

Pentothal Interview in the Treatment of Chronic Alcoholism

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DURING the past 50 years there has been a gradual increase in the use of psychobiochemical drugs in the treatment of the mentally ill. As early as 1882 Griesinger described beneficial results following the induction of deep sleep. In 1901 Wolfe reported the results obtained from the use of trional.

Real impetus was given to this type of treatment when in 1930 Bleckwenn^{2,3,4} introduced sodium amytal in the treatment of neuropsychiatric disorders. He first used the drug intravenously to produce rest and sleep in disturbed psychotic cases. He noted that under its influence patients demonstrated normal lucid intervals with spontaneous speech even in protracted cases of catatonic dementia praecox.

J. S. Horsley⁷ in 1936 introduced the term narcoanalysis to describe the procedure of using intravenous barbiturates for the purpose of conducting psychiatric interviews with patients in variable stages of narcosis. He used small doses of fast acting barbiturates to produce a state of relaxation with heightened suggestibilities and in this state he found the patient would discuss more freely his mental conflicts.

Sullivan¹⁴ and Morris¹² also report on the use of sodium amytal as a psychotherapeutic agent. Sullivan concluded "Sodium amytal is a valuable diagnostic and therapeutic agent in psychiatry meriting more usage than given."⁵ Morris reports the rapid removal of conversion symptoms with the use of intravenous barbiturates combined with psychotherapy in the form of reassurance, suggestion, rational explanation and education. He also found it valuable in the differential diagnosis of malingering from conversion hysteria.

Evipan has also been used for similar purposes. The technique as administered by Stungo¹³ in 1941 is similar to that employed in the use of sodium amytal. He believes this drug also provided a useful and rapid method of investigating suspected neuroses.

The use of sodium pentothal in the treatment of chronic alcoholism was begun by the author in April 1941. The idea was conceived as a result of observing the unconscious speech of patients who had been given pentothal anesthetic. At the time it was thought to be original, but a review of the literature disclosed that sodium pentothal had been used previously in treating certain psychiatric conditions. However, no extensive work where it has been used exclusively in the treatment of chronic alcoholism has as yet come to our attention.

During the recent war pentothal was widely used in the treatment of war neurosis. Grinker and Spie-

gal⁶ reported good results from its use in these cases encountered in the northwest African theatre. They employed it for narcosisynthesis and for what they term "narcosynthesis." They report that "under the influence of the drug and the work of the therapist there occurs a dosed release of intense repressed emotions in quantities small enough so that the weakened or broken ego, strengthened by the therapist, resumes its appraising and rationalizing functions." They also feel that it enables the therapist to more accurately estimate the amount of repressed anxiety.

As early as 1942 Wilde²⁰ described the use of pentothal hypnosis in the treatment of war neurosis. Besides being valuable in treating hysteria, anxiety states, and the after effects of injuries to the head and spine, he also found it useful as a diagnostic aid in borderline psychosis, mental deficiency and epilepsy. He believes pentothal hypnosis is a rapid and safe method of psychotherapy. Wilbur¹⁹ prefers the "ultra-short-acting" barbiturates, sodium pentothal and sodium thioethamyl because recovery is so rapid and a better control of the depth of narcosis can be maintained.

Primarily our use of pentothal interview in the treatment of chronic alcoholism has been and probably will continue to be, as an adjunct in a more comprehensive treatment program. The bulwark of this program is the conditioned reflex therapy as described by Voegtlin^{15,16,17} and Lemere, et al.^{8,9,10,11} This program includes establishment of a conditioned reflex aversion to all types of alcoholic beverages and the careful follow-up of the patient for at least a year following the initial treatment. This follow-up care includes reinforcement of the initial aversion by subsequent single conditioning seances and a rehabilitation program aimed at the rehabilitation of the patient from a marital, social and occupational standpoint.

This does not mean, however, that pentothal interview will not play an important part in the treatment of certain cases. According to our present concept it can be useful in treating the alcoholic, first as a diagnostic aid and, second, as an aid to psychotherapy in selected cases. We believe that it is of considerable value as an aid to diagnosis and we use it in the following way. The patient is admitted to the sanitarium for treatment of chronic alcoholism. If he is intoxicated the acute phase of his alcoholism is treated first. When he is mentally clear an initial interview is held with the patient during which his history is obtained. Usually this history is corroborated by a relative or friend. If this history reveals the patient belongs in one of six groups which we have arbitrarily set up as constituting a criterion for comprehensive therapy, he is given pentothal inter-

view. These groups, some of which have been previously described by Lemere, are as follows:

1. All patients under 30 years of age. We have found this group of patients to respond poorly to conditioned reflex therapy alone.
2. Patients with a criminal or psychotic history.
3. Patients who have relapsed twice following conditioning therapy with rehabilitation.
4. Those patients whose history is suggestive of constitutional psychopathic personalities.
5. Those patients commonly classed in the inadequate personality group.
6. Those patients not fitting into any of the other groups for whom we believe additional help will be necessary in order for them to maintain total abstinence. This includes recently returned veterans who have had a large amount of combat experience and those having a difficult time adjusting to civilian life.

It also includes those patients whose lives have become extremely difficult because of hardships, such as female alcoholics in the menopause who have suffered some severe psychic trauma. For example, loss of a husband, a son or similar tragedy. Recently this type of case has become quite common.

If a considerable amount of traumatic material or conflict is found in the first pentothal interview it may be repeated one or more times or until an accurate appraisal of the patient's personality, psychic make-up and psychotherapeutic needs can be made. The technique of conducting the pentothal interview which we employ is as follows:

The patient is placed in bed in a comfortable position and the arm is fastened to an arm board. One and a half grams of sodium pentothal is mixed in two hundred cubic centimeters of sterile distilled water. This solution is mixed in a standard intravenous bottle to which is connected a regulation intravenous tubing, with a Murphy-drip attachment. The needle is then inserted into the basilic vein and the solution is started. The rate of flow is easily controlled by means of a set screw applied to the tubing. Twenty to forty drops a minute usually maintains a satisfactory depth of narcosis. The therapist is seated near the patient's head so that the chin may be elevated if the narcosis should become too deep. One-half to one gram of pentothal is all that is usually required to conduct a two-hour interview. The reserve quantity of solution is merely an insurance against disturbing the continuity of the interview. In our hands this technique of administration has proven very satisfactory. We believe it offers an excellent means of controlling the depth of narcosis and we have had no undesirable effects from its administration in this manner.

Some of the advantages of the procedure as a diagnostic aid are that it facilitates taking a very complete personality history. For this purpose we have compiled a lengthy and rather detailed analytical questionnaire which quite thoroughly covers not only the patient's drinking history but also his early childhood, adolescence, marital history, sexual de-

velopment, financial and occupational status and many other factors. In this manner the time element is greatly reduced. This is of an economic importance for many patients and of advantage in those institutions where the number of admissions makes the more time-consuming type of psychiatric analysis impossible from a practical standpoint.

From a psychotherapeutic aspect, treatment, of course, is directed toward the goal of maintaining permanent and complete abstinence. As pointed out by Voegtlin¹⁸ the majority of cases automatically adjust to their environment if sobriety can be maintained. When the initial pentothal interview reveals traumatic or conflict material in the above mentioned groups of patients, psychotherapy is begun. It is started during the interview and is carried on at frequent conferences for a period of at least one year, the purpose being to assist the patient in adjusting to his more difficult problems, and to enable him to face reality and still maintain total abstinence.

We have found pentothal to be helpful in the conduct of this therapy in several different ways. The alcoholic is frequently a very sensitive individual. Under the narcosis of pentothal he lends himself more readily to a careful, thorough and unrationalized developmental history. A positive transference is frequently made in a very short time. Under pentothal there has also been noticed a marked release of inhibitions and a lowering of psychic resistances. Also the free discussion of conflict material while gradually allowing the patient to awaken is beneficial to the establishment of insight in certain types of problems.

HYPNOTIC SUGGESTION

Hypnotic suggestion is also utilized and we believe it to be worthwhile in these cases. This is particularly true in treatment of alcoholic cases, if the hypnotic suggestion is employed in the manner Erickson⁵ believes it should be. He states: "Successful hypnotic psychotherapy should be systematically directed to re-education of the patient, a development of insight into the nature of his problems and the promotion of his earnest desires to readjust himself to the realities of life and the problems confronting him." Altman,¹ in 1943 also laid particular stress on the role which suggestion plays in the use of any hypnotic drug as an adjuvant to psychotherapy.

Table 1 shows the results obtained by pentothal interview alone or in combination with other types of therapy. A total of 35 patients are reported. A much larger series is not reported because sufficient time has not elapsed since treatment. However, the patients of this group have been observed long enough to warrant a review of the results. It should be stated that these patients were selected as being the most difficult cases found in a series of nearly 4,000 chronic alcoholics. Previously, they were regarded as hopeless cases having failed to respond to other types of intensive therapy. The idea of this selection was that if any results could be obtained with pentothal interview in this group of unfavorable patients we might expect even better results in a more desir-

able type of patient. These patients also represent the experimental phase of the treatment and much improvement has been made in the manner of administration as well as in the method of handling them. The results in more recent cases have led us to hope that this improvement will be evident in future statistical evaluation. It should be explained that patients who resumed drinking even for a short period of time are classed as relapses even though six of the seventeen reported as relapsed have since become totally abstinent. Their periods of sobriety, however, have not been adequate to consider them as "cured."

Group 1 represents patients who had received conditioned reflex therapy with rehabilitation twice previously and had relapsed after both treatments. They were admitted to the sanitarium and were given pentothal interview and psychotherapy with follow-up conferences. No conditioned reflex therapy was administered to this group during this treatment period. There are nine patients in this group; four (44.4 per cent) have remained abstinent. The average period of total abstinence which had been maintained by these successful patients when the analysis was taken was 18 months.

Group 2 represents patients who received pentothal interview with psychotherapy in addition to conditioned reflex therapy as an initial treatment. The results in this group were not good. However, it should be pointed out that they were a very poor type of patient and were the most severe type of alcoholic. Formerly the patients in this group would not have been accepted for treatment because of the hopeless prognosis. Three had long criminal histories and one was admitted in an acute psychotic state. There are seven patients in this group; three (42.8 per cent) have remained abstinent. The average period of total abstinence which had been maintained by these successful patients when the analysis was taken was 12 months.

Group 3 shows patients who had relapsed following one treatment with conditioned reflex therapy. They were readmitted and given pentothal interview with psychotherapy and also conditioned reflex therapy. This group contains five psychopathic personalities out of a total of eight patients. Four (50 per

cent) have remained abstinent. The average period of total abstinence which had been maintained by these successful patients when the analysis was taken was eight months.

Group 4 is similar to Group 3 except that the patients of this group had relapsed two or more times following conditioned reflex therapy previous to their admission for this treatment. There are 11 patients in this group. Seven (63.6 per cent) have remained abstinent. The 63.6 per cent of success in this group is immeasurably better than we had been able to obtain by merely conditioning the patients a third time. The average period of total abstinence which had been maintained by these successful patients when the analysis was taken was 11 months.

The fact that conditioning procedures did not apparently play a major role in this group of patients, as is evidenced by the fact that patients did nearly as well without conditioning as with it, should not be construed as meaning that conditioning is of little value in other types of cases—for this group consists entirely of patients who have either already demonstrated that they were not susceptible to conditioning (because they had already relapsed twice) or else belonged to a class which Lemere has already indicated as being unsuitable for conditioned reflex therapy alone.

The practice of giving relapsed patients pentothal and psychotherapy alone, as a routine procedure, was abandoned, however for several reasons: First, we believe the sincere patient should be given every advantage possible in order to help him overcome his illness. Second, we believe that the conditioned reflex is of advantage to these patients suffering from psychiatric disorders in that it assists them in maintaining sobriety during the periods when they are trying to adjust themselves satisfactorily to their environments.

SUMMARY

A discussion of the use of pentothal interview in the treatment of 35 cases of chronic alcoholism over the period of the last five years is presented. These cases were selected from a series of nearly 4,000 cases of chronic alcoholism because they were the

TABLE 1.—Results Obtained by Pentothal Interview Alone or in Combination with Other Types of Therapy.

Type of Treatment	Number of			Percentage of Abstinence	Average Length of Abstinence When Analysis Taken
	Patients	Relapsed	Abstinent		
Group 1. Pentothal interview and psychotherapy <i>only</i> . This group had relapsed following two conditioned reflex treatments	9	5	4	44.4%	18 mo.
Group 2. Pentothal interview with psychotherapy plus conditioned reflex therapy on <i>initial</i> treatment.....	7	4	3	42.8%	12 mo.
Group 3. Pentothal plus conditioned reflex therapy on patients who had relapsed after one conditioned reflex treatment	8	4	4	50%	8 mo.
Group 4. Pentothal plus conditioned reflex therapy on patients who had relapsed following two or more conditioned reflex treatments.....	11	4	7	63.6%	11 mo.
Total.....	35	17	18	51.4%	

most difficult type and previously would have been regarded as practically hopeless.

In our opinion pentothal interview is of value as an aid to diagnosis in the treating of chronic alcoholic addicts. Its use in the production of a state of narcosis during which psychotherapy is administered in the form of hypnotic suggestion, re-education, and narcosynthesis offers promise as an adjunct in the treatment of selected cases of chronic alcoholism. From experience it is believed to be of value in assisting the physician in obtaining a more complete psychiatric history through the use of an analytical questionnaire. In doing this it is beneficial in helping to conserve time both for the physician and the patient which is an economic advantage.

Definite conclusions cannot be drawn from a series of this length but the results obtained have been encouraging and, we believe, warrant further more extensive clinical investigations, which are being currently made.

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