

## SUMMARY AND CONCLUSIONS

Despite great progress in combating tuberculosis in recent years the disease is still a formidable threat in this country. The resurgence of tuberculosis in some areas, with a significant increase in active cases and reports of epidemics, has implications for the individual and the community at large.

The age distribution of cases reported for 24 epidemics which have occurred during the past five years (73% under 20 years of age) suggests that our young population has had fewer opportunities for exposure to the organism in the recent past and may be highly susceptible at the present time.

The occurrence of this considerable number of epidemics during a relatively short period of time also suggests that we should not rely exclusively on the present methods used for the control of this disease. The benefits of a BCG immunization program should also be considered.

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## CASE REPORTS

## Avoidance Therapy: Its Use in Two Cases of Underwear Fetishism

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**D**URING the past decade several attempts have been made to treat fetishism by aversion therapy.<sup>8-10, 12</sup> Fetishism like alcoholism<sup>4</sup> may be considered as a learned response, which by the time of treatment is an habitual response. Support for this contention may be seen in the finding that conventional therapy has little effect in the treatment of this malady, while aversion therapy has proved more successful. The treatment pattern to be reported here was designed to further increase the potency of aversion therapy. The regimen is the result of a critical review of earlier methods and recent findings in learning theory.

## CASE HISTORIES

**CASE 1.**—G.W., a 16-year-old Protestant, Canadian male, was first seen in February 1966. He was suffering from a fetish to female underwear,

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namely brassieres and panties. An only child of middle-class parents, he was adopted at the age of 21 months. Nothing is known of his genetic antecedents, but it is interesting that he was a hyperkinetic child. The boy had always been rather "cold", withdrawn and odd, but was not considered psychotic. It was thought that he demonstrated a character disorder invariably found in sexual deviates. The boy was of average intelligence but his scholastic record was poor, as he was apathetic and without ambition. Physical examination was negative. His fetishistic activities began at the age of 11 and he had been "acting out" on the average of twice monthly since that time. His technique was to raid clothes lines at a distance from his home. At first he stole the articles and hid them some distance from the scene; he did not don them or masturbate with them. Of late he had taken to tearing up the objects, often on the spot, and this change in behaviour seemed to be activated by aggressive sexual fantasies. He alleged that he had never masturbated, thus lacking the normal history of masturbation for a boy of his age.

His fantasies were heterosexual and fetishistic, and he showed no evidence of other deviations. His father was rather obsessive and domineering, the

mother gentle and compliant; but there was no evidence that their handling of the boy had any etiological importance. As in all displacement phenomena, G.W. was more likely to "act out" when aroused or frustrated. He was finally expelled from school as a result of raiding girls' lockers and eventually was charged in the Juvenile Court. He was sent to stay with relatives in another province, but his abnormal activities continued unabated. After eight months of psychotherapy, including treatment with drugs without benefit, he was referred for behaviour therapy.

CASE 2.—F.B. was first seen in March 1966. He was a 19-year-old, single Canadian male, of the Roman Catholic faith. His home life was one of deprivation. He was an only child; his father deserted the household before he was born. His relationship with his mother was not good, and at 17 he moved into the home of an aunt. He was of average intelligence but at age 17 had reached only grade 10. He had been employed as a newspaper office boy, shipper, and punch press operator. A serious industrial accident in September 1965 resulted in loss of most of the fingers of his left hand.

F.B. had formed a sexual liaison with a 27-year-old separated woman with five children. She gave birth to a sixth and illegitimate child fathered by the patient. This infant suffered from a cardiac abnormality. F.B. abandoned his mistress and became promiscuous; he recently had a venereal infection. He was a primitive individual, with the character disorder of inadequacy and immaturity. His fetishism had begun only two years previously at the age of 17 and consisted of raiding clothes lines for panties and slips approximately once a month, which he fondled while masturbating. These activities increased when he was frustrated in his normal sexual activities. At the age of 17 he was an exhibitionist for a brief period, but this activity was curtailed following treatment and he began his fetishistic activities. He was physically fit, and appeared to be normally heterosexual except for his deviation. He had not received any consistent psychiatric treatment for his fetishism before the treatment described in this report.

#### THEORETICAL CONSIDERATIONS

The majority of early attempts to treat fetishism by avoidance therapy involved the pairing of the fetishistic object with the noxious effect of apomorphine.<sup>2, 8, 10, 11</sup> Recent work by Barker<sup>1</sup> has shown that faradic stimulation or shock is to be preferred to apomorphine as the avoidance stimulus. His major point is that the temporal contiguity between the deviant response and the avoidance stimulus is more easily controlled when shock is employed. As a result of these opinions, more recent attempts to treat fetishism by avoidance therapy have used the pairing of the deviant response with shock.<sup>5-7, 9</sup>

All the studies reported above had been based on a classical conditioning pattern in which the deviant response was paired with a noxious stimulus. Solomon and Brush<sup>14</sup> cite extensive evidence to suggest that an instrumental pattern in the form of avoidance conditioning should be preferred to classical aversive conditioning. According to his two-process avoidance theory, Solomon<sup>13</sup> indicates that less extinction occurs when the avoidance response is followed by a second response.

Church<sup>3</sup> showed that a two-choice situation, in which one response is punished and the other is not, leads to facilitation of response differentiation. Others, such as Kushner,<sup>7</sup> have indicated that booster sessions at various intervals following aversion or avoidance therapy are required to maintain suppression of the deviant response.

In an attempt to incorporate the recent advances in aversion (avoidance) therapy and learning theory, Evans and Day<sup>4</sup> designed an instrumental avoidance treatment for alcoholic drinking behaviour. This present report concerns a modification of the above procedure applied to the treatment of two underwear fetishists.

In a review of avoidance conditioning, Feldman and MacCulloch<sup>6</sup> concluded that anticipatory avoidance learning is to be preferred over other forms of avoidance conditioning because the technique produces good acquisition and a very high resistance to extinction. For this reason the method to be reported was designed as an approach avoidance pattern. It was also designed to incorporate those variables outlined by Feldman and MacCulloch<sup>6</sup> which contribute to resistance to extinction of the avoidance response. It will be noted, for example, that partial reinforcement is employed because the method is instrumental in nature.

It was decided that the conditioned stimulus would be the handling of underwear because it is the first step in the response chain when the patient steals underwear. As reason gives way to action during such an incident,<sup>15</sup> it was thought more appropriate to develop a conditioned response of avoiding underwear rather than entreat the patient to exert cortical control as would be done in psychotherapy.

#### TREATMENT PROGRAM

After the history had been taken on the two patients they were given the treatment program. The apparatus consisted of a two-compartment dispenser box. Under each compartment was a light, which indicated to the subject which object was to be taken. The fetishistic objects were placed in the first compartment and the

neutral objects were placed in the other compartment. The therapist was equipped with a control box with two three-position switches. The three positions of each switch were: light with shock; off; light. In the light-with-shock position an electric shock was given to the patient at a given delay after the light went on. The delay was controlled by a Hunter decade interval timer, and the shock was initiated with a Hunter shock stimulator. The shock electrodes were attached to the ring and index fingers of the subject's non-preferred hand. The shock was set in each session at 10 volts higher than the subject's reported upper threshold.

The first compartment contained 20 fetishistic objects and the second compartment contained 20 neutral objects, such as matches, a cigarette box, a pencil, and so forth. The fetishistic objects were presented in random order, with the exception that no more than two such objects fell in succession. A neutral object was presented after each fetishistic object or objects if two fell together. The remaining places in the 40 item session were neutral objects. The neutral objects were never associated with shock, and the fetishistic objects were related with shock on a 70% schedule. Eight such sessions were held on a weekly basis, and each session lasted about 30 minutes. The delay for the first two sessions was 6 seconds, the next two 4.5 seconds, the next two 3.0 seconds, and the final two 1.5 seconds.

The patients were instructed to remove one object from a compartment whenever the light under a compartment went on. The object was to be placed in a box provided at the patient's preferred side. As soon as the object was placed in the box, shock was terminated.

## RESULTS

CASE 1.—The patient agreed to co-operate in the treatment program. He was seen on a weekly basis for eight sessions and by the third session he no longer reported any urges to steal underwear. He was then seen for three twice-weekly sessions and he is now seen on a monthly basis, after which he will be seen every three months until February 1967. It will be remembered that before treatment he raided lines twice weekly and the urge to do so was continuous. Since the initiation of treatment (six months) no further incidents have occurred and since March 1966 he has no urge to act out.

CASE 2.—The patient agreed to co-operate in the treatment offered. As in the first case, he was

seen on a weekly basis for eight weeks and reported no urge to act out after the fourth session. He was then seen every two weeks for three sessions, and is now seen once a month. As in the first case, no further acting out has occurred since the initiation of his treatment and he has had no urge to do so since May 1966.

## DISCUSSION

While the patients are still in therapy, the major part of their treatment has been concluded. They are now going through a process of booster sessions in an effort to maintain their immunity from the deviant response. This procedure, strangely enough, is reminiscent of the treatment for allergies with allergens. In comparison to their former states, the patients have to date shown encouragingly normal behaviour. It is probable that if they can abstain from their deviant behaviour for a sufficient period of time, normal outlets for the control of sexual arousal will develop. It has been found that variations on this theme are most useful in the treatment of homosexuality, pedophilia, exhibitionism, voyeurism, and other forms of sexual deviation.

## SUMMARY

A pilot study in the use of a modified form of avoidance therapy in the treatment of fetishism is described. The theory and method are reported in conjunction with their use and result in two cases of underwear fetishism.

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