group. Trifluoperazine was accompanied by severe reaction and withdrawal symptoms were greater than the previous three.

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AVERSION THERAPY IN A CASE OF FETISHISM

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Behaviour therapy is based on the premise that abnormal behaviour has been acquired by learning as a conditioned response and as such can be eliminated according to the laws of learning theory.

One of the best known methods of behaviour therapy is aversion therapy in which the aim is to eliminate the unwanted behaviour by associating it with an aversive stimulus. It was used early in the treatment of alcoholism and the aversive stimuli were drugs such as apomorphine and emetine which induced nausea and vomiting. In 1956, Raymond reported the successful treatment of a handbag and perambulator fetishist by apomorphine conditioning. Following this account there was a renewed interest in aversion therapy and several reports of success were made in the treatment of other sexual deviations, such as homosexuality, and transvestism. One important development in aversion techniques was the substitution of drugs with electrical stimuli.

Chemical aversion therapy had several disadvantages. The patient had to be admitted to a hospital to be treated. The drugs had dangerous side-effects which could be fatal and the whole procedure was unpleasant. In addition there was great difficulty in timing the interval between the conditioned stimulus (abnormal behaviour) and the unconditioned response (nausea and vomiting).

To date, most therapists, prefer electrical methods over chemical aversion methods. The electrical stimulus is relatively safe and easy to administer. It affords better control in timing and can be given at a desired intensity and at the precise moment of time. All the available evidence indicates that aversion therapy is effective in the treatment of sexual disorders.

My first experience in the use of electrical aversion therapy began 2 years ago. I have treated 3 cases of alcoholism and 2 homosexuals. The results were encouraging. Of the 3 alcoholics, 2 improved and stopped drinking. One homosexual whose main complaint was recurrent fantasies of homosexual desires on a young boy was helped to rid himself of these fantasies. The other overt homosexual was not helped by the treatment.

There has been very little work done on behaviour therapy in Singapore or in Malaysia. The following study therefore merits a report as being the first case of fetishism treated by aversion therapy in this region.

The patient was a young Malayalee, aged 19 doing National Service. The father had caught him dressed up in his sister's brassieres on a number of occasions at night under his blanket and had punished him without much effect. Soon after enrolment into National Service his fetish acts became more frequent, and he was finally referred by his general practitioner for an opinion.

He was the eldest of six children (two boys and four girls) of an Indian Roman Catholic family. His father was very strict and authoritarian and used to punish him very severely for minor infringements during his early childhood. His father exerted great pressure on him to do well in his studies. However his academic work was poor for which he was punished. He failed the School Certificate examinations twice before passing on his third attempt. He was fearful of his

father, lacked confidence and had marked feelings of inferiority. After school hours, he resorted to smoking ganja with his friends in order "to relieve his frustrations". He smoked ganja daily for the past three years.

His sexual awareness began at the age of 13 with masturbation which he picked up from his classmates. He stopped this habit after the teacher warned him that it could disturb his concentration on his studies.

Soon after, he met a 16 year-old English girl who was sexually more mature. She initiated him into playing sexual games with her. Being much younger and inexperienced, he was terrified at first and yet fascinated. The sexual play involved petting and fondling and there was no sexual intercourse. "She would take off her clothes and mine. I was innocent, I did not know anything. I was trembling the first time." The sexual play occurred 1 – 2 times in a week and continued for about two years with the girl generally playing the more active and aggressive role and the patient, a passive one. The girl eventually left the neighbourhood. About 2 to 3 months after she left, he felt a vacuum and complained of uncontrollable urge to steal brassieres and panties and to put them on. "I would then imagine myself to be this English girl responding to sexual stimulation." He would also conjure up a picture of a girl in sexual ecstasy. Both these fantasies produced sexual excitement in him.

TREATMENT

Treatment was carried out in a darkened room with the patient lying on a couch and the electrodes of the shock box taped to the back of his hand. Before each treatment, he was asked to select an intensity of electrical shock which he experienced as unpleasant but not too painful. Treatment was conducted biweekly, with each session lasting approximately 45 minutes. There were two stages of treatment. In the first stage, the patient dressed in his normal clothes was instructed to conjure up in fantasy the stealing of brassieres, the putting on of the garments and the girl in sexual ecstasy. In the second stage, the patient was asked to put on a brassiere and to imagine that he was the girl responding to sexual excitation.

At a point when the patient reached maximum sexual excitement, he was asked to signal by tapping his hand, immediately following which 1 – 2 shocks were delivered.

On the average from 6 to 10 shocks were applied in each treatment session. Altogether, he completed 10 treatments in 5 weeks. It was incidental that 5 treatment sessions were conducted with the patient normally attired and the subsequent 5 treatment sessions with him wearing a brassiere. The switch from normal clothing to the use of brassieres was determined by the increase in latency in producing the fantasy. At the end of the 5th treatment he had great difficulty in producing the fantasy or image. The use of a brassiere during the 6th treatment session facilitated the appearance of the fantasy. At the end of the 10th treatment, he was again unable to produce any fantasy and treatment was stopped.

PROGRESS

During the first two weeks of treatment, he admitted having indulged in the fetish act once. After the 4th treatment, he continued to have urges to steal brassieres but these were controllable. These urges were precipitated by advertisements of brassieres in magazines.

During the rest of his treatment, he became less preoccupied with the thoughts of brassieres and the urges were less strong.

Throughout the treatment, the patient did not complain or show any signs of irritability or hostility to the therapist.

2 months after the last treatment, he succumbed to a strong temptation to steal a brassiere, took it from the sister's cupboard then suddenly discarded it and went to sleep.

Follow up 6 months after, he had stopped completely the fetish acts. He was more relaxed, less depressed and was not bothered by fetish desires.

DISCUSSION

Some methods of behaviour therapy require elaborate and sophisticated set-up which are beyond the reach of the clinician in private practice. However, aversion therapy method based on a punishment model is relatively easy to construct and does not involve complicated procedure. It is therefore a method of choice for the treatment of patients in a clinical setting.

While most aversion treatments were given daily, I have deviated from this practice by adopting a biweekly procedure which did not seem to have any adverse influence on the results of the treatment. *

In this case, the results after a 6 month follow-up is considered to be successful. Whether further "booster treatments" will be required remains to be seen.

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