well as wishful, aspect of dream work and of many of the religious, mystical, and philosophic experiences must be explained. For example, if a patient were to experience a childhood fantasy of having killed his baby brother in connection with the real or actual death of the latter, it would be very important to point out the ubiquitousness of the sibling death wish and the difficulty that the child may have in distinguishing between reality and his own guilt feelings in the case of the actual death of a sibling. Fantasies of reincarnation may be used defensively as a real belief to protect the patient against death fears. The defensive nature of such a belief when foreign to the patient's religious background must be pointed out.

TABLE 2.—*Rating Categories of Improvement and the Number of Patients Who Received Each Rating*

No.	Rating	
4	+5	Outstanding improvement
20	+4	Marked improvement
26	+3	Considerable improvement
23	+2	Some improvement
15	+1	Slight improvement
19	+0	Little or no change
3	−1	Slightly worse
0	−2	Difinitely worse
N=110		

Results.—The results of using LSD-25 as an aid in psychotherapy were evaluated in terms of ratings made by the therapists. An eight-category scale was used to rate the results for each patient. Table 2 shows the rating categories used and the number of patients who received each rating.

Evaluation of the degree of improvement was based upon a consideration of all available clinical factors, such as improvement in the presenting symptom picture, reports from family or friends as to apparent progress, evidence of actual behavioral change in handling real-life problem situations, manner and bearing during the regular therapeutic interviews, including productivity and the ability to cope wth anxiety-provoking material, and, finally, the patient's own subjective report of his degree of improvement. The subjective evaluation involves the error that the patient's enthusiasm will cause him to overevaluate his improvement, but this subjective error is at least partially corrected by the heavy weighting of other, more objective evidences of improvement. It will be noted from an examination of Table 2 that the modal rating

was +3, "considerable improvement." Taking the top three categories, we find that 45.5% showed considerable or better improvement. Including the category "some improvement," we obtain the figure of 66.4%. Looking at the other end of the continuum, we find that 20% showed little or no change, or some worsening in their condition. Of the total 110 cases, it will be recalled that 60 have discontinued treatment, either with or without mutual agreement by the therapist. The remaining 50 are still in treatment. In comparing the progress rating of cases of terminated treatment with those still in treatment, no specific differences were found. Therefore the results for the total group have been pooled together. Another breakdown was made by analyzing the results of 32 patients who had been in previous psychotherapy with one of us or a close associate for six months or more previous to the LSD work. A rating was made for each of these patients in terms of the rate of progress with LSD compared with the rate of progress in drugless psychotherapy. Table 3 shows the rating of progress acceleration and the number of patients falling in each.

Examination of Table 3 shows that the therapists felt that there had been a definitely noticeable or greater acceleration in the rate of therapeutic progress as a result of introducing LSD as an aid to therapy for 69% of the cases.

In addition, there were a number of cases in which previous therapy, sometimes with several different therapists, had produced little or no improvement but in which introduction of LSD-25 effected a real breakthrough, followed by continued therapeutic improvement. In the study are several patients who had had as much as six years of previous analytic therapy, with small benefit, and who, after 20 to 40 LSD sessions, either were discharged as markedly improved or appeared to be well on their way to the resolution of their basic problems.

TABLE 3.—*Progress Acceleration Rating and Number of Patients Falling in Each Category* *

Rating	Change in Rate of Progress	No.	Per Cent
+2	Marked acceleration	9	28
+1	Definitely noticeable acceleration	13	41
0	Little or no change in rate	10	31
		32	

* There were no cases of deceleration.

TABLE 4.—*Average Progress Ratings for Each Diagnostic Group* *

Diagnosis	No. of Cases	Average Progress Rating
Psychoneurosis	44	2.3
Anxiety reaction	27	2.5
Compulsive-obsessive reaction	3	1.2
Phobic reaction	3	.7
Depressive reaction	9	2.6
Conversion reaction	1	2
Dissociative reaction	1	4
Personality disorder	25	2.0
Schizoid	10	1.9
Paranoid	3	1.0
Compulsive	8	2.0
Cyclothymic	4	3.0
Personality trait disturbance	11	1.3
Passive-aggressive personality	7	1.3
Inadequate personality	3	2.0
Emotionally unstable personality	1	2
Sociopathic disorder	22	2.2
Sexual deviant, homosexual	2	2.5
Antisocial reaction	3	2.0
Addiction, alcohol, and/or narcotic	17	2.2
Adult situational reaction	6	2.8
Miscellaneous		
Schizophrenic reaction, residual type	1	4
Physiological disturbance, gastrointestinal type	1	2

* Diagnostic groupings are given in terms of the American Psychiatric Association's system of classification.

Although the number of cases in the various subgroups is insufficient for any statistical validation, we have found that the patients with character trait disturbances do most poorly. The immature, generally unstable, inadequate, or passive-dependent personalities do not appear to do well with the drug. This is in keeping with the findings of Cohen and Eisner.[2] Among the personality disorders, the subgroup which did the best was that of the cyclothymic personalities. The emotionally labile person is better able to make use of the LSD-25 experience than the more rigidly defended person. Among the psychoneurotics, the patients with anx-

iety reactions and the simple neurotic depressive reactions did the best. Progress was greatest in those with illness diagnosed as adult situational reaction, i.e., those closest to "normal" emotional health to begin with. An encouraging result is the promising progress of those with addictions. Most of these patients were alcoholic problems, but seven of these also had a recent history of drug addiction. The fact that this group did as well as it did suggests the possibility that LSD-25 may be a valuable therapeutic aid in work with this most difficult group.

F. Advantages and Disadvantages

Advantages.—1. The broadening of the spectrum of conscious awareness makes for the greater availability of early memories in nearly all patients. Several patients who had almost complete amnesia for childhood events before 10 or 11 years of age uncovered a great wealth of material which proved of tremendous therapeutic benefit.

2. LSD-25 tends to produce great intensification in the level of affectivity during the session. This gives greater vividness and reality to the material which is dealt with.

3. There tends to be a reduction in the resistance to communicating transference feelings during the sessions.

4. The increase in the scope of awareness produced by the drug includes a sharpening in the awareness of the ego structure itself and the various ego defensive mechanisms. The patient can literally "see" himself resisting, rationalizing, denying, isolating, etc.

5. With LSD as an aid, it has been possible to "reach" and work with patients who are otherwise unresponsive to psychotherapy. This includes a number with severe characterological defense systems of the obsessive-compulsive and acting-out types, as well as several of the overly inhibited schizoid type. Because initial therapeutic gains can occur in a dramatic manner and, after a shorter period than is the case with psychotherapy in general, some patients have sought treatment and benefited who would never have accepted the long-term schedule required in psychoanalytic or most other forms of psychotherapy.

Disadvantages.—1. The sessions are long, four to four and one-half hours on the average.

2. The patient requires more careful observation and supervision following therapy.

3. LSD therapy is emotionally more taxing on the therapist than most other types of psychotherapy. Some therapists are unsuited for LSD therapy because they find the emotionally charged and frequently hostile expressions of a patient over a four-hour period too exhausting. The therapist may find his tolerance for the emotionality of the LSD session increasing as he himself undergoes a course of LSD sessions.

4. The dramatic revelation of the unconscious which may occur with the drug can cause some patients to expect the drug to do all the work for them. They may be impatient with the more pedestrian pace of regular psychotherapy sessions devoted to the working through an application of insights to their daily lives. Sessions with the drug because of their sometimes dramatic nature do, especially during the earlier sessions, foster the patient's expectation that he will be completely transformed by the experience. This passive, magical attitude must be dealt with during the regular therapy sessions if it is not to lead to either a feeling of discouraged failure when the transformation does not occur spontaneously or a continuation of immature power projections on the drug or therapist, with consequent failure to assume more mature self-directing responsibility.

5. Occasionally mystic or religious experiences occur which the patient believes give him the ultimate insight and a transcending integrative reaction. Our experience indicates that these usually represent a premature effort to handle the overwhelming hostility which arises from the unconscious. Such a reaction is frequently at least a temporarily effective block to further insights involving the "negative emotions," such as hostility and destructiveness. Two

cases withdrew from therapy at this point. From a practical point of view this rerepression of hostility did not adversely affect their life adjustment.

6. The delusion that the drug in itself can produce a cure may be a temptation to the immature therapist. No matter how effective a drug is in "making the unconscious conscious," it still requires much time and many sessions to work through the transference and to integrate the insights gained into the person's everyday living. This requires not only skill but patient and persevering effort on the part of the therapist.

7. There is some evidence that because of the reduction in psychological "distance" from the unconscious there may be a greater tendency for acting out to occur during the few days following a session. Minimal acting out certainly has been observed in those patients prone to it in their prior life. Whether or not this tendency is greater with LSD than with any actively moving uncovering psychotherapy is difficult to determine. One form that this acting out may take in those predisposed to it is one which is not so much dangerous as embarrassing to the patient's friends or relatives and to the patient himself after he "simmers down." This is the frequent tendency to feel that he has discovered the answer to everything, that he has acquired philosophical insights into the meaning of life, the nature of the universe, etc. If utilized in the proper manner during regular psychotherapy, and not isolated from the problems of everyday living, these philosophical understandings can be a valuable part of the person's growth, but they will prove harmful to him if he considers them as ultimate truths or uses them as a defensive means of supporting neurotic delusions of superiority.

8. A further disadvantage is the risk involved in its use. As Cohen and Eisner have pointed out, the risks involved are related to the psychologic and not to the pharmacologic effects of the drug. The commonest risk mentioned in the literature is that of suicide. Stoll [3] refers to two suicides in Europe following LSD-25. One of these patients had been given the drug without her knowledge. Savage [4] had one schizophrenic patient who committed suicide after treatment with the drug. Our sample includes one suicide. This was a patient who had a long history of alcoholic and narcotic addiction. She was a depressive and had made three previous genuine suicidal attempts, for which she had been hospitalized in a state mental institution and had been given a series of 50 electroshock treatments. Previous psychiatrists, as well as A.A. and N.A., had failed to help her. She came for LSD-25 therapy at the insistence of friends, and confessed to the therapist that she was intending to end her life that night anyway. She refused further hospitalization because of a dread of further shock treatments, and also because of financial embarrassment. During her first and only session she abreacted feelings of guilt and hostility, experiencing much relief and an apparent change in attitude, which carried over to the regular psychotherapy sessions the following week. Over the following weekend she became depressed and insisted that her husband obtain some meperidine (Demerol), to which she had previously been addicted for some time. In spite of previous instructions and warnings to the contrary, the husband failed to call the therapist, as agreed, or members of A.A. and N.A. who had volunteered to stand 24-hour-a-day watch with her at any time her husband was not in immediate attendance. He became furious and walked out, leaving her alone all night. When he returned the next day, she had taken a lethal dose of snail poison. This was one of the earlier cases. The failure of the nonprofessional 24-hour-a-day watch program led to an iron-clad rule that all suicidal patients must be hospitalized and that any patient likely to relapse into narcotic addiction must be hospitalized. Another patient, a homosexual with chronic alcoholism, following an almost lifelong pattern, got drunk and took an overdose of sleeping pills on several occasions when frustrated by his life situation.

He broke this pattern only after his last bout resulted in a case of pneumonia which necessitated hospitalization. This was followed by a clear recognition of the underlying suicidal wish.

Professional workers often refer to the danger of precipitating a psychosis, in spite of the fact that there is little to support this in the literature. We have observed one case of a temporary psychosis lasting the remainder of the day on which the patient received his LSD treatment. This patient was a 19-year-old white youth with a history of a previous psychotic breakdown for which he had received electroshock in a psychiatric institution. In his first, and only, treatment he experienced a religious conversion reaction following an upsurging of murderous hostility toward his mother, to whom he had been born out of wedlock. He had fantasied his withered arm to be the result of a murderous assault upon him by his mother during infancy. He then became hyperactive and began to affirm repeatedly that "God is good." Temporary hospitalization was recommended but was refused by his relatives. They were able to handle him that evening, and by the time he awakened in the morning there was no trace of his psychotic break. He returned for an hour of psychotherapy and showed good insight into his problem and the meaning of the religious reaction. In spite of the violence of his overreaction, he felt he had gained a great deal through this experience. This is the only case in which the therapist was unable to control the overreaction of the patient during the session to the material elicited by LSD therapy.

The overly enthusiastic reaction to certain philosophical "insights" previously referred to might be considered by some as transient psychotic-like reactions, but they certainly do not show the general breakdown of ego functions usually considered to characterize a psychosis. For example, we have never seen a defect in thinking functions as an after-effect of LSD-25.

In the bulk of the patients treated with the LSD the illness was of such a degree as to be unacceptable for analysis or any type of deep psychotherapy. Some of the patients had had varying types of psychoanalysis for periods up to six years without significant benefit. The few patients who could be considered acceptable candidates for orthodox analysis made extremely rapid strides with LSD therapy and showed very little emotional disturbances between sessions.

Summary

This paper reports the treatment of 110 patients with LSD therapy, many of whom are still in the process of treatment.

In conjunction with LSD therapy, deep-fantasy or waking-dream technique was used. With LSD therapy most patients showed greater depth of therapy and greater acceleration of therapy than they had shown with previous drugless psychotherapy. Many patients who would be unacceptable for analysis or almost any type of deep psychotherapy were benefited by LSD therapy.

One suicide is reported in a suicidal patient following one LSD therapy treatment.

One case in which a temporary psychotic reaction occurred on the evening following an LSD therapy session is reported. No other serious reaction occurred in response to the material elicited by LSD-25 therapy.

Psychiatric Institute of Beverly Hills, 450 N. Bedford Dr.

REFERENCES

1. Cohen, S., and Eisner, B.: The Use of Lysergic Acid Diethylamide, read before the Section on Nervous and Mental Diseases at the 107th Annual Meeting of the American Medical Association, San Francisco, June 25, 1958.

2. Cohen, S., and Eisner, B.: Psychotherapy with Lysergic Acid Diethylamide, from the Neuropsychiatric Hospital, Veterans Administration Center, Los Angeles 25.

3. Stoll, W.: Personal communication to the authors.

4. Denber, H. C. B., Chairman: Psychodynamic and Therapeutic Aspects of Mescaline and Lysergic Acid Diethylamide: Round Table, J. Nerv. & Ment. Dis. 125:423-451, 1957.

5. Abramson, H. A.: Lysergic Acid Diethylamide (LSD-25): III. As an Adjunct to Psychotherapy, with Elimination of Fear of Homosexuality, J. Psychol. 39:127-155, 1955.

6. Abramson, H. A.: Lysergic Acid Diethylamide (LSD-25): XIX. As an Adjunct to Brief Psychotherapy, with Special Reference to Ego Enhancement, J. Psychol. 41:199-299, 1956.

7. Abramson, H. A.: Verbatim Recording and Transference Studies with Lysergic Acid Diethylamide (LSD-25), in Psychodynamic and Therapeutic Aspects of Mescaline and Lysergic Acid Diethylamide, J. Nerv. & Ment. Dis. 125: 423-451, 1957, pp. 444-450.

8. Martin, A. J.: LSD (Lysergic Acid Diethylamide) Treatment of Chronic Psychoneurotic Patients Under Day-Hospital Conditions, Internat. J. Soc. Psychiat. 3:188-195, 1957.

9. Sandison, R. A.: LSD Treatment for Psychoneurosis: Lysergic Acid Diethylamide for Release of Depression, Nurs. Mirror 100:1529-1530, 1955.

10. Sandison, R. A.: Psychological Aspects of the LSD Treatment of the Neuroses, J. Ment. Sc. 100:508-515, 1954.

11. Sandison, R. A.; Spencer, A. M., and Whitelaw, J. D. A.: The Therapeutic Value of Lysergic Acid Diethylamide in Mental Illness, J. Ment. Sc. 100:491-507, 1954.

12. Sandison, R. A., and Whitelaw, J. D.: Further Studies in the Therapeutic Value of Lysergic Acid Diethylamide in Mental Illness, J. Ment. Sc. 103:332-343, 1957.

13. Savage, C.: Lysergic Acid Diethylamide (LSD-25): A Clinical-Psychological Study, Am. J. Psychiat. 108:896-900, 1952.

14. Savage, C.: The LSD Psychosis as a Transaction Between the Psychiatrist and the Patient, in American Psychiatric Association's Proceedings of Round Table on Lysergic Acid Diethylamide and Mescaline in Experimental Psychiatry, Annual Meeting, May 12, 1955, Atlantic City, edited by L. Cholden, New York, Grune & Stratton, Inc., 1956, p. 35.

15. Savage, C.: The Resolution and Subsequent Remobilization of Resistance by LSD in Psychotherapy, in Psychodynamic and Therapeutic Aspects of Mescaline and Lysergic Acid Diethylamide, J. Nerv. & Ment. Dis. 125:423-451, 1957, pp. 434-437.

16. Stevenson, I.: Comments on the Psychological Effects of Mescaline and Allied Drugs, in Psychodynamic and Therapeutic Aspects of Mescaline and Lysergic Acid Diethylamide: Round Table, J. Nerv. & Ment. Dis. 125:423-451, 1957, pp. 438-442.