One interesting feature is the absence of irritability and aggression on the part of the patient. Most studies report the presence of irritability, anxiety or aggression during the course of treatment. Some degree of hostility would not be unexpected of the patient considering that he was rebellious against the strict punitive atmosphere in his early childhood. Could this be related to the infrequency of the shocks used or the spaced intervals between the trials? It has been shown that the more often the shock is presented, the greater the frequency of aggressive responses: (Ulrich, Hutchinson and Asrin in Aversion Therapy and Behaviour Disorders: an analysis, Pg. 92).

So far, no study has been done to determine the optimum number of trials or the optimum number of shocks required in aversion therapy to successfully suppress the abnormal behaviour to be eliminated.

A study on such lives will be of great help to the clinician who aims to employ aversion therapy.

SUMMARY

This paper describes the successful use of aversion therapy in a case of fetishism.

A young Malayalee national serviceman, aged 19 years old presented with a 3 year history of fetishism. From the age of 13 to 15 years, he was exposed to the excitement of sexual play by a more mature 16 year old Caucasian girl. Soon after the girl left, he began to wear brassieres and panties and indulged in fantasies simulating their sexual play.

He was treated as an outpatient with aversion therapy twice weekly. The shocks were delivered with the patient in fantasy when he imagined carrying out the fetish act and also in practice when he put on the brassieres.

He recovered after 10 treatments and was free of fetish acts six months later.

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CLONAZEPAM IN THE TREATMENT OF PETIT MAL

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Petit mal is a disease long known for its resistance to medical treatment. In 1945 trimethadione was introduced by Davis and Lennox as a drug against petit mal. Soon its hematologic and renal complications restricted its use. In 1947, the same authors (3) used dimethylethyl oxazolidine-diona in the treatment of patients with minor attacks, but this proved itself no better than its predecessor.

The invention of the benzodiazepines heralded a new era in the treatment of petit mal. At first Mogadon was used; it decreased the attacks of absences considerably, but its side effects like somnolence or tiredness were troublesome.

Since 1969, Clonazepam was used with more success. Also the results of a preliminary clinical trial by the author were good (2). On the basis of these results, a double blind study was set up, to compare the results of Clinazepam with Diazepam.

Materials and methods

All patients with petit mal who consulted the author directly or indirectly (were referred by other physicians) during the period from 1 January 1971 until 1 July 1972 were asked to cooperate in this study. Originally this group comprised 44 patients, but two parents refused and 3 patients did not continue the medication long enough to allow proper evaluation.

The remaining 39 patients ranged in age from 3 to 12 years with a mean of 7 years. There were

22 girls and 17 boys.

The diagnosis was based on: (1)

1. a short transient attack coupled with a loss of consciousness and characterized by staring and absence.
2. a distinct EEG pattern of three per second spike and wave.

The EEG's were made on an eight channel EEG and 17 electrodes were used for children.

To rule out the possibility that symptoms of brief duration might subside spontaneously and be falsely attributed to the medication only, patients who had the disease for more than six months were selected.

All the 39 patients were initially seen by the author. Their progress was followed by means of personal interview or by questionnaire at monthly intervals. Of the 39 patients, all had been treated with phenobarbital previously in dosages ranging between 30 and 60 mg.tid. Four patients had some reduction of the frequency of the seizures, but most of them had no benefit from the treatment with phenobarbital. Ten days before the controlled study began, all previous medication was withdrawn. None of the patients included in our study had associated illness such as meningitis or cerebral palsy, either initially or later.

Clonazepam and Diazepam were prepared in identical capsule forms and coded in such a way, that neither the investigator nor the patient knows, which was clonazepam and which Diazepam.

The dosages were 3 to 6 mg. Clonazepam daily 0.1 mg/kg. – 0.2 mg/kg. (one capsule contains 1 mg. Clonazepam or 6 to 12 mg. Diazepam; one capsule contains 2 mg. Diazepam). The duration of treatment was one year. The following initial laboratory determinations were made for each patient before administration of the test drug – complete blood count and differential count, platelet count, urinalysis and liver function tests such as serum glutamic exaloacetic transaminase content, serum alkaline phosphatase content and sulfhbromophthalein retention. Determinations of the values were reported after administration of the drug at monthly or bimonthly intervals, depending on the age of the patient.

Responses were graded as excellent when all the absences vanished, good when there was a reduction between 99% and 55% of the attacks, fair when there was a reduction between 54 and 25% of the attacks and poor when there was a reduction of 24% or less.

Results:

Breaking the code showed that 19 patients had received Clonazepam and 20 patients had received Diazepam. The results may be seen in table I.

Two of the patients, who had received clonazepam had a recurrence of the attacks, whereas in the group, who had received Diazepam, only one patient showed a sustained improvement.

Side effects

As may be seen in table II, side effects occurred in both the clonazepam treated group and in the Diazepam group. In both groups, side-effects were mild.

As can be seen in table II, there were some side effects. Two patients complained of dizziness, when bending, turning or lifting their heads. One patient complained of nausea during Clonazepam treatment. These complaints disappeared when the dosage of Clonazepam was lowered from 0.2 mg/kg. to 0.1 mg/kg. bodyweight. It was never

Table I Results of double blind study using Clonazepam and Diazepam in 39 patients with petit mal.

Drug	Excellent	Good	Fair	Poor	Total number
Clonazepam	14	3	2		19
Diazepam	0	1	8	11	20

Table II Frequency and Intensity of side effects

Side effects	Clonazepam group	Diazepam group
Dizziness	2 patients	0
Drowsiness	0	4
Nausea	1	1

Table III Influence of test drug on EEG

Drug	3/sec spike and wave	fast activity
Clonazepam	disappeared (in 17 pat)	increased (in all pat)
Diazepam	still seen (in all pat)	increased (in all pat)

Table IV Statistical data of both groups

symptom	clonazepam group (19)	Diazepam group (20 patients)
frequency absences	Excel/good 17	excellent/good 1
disapp. 3/sec S.W.	17	0

necessary to interrupt the treatment because of these side effects. In the Diazepam group, the chief complaint was drowsiness, which vanished too when the dose was adjusted.

Influence on the EEG

In all patients, an EEG was made before and during administration of the test drug. The results may be seen in table III.

In both groups, the EEG was altered; there was an increase of fast activity. In the Clonazepam group, however, the three per second spike and wave activity disappeared in 17 patients while in the Diazepam group they were still seen in all patients. In two patients from the Clonazepam group, who showed only a fair improvement, the 3/sec spike and wave complexes were still seen.

Statistical Analysis

To emphasize the difference between the Clonazepam and Diazepam treated group, a table was made, which showed the chief differences between both groups (table IV)

t-Tests for paired observations then showed, that for both symptoms the p values were < 0.001, making it highly significant.

DISCUSSION

The results of table *1, corroborate the improvement reported in earlier uncontrolled studies (2, 6, 8) of Clonazepam treatment in petit mal. Although it was formerly reported, that Diazepam had a favourable influence on petit mal, the results of this study showed, that this is not true.

As can be seen from table II there were only mild side-effects, which never necessitated the interruption of the treatment. Two boys stated however clearly, that they felt dizzy, when bending or turning their heads. The ENT specialist who was consulted, stated however, that he did not find any abnormalities in the vestibular apparatus, and the complaints disappeared when the dosage was lowered from 0.2 mg/kg to 0.1 mg/kg.

The influence on the EEG, which was reported earlier (2, 6, 8) in uncontrolled studies, was remarkable. It seems to correlate, with the clinical improvement of the absences.

Statistical analysis for the clinical symptoms and EEG signs, gave highly significant levels for both symptoms.

Pharmacology and Mechanism of Action of Clonazepam

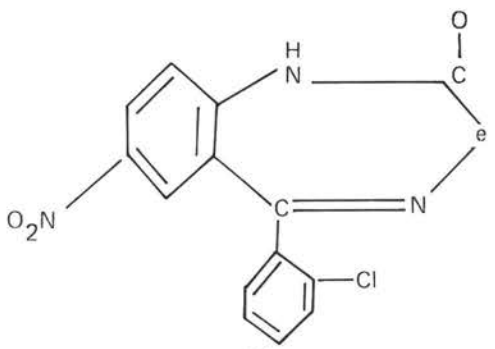
Clonazepam is a benzodiazepine derivative, which possesses stronger anticonvulsant activity than Diazepam. Its formula is shown in table V.

In the antimetrazol test, Clonazepam showed a potent anticonvulsant action. Preparations, which in animal studies show a potent protective effect against metrazol convulsions generally turn out to be clinically effective drugs in the treatment of petit mal. Since 1963, Fromm (4) has used the spinal trigeminal nucleus of cats as an experimental model but until now, the effect of Clonazepam on this model is not known.

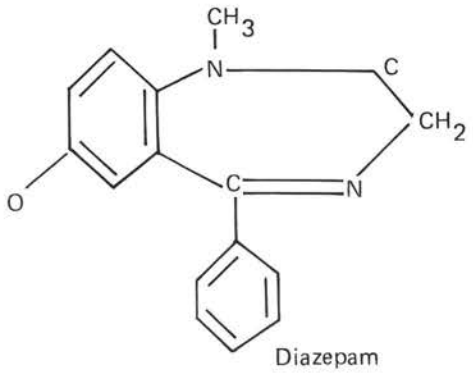
The tranquillizing properties of Clonazepam are five times weaker than that of Diazepam and it also has a very weak muscle relaxant activity (7). All these properties make Clonazepam an ideal drug against petit mal, especially because of its mild side effects.

According to Gastaut, (5), petit mal attacks represent paroxysmal activity in cortical inhibitory pathways and it seems therefore that Clonazepam has the capacity to depress cortical inhibitory pathways. The precise mechanism of action of Clonazepam in the control of epilepsy is not yet known.

Table V Structural Difference between Clonazepam and Diazepam



Clonazepam



Diazepam

SUMMARY

The anticonvulsant properties of Clonazepam were investigated in a double blind clinical trial on 39 patients. 19 patients received Clonazepam and 20 patients received Diazepam, during one year.

Statistical analysis of the results, gave highly significant levels for the symptoms of absences and EEG. On the basis of these results, we believe that Clonazepam is an excellent drug for the treatment of epilepsy, especially because of the lack of serious side-effects.

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Clonazepam – Rivotril, Roche. The supply of Rivotril needed in this study was donated by the Roche Research Foundation.

ATTITUDES OF FILIPINO PSYCHIATRIC PATIENTS TOWARDS PRESCRIBED MEDICINAL DRUGS

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The study pertains to attitudes and interpretations by Filipino patients regarding drugs prescribed for them by doctors. Thirty doctors, practising in Manila, were asked through letters, questionnaires and follow-up interviews to record their observations of patient-attitudes towards