

Table: V

## RATING IN PERCENTAGES OF EFFECTIVENESS

Diagnosis	Very good	Good	Moderate	No effect
Psychophysiological reaction	21%	42.5%	32 %	4.5%
Anxiety neurosis	28%	48 %	19.5%	4.5%
Obsessive-Compulsive reaction	19%	31 %	31 %	19. %
Reactive/Neurotic depression	—	28 %	55.5%	16.5%
Conversion reaction	—	—	100 %	—
Phobic reaction	—	—	33 %	67 %
Transient situational disorder	50%	17 %	17 %	17 %
Personality disorder	6%	12.5%	69 %	12.5%
Unspecified neurosis	—	57 %	28.5%	14.5%
Totals	20%	38 %	32 %	10. %

Table: VI

## IMPROVEMENTS

First week	5%
Second week	55%
Third week	47%
Fourth week	8%

## INTRODUCING VALIUM IN NARCOANALYSIS

(A preliminary report of 10 cases)

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Narcoanalysis is a well-known method of interviewing a person by putting him under the influence of a drug which acts by disinhibiting higher cerebral functions. Its introduction probably arose out of the observation that certain chemicals like alcohol could make a normally reserved person more talkative and willing to divulge secret information or exert a disinhibiting influence on the person's behaviour.

Psychophysiologicaly this could be explained by the tranquillizing effect to the drug on the person's higher cerebral activities, allowing shame-

ful or embarrassing materials to be released from the subconscious (normally suppressed or repressed).

Alcohol as an agent, though effective, is difficult to administer and measure. A variety of substances have been tried as a substitute for this purpose amongst which are amylobarbitone, methylamphetamine, ether, nitrous oxide, carbon dioxide and even LSD.

Barbiturates had been used by Sargant & Slater (1940) in the treatment of war neurosis with success. It was found to bring relaxation and

abreaction to traumatic experiences and to assist in the recovery of amnesia. For the latter intravenous methylamphetamine was found to be more effective in producing talkativeness.

Barbiturate is undesirable because of its toxicity and depressing effect on the respiratory centre. Methylamphetamine may result in addiction and LSD is a very harmful drug. The drugs of the benzodiazepine group appear to have actions very similar to amylobarbitone without all its disadvantages in that they are non-toxic, less sedating and anxiolytic. Of these drugs diazepam is the only member known to the author that can be given intravenously. Diazepam (Valium) has another advantage in that it also produces muscle relaxation.

#### Method

Unlike the use of other drugs, the patient does

not require much pre-operative preparations except that the patient should be fasted for 4 hours. Even this is not an absolute necessity. The procedure can be performed in the ward with the patient sleeping on his bed or in the doctors' consultation room or any other quiet enclosed place.

The patient was told that he would be given an injection to relax his mind. Blood pressure was taken after every 5 mg. of Valium was introduced. Intravenous Valium was given at the rate of 5 mg per minute up to 15 mg after which the rate is reduced according to the patient's response. The maximum dose was 30 mg over a period of about 15 minutes. The patient usually started to talk after 10 mg was injected. The results are summarised in the table below.

#### Summary of Cases

No.	Age	Sex	Race	Indication	Diagnosis	Result
1	18	M	Chinese	Murder (mute) rape	Psychopath	Good
2	31	M	Chinese	Mute	Psychopath Personality	Good
3	41	F	Chinese	Mute	Depression	Good
4	24	M	Chinese	Mute	Schizo.	Fair
5	25	M	Chinese	Amnesia Murder	Inadequate Personality	Fair
6	40	M	Chinese	Amnesia Murder	Reactive Depression	Fair
7	63	M	Chinese	Mute	Depression	Poor Sleep
8	18	M	Malay	Mute	Malingering	Poor
9	21	M	Chinese	Mute	Psychopath	Sleep
10	23	M	Chinese	Mute	Inadequate Personality	Trance

The "success" rate of 3 good results was low compared with amylobarbitone which in the author's experience had a 50% good result. This comparison is not properly controlled, and the numbers were too small to be significant.

#### Indications and Results

Of the 10 cases, 8 patients underwent interview under intravenous Valium because they were mute or near mute to normal interview. For 2 cases who were alleged to have committed murder, the purpose was to resolve their amnesia for the murder. 3 patients showed very good response. This included one who was near mute but was

alleged to have committed murder and rape. For these 3 cases the patients started to respond by talking after 10 mg Valium was injected. They continued to talk even after 30 mg of Valium had been injected. There was a tendency for them to continue to talk even though they were left alone. However their talk was not very informative.

#### DISCUSSION

The use of Valium as the agent in Narcoanalysis had not been tried out extensively, partly because this method of treatment was no more popular in recent years. Farb (1963) reported the use of intravenous Valium in 34 patients who were

resistant and unresponsive to psychotherapy and had good results. He used from 10 to 30 mg Valium and added 20 mg methylamphetamine to induce talkativeness. All the patients were alert throughout the interview.

The purpose of using intravenous Valium in this study is to induce a more productive interview or to recall Amnesia. If functional amnesia is the result of a repressive force because of threat of anxiety and Valium reduces anxiety, then the patients should be better able to recall their repressed memories. This was not the case in the three patients with amnesia. Valium did not appear to be able to assist patients to recall amnesia if they do not wish to do so. (3 cases accused of murder, denied during narcoanalysis). On the other hand for a number of patients (5 patients), their mental state improved after the experience of interview under Valium injection. e.g. one patient who remained mute during the interview confessed that he was malingering. A similar result was also noticed in another case (not in the series) who was interviewed under sodium amylobarbitone.

#### *Side effects*

These were characterised by their absence. Only 2 patients felt drowsy and somnolent. The blood

pressure remained unchanged or dropped only by 10 mm. Hg. systolic and diastolic. In one case, the systolic rose by about 20 mm. Hg.

#### CONCLUSION

As a method of treatment, Narcoanalysis does not seem to have much of a place in Psychiatry. This could partly be due to the dangers inherent in the treatment — which in some cases is equivalent to administering an anaesthetic. Intravenous Valium appears to have overcome this obstacle in that it can be given in the office or in the medical ward without any pre-operative preparation.

The author feels that there is room for a more extensive trial of this procedure, as it is not more difficult than giving an intravenous injection and is almost without danger. Valium should replace amylobarbitone for general use.

#### ACKNOWLEDGEMENT

I wish to thank Dr. S. S. Lo M.D. of Roche Far East Research Foundation for sending me the above reference.

#### BIBLIOGRAPHY

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## A TWO-YEAR FOLLOW-UP STUDY OF 85 SCHIZOPHRENICS

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In the investigation of prognoses of mental disorders, most previous reports have focused on follow-up studies of schizophrenia. However, they have used so many different methods and criteria that their results have hardly been comparable with each other. In order to collect a comparable sample, diagnostic tools applied should be clearly defined. To evaluate individual features in their relationship to a course of a certain illness, a treatment method or some social factors should be controlled. The International Pilot Study of Schizophrenia (IPSS) has been carried out in nine

field research centres, located: Aarhus, Agra, Cali, Ibadan, London, Moscow, Prague, Taipei, and Washington, to meet the former conditions. This project has been under the sponsorship of the World Health Organization, which will publish the first report in 1973.

I am going to present a part of this research, a two-year follow-up study, relating mainly to neuroleptic medication which is the main theme, and also our concern in this Seminar; although this study has not been well controlled in terms of treatment methods and social environment.