

AZACYCLONAL IN MENTAL DEFICIENCY PRACTICE: A PRELIMINARY REPORT

By

WILLIAM B. WRIGHT, L.M.S.S.A.(Lond.)

Senior Medical Officer

The Royal Scottish National Institution, Larbert

SCHIZOPHRENIA occurring in the early years is generally recognized to be a deteriorating illness and one in which therapy has little effect. Tredgold (6) recognized schizophrenia as a cause of oligophrenia and most mental deficiency hospitals have a number of these patients. Although not numerically a large problem, they are among the most difficult patients to handle.

In view of the results reported by Rinaldi *et al.* (4, 5) and Ferguson (2) on the use of Azacyclonal with psychotics in mental hospitals, it seemed desirable to try its effect on mental defectives whose incapacity appeared to be due to a similar if more malignant process. The mode of action of Azacyclonal is unknown but Fabing (1) has shown its ability to block LSD-25 and mescaline induced psychoses. Clinically it has been found to diminish hallucinations and delusions with a resultant improvement in behaviour. Observers also note its freedom from side-effects and compatibility with other drugs such as chlorpromazine, reserpine, and barbiturates.

METHOD

A group of eight patients was selected. From their history and present mental state, they appeared to be suffering from a chronic schizophrenic process which had originated in early years. There had been no remissions in recent years and all attempts to socialize had failed. As the number of this type of patient is small and as each is an individual problem, the use of a control and experimental group was impossible. The patients' behaviour, however, was such that there would be no dubiety if any significant change took place. The staff were well accustomed to the trial of new drugs and had a healthy scepticism of their value. No information was given to the staff as to the likely effect of Azacyclonal. Each patient was given 120 mg. of Azacyclonal per day in addition to any medication he was already receiving. At the end of four weeks, his or her state was evaluated. The patients were not brought together as a group but remained in their usual wards. No change was made in their daily routine.

RESULTS

The results are presented as individual case reports as this is often more illuminating than bald charts and graphs.

Case 1

Female, aet. 43. Admitted 1923. This patient is a medium grade defective who has been subject to frequent episodes of excitement for many years. She expressed delusions of grandeur and appeared to suffer from auditory hallucinations. She would often express paranoid ideas and had made numerous attacks on patients and staff. During treatment with Azacyclonal, her delusions receded and she denied hallucinatory experiences. Her general behaviour improved and she ceased to make assaults on patients and staff.

Case 2

Female, aet. 35. Admitted 1957. A medium grade defective. History of alteration of personality following an operation at 6 years, becoming indrawn and later exhibiting bizarre behaviour. On admission, she was abstracted and took no interest in her surroundings. She sat in a chair muttering to herself and appeared to be hallucinated. She would slap herself and rend her clothes. Treatment with Azacyclonal was followed by more normal behaviour. She ceased to slap herself and she appeared more in touch with her environment. She would converse freely and interest herself in the cinema and television.

Case 3

Female, aet. 14. Admitted 1948. A low grade incontinent patient whose tardy development was noted in early months. Her speech consists mainly of repetitive phrases and she exhibits echolalia. On occasions, she makes remarks which are to the point but this may be coincidental. She is overactive and has frequent episodes of screaming. She is impulsive and bites other patients with such suddenness that they seldom can take avoiding action. Reserpine has been tried but it had to be withdrawn as she became unsteady on her feet. Sodium amylobarbitone has been administered for the past year with only a slight beneficial effect. There was no change in her behaviour with Azacyclonal.

Case 4

Female, aet. 27. Admitted 1944. Medium grade defective with a history of frequent violent episodes for several years in which she would attack patients and staff. Admitted to auditory hallucinations. She frequently exhibited silly inappropriate laughter. Sodium amylobarbitone has been given for several months with a slight quietening effect. Since receiving Azacyclonal, this patient's behaviour has improved. There have been no violent outbursts and she now denies hallucinatory experiences. She still, however, shows silly inappropriate laughter.

Case 5

Female, aet. 40. Admitted 1931. Medium grade defective. History of impulsive behaviour for many years in which she would strike out for no apparent reason. She admitted to auditory hallucinations. On interview, she was tense and hostile. For the past few months, she has been receiving acetylpromazine with a slight beneficial effect. Since administration of Azacyclonal she has made no attacks on other patients and she now denies the presence of auditory hallucinations. Hostility has also diminished and she is now more ready to converse.

Case 6

Female, aet. 35. Admitted 1930. Medium grade defective. Since admission, she has been impulsive in behaviour and has made serious attacks on the staff. Her speech consisted of stereotyped phrases and conversation with her was impossible. She always referred to herself in the third person. She was able, however, to perform simple routine domestic tasks. For the past few months she has been receiving acetylpromazine and since then she has been less tense and there have been no episodes of violence. Following the prescribing of Azacyclonal, she became more communicative and she could be taken outside her usual stereotyped thinking.

Case 7

Male, aet. 18. Admitted 1944. Medium grade indrawn patient who has for several years spent his day sitting on the steps conversing with himself. Admitted to auditory hallucinations. He was liable to strike out for no apparent reason. Since receiving Azacyclonal, he denies hallucinatory experiences and has ceased to strike out. He is also freer in conversation and appears more in touch with reality.

Case 8

Male, aet. 16. Admitted 1951. Medium grade defective. He has been withdrawn and subject to bizarre behaviour for several years. There have been frequent episodes in which he would throw furniture about. Auditory hallucinations were present. He has been on reserpine for the past year and, since then, he has been quieter although he remained hallucinated and withdrawn. Since administration of Azacyclonal, he denies and shows no evidence of hallucinations. He is also more sociable.

No side-effects from administration of Azacyclonal were noted and it proved compatible with sodium amylobarbitone, reserpine and acetylpromazine.

DISCUSSION

Seven of the eight cases benefited from receiving Azacyclonal. Hallucinations and delusions disappeared, aggressive behaviour diminished, and social contact became closer. No attempt was made to socialize the patients as extraneous factors would have come into play. It would seem, however, that intensive attempts to socialize this type of patient, accompanied by Azacyclonal

medication, would be worth while. Ferguson (2) among others has noted the need for psychotherapy to help the patient use his new free psychic energy in a constructive manner.

It is of interest that the one patient who was not helped by the drug was a low grade defective who approximated to what MacGillivray (3) had described as "hyperkinetic larval psychosis of idiocy". Results from one case prove nothing, but there is the suggestion that the aetiology of her psychosis differed from the others in the group.

SUMMARY

Azacyclonal was administered to eight mental defectives who showed evidence of a schizophrenic process which had originated in early years. Seven of the eight patients showed a significant improvement in their mental state.

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REFERENCES

1. FABING, H. D., *Neurology*, 1955, **5**, 319.
2. FERGUSON, J. T., *Antibiot. Med. Clin. Ther. (Brit. Ed.)*, 1956, **1**, 75.
3. MACGILLIVRAY, R. C., *Amer. J. Ment. Defic.*, 1956, **60**, 570.
4. RINALDI, F., RUDY, L. H., and HIMWICH, H. E., *Amer. J. Psychiat.*, 1955, **112**, 343.
5. *Idem, ibid.*, 1956, **112**, 678.
6. TREGOLD, A. F., *Text Book of Mental Deficiency*, 7th ed., 1947. London: Baillière, Tindal and Cox.