TRANSVESTISM AND TRANSSEXUALISM

A REPORT OF 4 CASES AND PROBLEMS ASSOCIATED WITH THEIR MANAGEMENT

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Transvestism is defined by Kinsey[1] as behaviour by 'an individual who prefers to wear the clothes of the opposite sex and who desires to be accepted in the social organization as an individual of the opposite sex'. Transsexualism refers to those cases where in addition the urge exists to undergo a sex-conversion operation.

Interest in these problems arose when, within a period of 5 months, 4 such patients were admitted to Tara Hospital. A search of the literature showed that there were very few reported cases and that lack of a definitive plan of management existed. Eyres[2] stated that approximately 50 cases of transvestism had been recorded in the literature, but the actual incidence is probably higher, taking into account the experience of Hamburger *et al.*[3] who received hundreds of letters seeking help, from all over the world, following their report of a case.

The 4 cases in the present series had cross-dressed for a number of years, and each requested a sex-change operation. Apart from case 4, who was also a fetishist, none of the patients reported any sexual excitement when wearing the clothing of the opposite sex.

An attempt was made to study these patients both physically and psychologically, and a scheme was formulated based on a method suggested by Davidson.[4] A medical and psychiatric history was obtained and a full general and neurological examination was performed on admission. The sex of the individual was determined as comprehensively as possible by assessment of the nuclear pattern of the buccal mucosal cells; study of the endocrine status, physical examination with special reference to the gonads, external genitalia and secondary sex characteristics, and finally by psychological reactions and social behaviour.

Each of the cases will be reviewed briefly with the conclusions to be drawn from the study of these patients.

CASE REPORTS

Case 1

Mr. A., 18 years old, was referred from a mental hospital where he had been admitted following a suicide attempt. He requested a sex-change operation and stated that his mental outlook was that of a woman. He claimed to have had feminine interests as far back as he could remember and had never participated in the more active manly games at school. His parents were divorced when he was 5 months old and he had been brought up by his grandparents, who had indulged him. Since the age of 14 he had worn female clothing and cosmetics both inside and outside the home and would on other occasions wear female underclothing beneath his male garments. He stated that at these times he felt relaxed and contented. After leaving school he had worked for a period as a switchboard operator, followed by employment as a male nurse, and it was his ambition to become a cabaret dancer.

The patient was an overt passive homosexual who had never experienced any interest in heterosexual relations. Before admission to hospital he had been living with a man and in this situation had apparently filled the role of housewife quite adequately.

He was hypertensive, blood pressure 160/105 mm.Hg, but further investigations, including intravenous pyelography, were normal and no cause for the hypertension was found. When 12 years old he had had bilharziasis, but further examination of urine and stools failed to demonstrate parasitic ova.

His I.Q. on the S.A. Individual Scale was 86, but in view of a wide scatter was felt to be below his potential level. A Thematic Apperception Test (TAT) revealed strong passive dependent needs with poor and immature adjustments at the interpersonal level. There was a low frustration tolerance which expressed itself in uncontrollable aggression and death wishes. There was a poor sexual identification, in that he was unable to identify with the positive assertive aspects of the male, whose aggression he feared.

During his stay in hospital over a period of 2 months, he was impulsive and irresponsible and showed extreme sensitivity. No psychotic features were demonstrated and he was considered to be primarily a psychopathic personality.

After consideration, surgical treatment was not recommended and the patient was offered psychotherapy. He refused and returned home, but telephoned 3 months later to say that he was proceeding to Europe where he hoped to have an operation performed.

Case 2

Miss B., 18 years old, stated that since she was 5 she had felt she was more like a boy. She preferred playing with boys and enjoyed rugby, cricket and boxing. She used male toilets and urinated while standing. She had worn male clothing since childhood, and when obliged to wear a dress at school had also worn male undergarments. She requested amputation of her breasts and construction of male external genitalia.

Her birth and early development were unremarkable, but she did recount a period of distress when breast enlargement and her menses began at 12. She stated that subsequently she was able to ignore her monthly menstrual flow. She attended a special school for retarded children and left at 16 years, her principal then reporting that her level of attainment was equivalent to Standard I. Since then she had remained at home assisting her mother with the housework, but it was her ambition to be employed in an engineering works. She had had no sexual experiences and claimed to have no interest in boys.

Her mother and father were both alive and healthy and 2 older sisters were married and apparently quite normal.

Her I.Q. was 54, with a mental age of 7 years and 8 months. The TAT was poorly done and constricted, and this was attributed to low intelligence. However, it could be stated that she was an anxious depressed individual who was unable to resolve the conflict between her libidinal needs and a rigid moralistic environment and parental figures on whom she was dependent. There were feelings of inadequacy and unworthiness and easily aroused aggression and guilt feelings. There was a need for regression and rebirth at an extremely primitive level.

The electro-encephalogram was dysrhythmic and asynchronous, with scattered medium-amplitude theta waves. An atrophic uterus was palpable per rectum.

In view of the severe mental retardation, no treatment was recommended and she was discharged to the care of her mother, with the possibility of later referral to an institution for the feeble-minded. In the meantime an attempt is being made to place this patient in a sheltered employment workshop.

Case 3

Mr. C., 18 years old, claimed to have first noticed when he was 10 years old that he was different from other boys. He found that in his thinking, behaviour and interests he was much more like a girl, and because of this had been teased at school. He left school at 17, having failed Standard 6, and had subsequently had a variety of temporary occupations, the last being as a steward on the railways.

He was an overt passive homosexual who had only attempted heterosexual relations once, but had then been unable to achieve an erection. His masturbatory fantasies were concerned with male figures. He wished to marry and adopt children, but if operation was not recommended desired at least legal recognition of his cross-dressing. This was confined mainly to the home, but he had on occasion ventured out of doors in female attire. He claimed to enjoy cooking, knitting and housekeeping.

His mother had died shortly after childbirth and he had been brought up by a stepmother who, he felt, disliked him, and he was much closer to his father. However, he identified closely with his dead mother and wanted to adopt her name. He had an older married sister and 4 step-siblings, all of whom were quite normal.

His I.Q. was 82, with a mental age of 12 years and 4 months. The TAT revealed deep insecurity concerning mother and the female on whom he was dependent, and his identification was largely female and passive in nature. Mother was perceived as the source of his depression and he experienced strong aggression towards her, which he denied and repressed. In spite of seeing her as totally rejecting and aggressive, he was bound to her by deep insecurity and hence strong dependence. He had poor self-perception and could only assert himself and make contact with the male by enlisting the aid of the female.

Initially this patient was regarded as a homosexual, primarily, who seemed to have no other capacity to form relationships and who hoped by surgery to facilitate and justify his homosexuality both in his own eyes and those of society.

Surgery was not recommended. The patient was adamant in refusing any treatment that would attempt to alter his sexual orientation, but was willing to accept psychotherapeutic assistance which might help him to adjust more easily to the role he had chosen for himself.

Therapy was commenced by a senior staff member and after 1 month a noticeable improvement in the patient's assertiveness had occurred. He was beginning to show an interest in girls and dressed in male clothing. However, within a further month he developed florid hallucinations and persecutory ideas, and became deluded, requiring certification and admission to a mental hospital with the diagnosis of schizophrenia.

Case 4

Mr. D., 18 years old, stated that since he was 7 he had wanted to dress like a girl and had played with dolls. He enjoyed helping his mother in the kitchen and expressed a strong dislike of heavy manual work. He left school at the age of 16, having passed Standard 8, and for the past 2 years had worked as an apprentice butcher. He was most unhappy in this occupation and wished to become a ladies' hairdresser, for which work he felt he had an aptitude.

When dressed in female clothing, he would stand and admire himself in front of a mirror, feeling sexually aroused. He would then masturbate with fantasies of himself in a passive homosexual role. The patient had never had any heterosexual interests or experiences and his sexual activity had been confined to a number of casual homosexual episodes.

The patient was quiet and effeminate and walked with a pronounced swagger. He regarded his body as being very unmasculine and was reluctant to appear in public in bathing costume because of the belief that his shoulders and muscles were too small.

His I.Q. was 93, but it was felt that a potentially average intelligence was lowered by anxiety factors. A TAT revealed immature interpersonal adjustments, with an inability to accept anything but idealized relationships with parental figures. He was unable to assert his own libidinal impulses because of the idealized level at which he perceived relationships, and hence needed support and assertion from others to satisfy his needs. Heterosexual relationships were likewise experienced at an idealized level, and he was very dependent on and ambivalent towards an overprotective and possessive female, from whom he was unable to emancipate himself. There was a poor relationship with father, who was seen as powerful, and he experienced conflict between the need to

identify with an idealized father and anxiety about his competitive and envious feelings of father's potency, which led to passive dependency attitudes and a renunciation of his own assertive and aggressive impulses.

On admission to hospital the patient was found to have a mild jaundice, with a total serum-bilirubin level of 1·8 mg. per 100 ml. and a delayed direct van den Berg reaction. Further investigations were negative, and within a fortnight the bilirubin level gradually returned to normal. The patient was asymptomatic throughout this period and no cause for the jaundice was discovered.

It was felt that this patient could be helped, firstly with his work and family adjustments, and secondly with regard to the cross-dressing. He eventually accepted that surgical treatment was impossible, and was willing to receive assistance as suggested, but stipulated that he wanted no alteration of his sexual orientation. His parents were interviewed and with their growing awareness that their son's behaviour was a manifestation of psychological illness and not delinquency as they had believed, a marked improvement in family relationships occurred. The patient was also assisted to obtain employment as a ladies' hairdresser. He recognized, too, the legal hazards to which he exposed himself by cross-dressing, and was keen to have the desire to wear female clothing abolished. An attempt is being made to treat this patient by the use of aversion techniques and the results will be reported in detail later.

ANALYSIS OF THE FINDINGS

In addition to the results recorded in Table I, the following investigations were performed on all the patients: full blood count and sedimentation rate; protein electrophoresis; plasma urea and electrolytes; modified Ide test; urinalysis; radiological examination of the skull and chest and a bone-age estimation; and an electro-encephalogram. All the results were negative, unless otherwise specified.

Examination of Table I shows no discrepancy between the patients' given sex at birth and objective evaluation of the sex, and it can be concluded that at the present time, with the techniques available to us, the genesis of the condition should be sought not in physical disorder but in terms of psychological illness.

Table II shows the presence of eosinophilia in 3 patients. Stool and urine examination for parasites was negative and no cause for the eosinophilia was discovered.

Other features to be noted include: the relative youth of all 4 patients; the intelligence quotient, which was generally subnormal; the strong homosexual trait present in the 3 males studied; the confused sexual identification

TABLE I. RESULTS OF INVESTIGATIONS

Level of assessment	*Normal values*	*Case 1*	*Case 2*	*Case 3*	*Case 4*
1. Nuclear pattern	Male: negative Female: positive	Chromatin-negative	Chromatin-positive	Chromatin-negative	Chromatin-negative
2. Hormonal:					
Total 17-hydroxycorticosteroids (24 hr.)	Male: 5-23 mg. Female: 4-18 mg.	10·9 mg.	14·6 mg.	12·2 mg.	13·7 mg.
17-ketosteroids (24 hr.)	Male: 6-25 mg. Female: 3-20 mg.	16·2 mg.	15·8 mg.	10·5 mg.	15·4 mg.
Total plasma 17-hydroxycorticosteroids (μg./100 ml.) ..	14-46 μg.	37 μg.	7 μg.	15 μg.	10 μg.
	Male / *Female*				
Oestriol (24 hr.)	1-11 μg / Varies with	2 μg.	2 μg.	Not done	Not done
Oestrone (24 hr.)	3-8·2 μg / phase of	2 μg.	2 μg.	2 μg.	3 μg.
Oestradiol (24 hr.)	0-6·3 μg / cycle	2 μg.	2 μg.	2 μg.	1·5 μg.
Follicle-stimulating hormone (24 hr.)	Adult male and female: 6-48 mouse units (mu)	Less than 6 mu	24-48 mu	6-12 mu	24-48 mu
Glucose-tolerance curve ..	—	Normal	Normal	Normal	Normal
Protein-bound iodine (μg./100 ml.)	4-8 μg.	5·5 μg.	4·5 μg.	5·2 μg.	6·5 μg.
Plasma cholesterol (mg./100 ml.)	120-250 mg.	196 mg.	190 mg.	164 mg.	166 mg.
3. Gonads	—	Macroscopically normal testes	Not known	Macroscopically normal testes	Macroscopically normal testes
4. External genitalia	—	Normal male	Normal female	Normal male	Normal male
5. Secondary sex characters ..	—	Sparse body hair; female escutcheon	Normal breasts; female escutcheon	Sparse body hair; female escutcheon	Normal male hair distribution
6. Psychosocial	—	Female	Male	Female	Female

TABLE II. FULL BLOOD COUNT

	Case 1		Case 2		Case 3	Case 4		
Haemoglobin (G./100 ml.)	18·5	—	16·5	—	16·9	15·8	—	—
Total leucocyte count (thousands/c.mm.)	7·7	7·3	7·7	8·5	5·9	8·3	7·0	8·1
Neutrophils (%)	42·0	50·0	57·5	60·0	56·5	43·0	42·5	42·0
Monocytes (%)	2·5	2·0	2·0	2·0	8·0	8·0	4·5	3·5
Lymphocytes (%)	40·0	33·0	30·5	29·5	33·5	42·0	40·0	43·5
Eosinophils (%)	15·0	15·0	10·0	8·5	2·0	7·0	13·0	11·0
Basophils (%)	0·5	—	—	—	—	—	—	—

in all the patients; the immature perception of the role of the opposite sex, which was particularly obvious in the 3 males who had almost no other appreciation of a woman than someone who cooked and managed a home; and the absence of a common basic personality structure. Case 1 was considered to be a psychopath; case 2 was not evaluated because of severe mental retardation; case 3 was schizophrenic; and case 4 a sociopathic personality, manifesting with homosexuality, exhibitionism, narcissism and fetishism.

Genetic Aspects

While no evidence was forthcoming to suggest the inheritance of the condition, the presence of psychological disturbance and family discord was found in the relatives of several of the patients. The mother of case 1 and the father of case 4 were alcoholics, and both cases 1 and 3 had come from disrupted homes and had been cared for by foster parents for a period during infancy.

HISTORICAL AND CULTURAL ASPECTS

This subject has been covered most adequately by Lukianowicz,[5] from whose comprehensive review much of the material in this section has been obtained. The phenomenon of cross-dressing was known in antiquity and was described by Herodotus as the mysterious 'Skythian illness', occurring on the shores of the Black Sea, where anatomically normal males would wear female clothing and do women's work. In ancient Greece, a picture of Hercules in female attire suggests the presence of the condition there as well, and in Rome the Emperor Caligula was known to have worn female garments on occasion. The best-known transvestites of modern times include the Chevalier d'Eon Beaumont, from whose name the term Eonism has been derived, and James Barry, Inspector-General of the English Army Medical Department.

Cultural factors play an important role in the extent to which this condition comes within the surveillance of the physician, and in this regard Margaret Mead writes, 'Whether transvestism will occur seems to be a question of cultural recognition of the possibility'.

Attitudes towards the transvestite vary enormously in different cultures. Transvestites are held in high social esteem by the Mohave Indians and by certain of the indigenous peoples of Siberia. There are, as well, instances of compulsory transvestism which are enforced by tribal tradition. The natives of Madagascar may bring up their male children as girls in those cases where the parents desired to have a girl.

In Western culture, examples of the type cited above are rare and one of the few examples quoted in the literature concerns the inhabitants of the island of Maarken in Holland, where the unusual custom exists of dressing boys as girls until the age of 7. This has been regarded by Jelgersma[6] as a 'symbolic castration' imposed by men 'to guard against the incestuous tendencies of children among a seafaring population'.

Attitudes in our own society vary to a certain extent as regards each sex. The female who wears her hair short and dresses in slacks or severely tailored clothes is so commonplace as to hardly merit mention, yet the male who shows the slightest manifestation of transvestism is generally viewed askance and considered a homosexual. However, the Scot may wear his kilt without being suspect, thus illustrating a rather interesting regional and traditional exception to a generally held view.

VIEWS ON AETIOLOGY

1. *Traumatic Theory*

This is mentioned, not because it appears to be worthy of serious consideration, but because of its historical interest. Hippocrates suggested that mechanical trauma to the reproductive organs, incurred by excessive horse-riding, might be responsible for the occurrence of transvestism and this theory was revived at the beginning of the last century when it was mooted as an aetiological factor in the production of effeminacy among the equestrian Tartars.

2. *Chromosomal and Hormonal Theory*

It is generally accepted that gonadal hormones do not determine the character of the sexual drive in adult human beings. The character of the drive may, of course, be affected by the reproductive hormones, but the behaviour through which it finds expression is learned and not dependent on endocrine factors.

However, this view was questioned recently by Lief *et al.*[7] in a report of a male of 23 who experienced a cyclical alternation of feeling and acting 'male' and 'female' over a period of 11 years. Spontaneous cessation of this periodicity was accompanied by a marked increase in the secretion of urinary 17-ketosteroids. Their data suggested an association between a derangement in development of androgenic characteristics and a homosexual pattern in adolescence and homo-eroticism in adulthood. They postulated that a deficiency of adequate levels of male hormones probably served to perpetuate pre-existing effeminate childhood patterns in their patient. In early adulthood, 11 years later, a second puberty began spontaneously and was associated with an increased secretion of pituitary gonadotrophic hormones and male hormone production, with development of a masculine physique and some decrease in feminine characteristics and mannerisms. The authors claimed that this was the first recorded case

of its type in the literature and its particular significance seems to lie in the unequivocal demonstration of a close association between an endocrine dysfunction and a sexual deviation, involving not only homosexuality, but also effeminacy and the adoption of feminine interests.

None of the cases studied in the present series show variance between the nuclear structure of the body cells, the hormonal status and the anatomical sex. However, sparse development of the secondary sex characters in cases 1 and 3, namely lack of hirsuties and the presence of a female escutcheon, suggests that endocrine factors, as yet not measurable by present-day techniques, may be responsible for the clinical manifestations. This is, of course, speculative, and until endocrinologists can ascertain subtleties of hormonal variation between male and female more discretely, it must be accepted that these patients have an endocrine picture in conformity with their anatomical sex. At the present time there would appear to be little evidence to support the contentions of Hamburger and his co-workers[3] that transvestism is a kind of intersexuality. It seems to be of paramount importance to refute this claim because, as will be discussed later, it has been advanced as an argument in favour of radical genital surgery on these patients.

3. *Theories of Psychological Conditioning*

Included in this category, which blames adverse childhood conditions, are such factors as parental rejection of the child because of its unwanted sex, which may manifest as transvestism. In a more severe degree, these patients may in consequence develop a hostile attitude towards their own genitalia, with a desire either to hide them or even to remove them completely.

Transvestites frequently blame their mothers for the condition and cite as an aetiological factor being forced to wear female garb in childhood. Case 1 in this series recounted such an experience.

The favoured status of the little girl in many families[5] may be of importance, for by assuming the dress of the preferred sex, the preferential treatment accorded to that sex may thus be obtained.

Close identification with a parental figure has been quoted by a number of authors[8,9] as being responsible for the evolution of transvestism. Such identifications may include close visual contact with a female or a reversal of the parental roles — for example, an aggressive mother or submissive father may sometimes lead to identification with the wrong parent. Although such theories appear to be very attractive, clinical observations question their validity. Cases 3 and 4 in this series, with closely allied clinical presentations, show clearly, in the case of the former, identification with the mother and, in the latter, with the father. Study of further patients would probably be necessary before an accurate assessment of the role of identification could be made.

4. *Psychoanalytic Theory*

The basis of this theory is that transvestism is an attempt to overcome the fear of castration by creating an imaginary phallic woman and subsequent identification with her. Fenichel[10] suggested the following symbolic formulation: 'I keep my penis by acting as though I were in fact a girl'.

5. *Relationship to Homosexuality*

Most writers regard transvestism as an independent sexual perversion, although it is generally acknowledged that overt homosexuality is found frequently in transsexualists and female transvestites. All 3 males in this series were practising passive homosexuals with strong homosexual drives. It is suggested that the cross-dressing and castration requests, with the persistent assertions that they were 'inwardly female' may be a rationalization for their homosexuality, which all conceded was frowned upon in this society. Case 3 illustrated rather interestingly another aspect of the problem, in that he was adamant in demanding legal recognition of his cross-dressing if a sex-conversion operation was denied him. He felt by this means he would facilitate the establishment of homosexual contacts for himself. From the very limited experience gained with this small number of patients, it would seem that a much closer relationship exists between transvestism and transsexualism on the one hand and homosexuality on the other than was formerly believed. Thus it is suggested that a causal association may exist between these conditions and that the manifestation of each perversion may be a question of degree and not of real difference.

6. *Transvestism as a Symptom of Disordered Brain Function*

The existence of a hypothetical cerebral centre discharging 'without normal cortical control' was postulated by Thompson[11] as suggesting that the sexual anomalies might be a kind of release phenomenon similar to Parkinsonism. Epstein[12] reviewed 4 patients with transvestism and fetishism, of whom 3 had conclusive electro-encephalographic abnormalities with a temporal focus and 1 a suggestive temporal abnormality. A fifth patient was mentioned with generalized brain dysfunction. The author suggested that such dysfunction involved temporal-lobe mechanisms which may, in the male, normally subserve sexual arousal patterns.

The only electro-encephalographic abnormality discovered in the present series was in case 2, in whom there was no other evidence of neurological disease.

MANAGEMENT

At the outset the major problem requiring clarification concerns the role of surgery in the treatment of these cases. Reports in the literature on this aspect of the management are sparse and it is impossible to assess the efficacy of surgery in a sufficiently large series followed-up over a number of years to be dogmatic on this point.

Surgical Treatment

In 1953, Hamburger and his co-workers[3] reported the case of a 24-year-old male, whom they considered a 'genuine transvestite' and treated initially with oestrogens, followed by castration and later penotomy. They concluded their report saying that 'by hormonal feminization and operative demasculinization, the patient's soma harmonized with the pronounced feminine psyche .... The patient will be able to move about freely among other persons without anyone suspecting that this is not a normal young woman but a male transvestite whose highest wishes have been

fulfilled by the assistance of the medical profession and by society'.

The report of this case was followed by severe criticism, mainly from psychoanalytically orientated workers who felt that there were absolutely no indications for operation in this biologically normal male. Ostow,[13] discussing the management of the case reported by the Danish authors, suggested the following proposition: 'This patient and every other male transvestite has a neurosis. The neurosis, however, causes pain. Some of the pain arises from the guilt and anxiety inherent in the neurotic process itself. Another source of pain is the frustration from and resentment against social and legal interference with the gratification of the neurotic wish'. He suggested that intensive prolonged psychoanalysis may probably reduce the patient's agitation and level of unhappiness.

On first principles this argument would appear to have a great deal of merit, for it would seem indubitably more profitable to attempt to treat a neurosis rather than to gratify a neurotic desire.

More recently (1961) Hertz *et al.*[14] reported on 5 hormonally and surgically treated cases. Their work is worthy of serious consideration because of the great care with which their patients were studied and the long follow-up of the cases, for as long as 16 years in 1 instance. They believed that it was impossible to influence transvestism by psychiatric treatment, and assisted their patients to have the characteristics of the phenotype, to which they felt they did not belong, removed by hormone therapy and surgery. Case 1 in their series, a male treated by penotomy, castration, oestrogens and later construction of an artificial vagina, was reported 4 years later to have a psychotic depression and to be dressing once more as a male, and the authors felt that the final outcome in this case was 'unsatisfactory'. Case 2, another male, was treated similarly by operative demasculinization and oestrogens. Subsequently this patient found his adaptation problems overwhelming, developed a depressive illness and probably became a drug addict. Six-and-a-half years after operation, the patient revealed that he had become a homosexual prostitute and admitted that 'he had found more adaptation difficulties than he had ever imagined'. Case 3, a female, was treated by hysterectomy, oophorectomy, bilateral mastectomy and androgens, and 3½ years later had married and made an apparent satisfactory adjustment. Case 4, also a female, was treated by hysterectomy, oophorectomy and androgens and after 6 years had likewise adapted satisfactorily. Case 5, another female, also underwent hysterectomy, oophorectomy and bilateral mastectomy, and then received testosterone. Six years later she married, but was divorced after 2 years and subsequently became depressed and made a suicide attempt. Sixteen years after operation the patient acknowledged that 'the adaptation difficulties had been very great... but she did not regret that the surgical procedure had been performed'.

It may be concluded from these authors' experience that while male transvestites are unlikely to benefit from radical surgery, a more favourable outcome may be expected from such treatment in the female. However, the desirability of such a major procedure as hysterectomy, with its attendant risks, must be questioned, and the suggestion made, provided the ethical implications of mutilating treatment are accepted, whether the same results would not have been achieved by mastectomy alone, together with androgenic hormones.

Stürup[15] emphasized that any surgical treatment should be preceded by several years' contact, and he usually commences with hormone therapy and obtains permission from the Danish police authorities for the cross-dressing.

Lukianowicz[5] stressed the irreversibility of a conversion operation and quoted the case of a man who returned 4 years after castration, wanting to be changed back into a male. He was 'utterly lonely and very depressed, and presented a most pathetic picture of a "cured" transsexualist, and is a grave warning to all enthusiasts of conversion operations'.

The weight of evidence, at the present time at any rate, does seem to be against these sex-conversion procedures, particularly when all objective evidence of constitutional intersex is lacking. It might be said, too, that there would appear to be as little moral justification for operating on these patients, as there would be for assisting the depressed person who wished to die.

Legal Hazards

Also to be considered are the legal impediments to such surgical procedures. In most Western countries, castration is illegal except where an obviously pathological process in the organ justifies its removal. However, in Norway, Denmark and Sweden voluntary castration is permitted and governmental approval may be obtained for official alteration of a name and sex. In South Africa, opinion is doubtful whether provision exists for such action by the Registrar of Births and Deaths, and it is likely that any such request would have to be referred to the Supreme Court. Furthermore, in this country women are still subject to certain legal disabilities and the male undergoing a sex-conversion operation would have to appreciate fully the complications that might ensue, consequent on his altered status, if such a procedure were performed.

The problem of cross-dressing, too, is fraught with legal hazards. The condemnation of society for these practices stems from Biblical times and injunctions against such conduct were laid down in the Mosiac Code.[16] 'The woman shall not wear that which pertaineth unto a man, neither shall a man put on a woman's garment: for all that do so are abomination unto the Lord thy God'.

Masquerading in the clothing of the opposite sex is a criminal offence, though the courts appear to deal leniently with those subjects in whom medical evidence suggests a psychological abnormality. Unlike the Scandinavian countries where permission to wear female clothing in public may be granted to a male transvestite, no such facility exists in South Africa, though an attempt is being made to obtain an immunity from prosecution from the relevant authorities for case 4 in this series.

Somatic Treatments

The remainder of the physician's armamentarium is, unfortunately, rather limited. A variety of somatic treatments have been suggested by different workers. Jones[17] used stilboestrol in 2 patients—in 1 case to reduce libido, where it was felt that the transvestist episodes were associated with overt sexual excitement, and in the second case

to relieve tensions associated with the patient's unsatisfied desire for a male sexual partner. The first patient appeared to benefit from this treatment, but the second voluntarily increased the dosage to attain feminization and the author concluded that 'there would seem to be little scope for oestrogens in transsexualism'.

Androgenic hormones would appear to be of no value in the management of these cases, in the light of the clinical picture and normal 17-ketosteroid secretion.

Eyres[2] treated 2 patients with electroconvulsive therapy and claimed to have helped the associated depression, anxiety and tension, thus enabling the patients to cope better with their basic problems.

Aversion Therapy

Based on the principles of deconditioning, Lavin *et al.*[18] attempted aversion therapy on a transvestite. The conditioned stimulus used by these workers consisted of colour slides depicting the patient in various items of female attire and a tape recording of the patient's voice describing himself in these garments. Nausea and vomiting were induced mainly by injections of apomorphine, and the stimuli presented 2-hourly over a period of 6 days. Follow-up after 6 months suggested a complete recovery. A further success was claimed by Glynn and Harper,[19] using a similar technique, with a good result still apparent 7 months later.

Psychotherapy

Psychotherapy may be useful in helping a large number of these patients. Intensive psychoanalytic exploration is probably precluded by the refusal of these subjects to accept any form of re-orientation of their sexual drives, and was not recommended for any of the patients studied in this series. However, a therapeutic approach which assists in relieving symptoms, tensions and associated anxiety might be worthy of consideration. These patients have a great deal of difficulty in coping with their interpersonal relationships and family adjustments, and psychotherapy of a counselling and supportive nature may aid them symptomatically. Where applicable, environmental manipulation might be combined effectively with such therapy and this regime appears to be having gratifying results in case 4 in this series, even at this early stage, 4 months after first seeking treatment.

CONCLUSIONS

The therapeutic possibilities for these seriously disturbed individuals are few, and in the present state of knowledge the prognosis is likely to be poor. While it seems relatively easy to evade the responsibility of recommending reconstructive surgery on these cases because of the lack of evidence of biological intersexuality, this view is not expressed merely to avoid accepting a radical form of treatment, but because of serious doubts about its value. The published reports of surgical treatment in males inspire little confidence in its efficacy in producing worthwhile results.

At the present time, the most encouraging results, though few in number, appear to come from the use of aversion therapy, and further reports with longer follow-up are awaited keenly. It is important, though, to remember that this treatment is only likely to benefit the transsexualist who is willing to accept that no surgery is possible and who genuinely desires to stop his cross-dressing. Unfortunately, such patients probably comprise a small minority only, and the remainder, if adamant enough, will seek treatment in countries where surgical reconstruction is available or, failing that, suicide is a not unlikely outcome.

SUMMARY

Four cases of transsexualism were studied physically and psychologically. Special investigations failed to demonstrate any evidence of biological intersexuality, and it was concluded that the condition was probably psychologically determined. Various possible aetiological factors were considered, but in the present state of knowledge no definite concepts regarding causation have been suggested and much of what is known concerning the problem is speculative. While no common personality structure could be associated with the illness, a strong homosexual trait was present in the 3 males studied, and a feature of all the patients was the generally subnormal I.Q. The problem of management is one of the major difficulties to be faced, and very little encouraging information is to be found in the literature. Surgical treatment has not yet proved to be efficacious and is not recommended. Supportive and manipulative psychotherapy is likely to be all that can be offered at the present time, though in suitable cases the use of aversion therapy to abolish the cross-dressing promises hopeful results.

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