Brit. J. Psychiat. (1976), 128, 194-8

Impotence: Prognosis (A Controlled Study)

By J. M. A. ANSARI

Summary. Sixty-five patients primarily referred for erectile impotence were investigated and treated in a psychiatric out-patient department. Information was obtained from patients and wherever possible from their partners. Subjects were treated either with chemotherapy or with a modified form of Masters and Johnson's technique. A controlled group were not given any specific treatment. Results indicated that neither chemotherapy or behaviour modification (modified Masters and Johnson's technique) were in any way superior to no treatment.

The prognosis was related to the clinical features of the subjects rather than to the form of treatment. Subjects in whom impotence was caused by a specific psychological or physical trauma showed a much better prognosis than those who had an insidious decline in sexual potency without any discernible psychological or physical factors. The decline in these latter subjects with a very poor prognosis was possibly due to inherent physiological factors.

Introduction

Opinions regarding the prognosis of impotence, especially disorders of erection, appear contradictory. Some workers have claimed a very high (up to 90 per cent) recovery rate with psychotherapy (Stekel, 1927; Stafford-Clark, 1954; Hastings, 1963), chemotherapy (Hamilton, 1937; Tuthill, 1955; Teter, 1972), behaviour therapy (Wolpe, 1958; Rachman, 1961; Friedman, 1968), hypnotherapy (Schneck, 1970) or even simple counselling (Wolberg, 1967), while others, using similar forms of treatment have reported a very low recovery rate (Johnson, 1965; Cooper, 1969). Possible reasons for such a wide discrepancy may be that the opinions are based on single case studies (Kinsey *et al.*, 1948), preconceived ideas (Hastings, 1963) or dearth of factual data (Cooper, 1968).

The present paper is a report of a controlled study in which the efficacy of specific forms of treatments was evaluated against no treatment (control) in a group of subjects suffering from erectile impotence, and examines the factors which may have influenced the outcome of treatment.

Patients and Methods

Sixty-five patients with a primary complaint of erectile impotence were investigated and treated in a psychiatric out-patient department. On the basis of the data obtained from the patients and (wherever possible) their partners, they were classified into three distinct clinical sub-groups:

Group 1 (21 cases). Acute onset triggered off by psychological or physical trauma.

Group 2 (23 cases). Insidious onset due to long-term psychological or physical factors.

Group 3 (21 cases). Insidious onset without any discernible psychological or physical factors.

In Group 1 the majority of subjects had become impotent because of anxiety in sexual situations: first coital attempt, engagement, marriage. In Group 2 subjects developed impotence mainly because of their partners' low sexual response, interpersonal conflict, extra-marital relationships. In Group 3, in spite of a thorough search, no psychological or physical factors could be found to account for the decline in sexual potency. The three groups differed significantly in their mean age (Group 1 = 29·0; Group 2 = 46·4; Group 3 = 45·0; $P < ·001$), marital status ($P < ·001$), mean duration of disability (Group 1 = 1·6 years; Group 2 = 3·1 years; Group 3 = 5·0 years; $P < ·05$), and their sex drive. Details of the

https://doi.org/10.1192/bjp.128.2.194 Published online by Cambridge University Press

differences between the three groups have been published elsewhere (Ansari, 1975).

For the purpose of treatment subjects were assigned either to (a) chemotherapy, (b) a modified form of Masters and Johnson's technique (Bancroft, 1972) or (c) to a control group who were not given any specific treatment. The distribution was not strictly random. A number of cases could not be assigned to the Masters and Johnson's technique either because they were single or because their partners were unwilling to participate in the treatment. Such cases were treated either with chemotherapy or were placed in the no-treatment control group. All subjects attended the clinic for six to eight months and were seen every two to three weeks for a total of 12–14 occasions. No formal psychotherapy was given to any patient. The partners were interviewed whenever they agreed to come and were only involved in treatment if allocated to the Masters and Johnson's technique.

Chemotherapy

Patients were prescribed oxazepam, a total of 30–90 mgm. daily in divided doses. This drug is known to have anxiolytic properties (Dally, 1967) and impotence caused by a high level of anxiety (Tucker, 1971) should improve as soon as the anxiety is brought under control. The initial dose was 30 mg. and this was gradually increased to a maximum of 90 mg. daily (30 mgm. t.d.s.). If patients became drowsy the dosage was reduced and kept at the lower level. Patients were made aware that the tablets prescribed were not hormones.

Masters and Johnson's technique

Masters and Johnson's (1970) technique is based on the principle that impotence develops from a breakdown of interpersonal relationship, rather than from a psychiatric or medical illness; so the aim of the method is to improve the quality of the relationship between the couple as well as their sexual attitudes. No patient is accepted on his or her own, for sexual dysfunction is regarded as a problem of the marital unit and not of the individual alone. There is a dual-therapy team consisting of a male and a female therapist. Couples are initially told not to indulge in sexual intercourse until advised to do so, thus removing the pressure to procure and perform. They are further instructed to explore the sensation of touch, and emphasis is placed on giving pleasure rather than on receiving it. As soon as the subjects have mastered the preliminaries, the female is advised to stimulate the male's genitals, and this is repeated several times. The erections thus procured are allowed to die down until the man gradually overcomes his fear of losing erection during intercourse; only then are they encouraged to indulge in coitus. Treatment lasts about two weeks, during which time they spend 12 to 30 hours with the therapists and the rest in homework.

Modified form (Bancroft, 1972)

In order to make it applicable in the hospital setting, a modified form of the original technique was used. The basic principles were the same. There was only one therapist, the patients practice took place in their own homes, and they were seen periodically in the out-patients department, usually every two weeks, totalling 12 to 14 occasions.

No-treatment group (control)

These patients were not given any specific therapy, though they attended the clinic for the same length of time and the same number of occasions as the other groups. History taking, physical examination, any necessary laboratory investigations and follow-up were exactly the same as for the other subjects.

The distribution of the subjects according to their clinical categories and the type of treatment assigned to, is presented in Table I.

TABLE I

Distribution of 55 impotent subjects in two treatment and no treatment (control) categories

Subjects	Chemo-therapy	Masters and Johnson (mod)	No treat-ment (control)
Group 1 (N = 18)	6	4	8
Group 2 (N = 20)	6	9	5
Group 3 (N = 17)	4	8	5
Total ..	16 (29·0%)	21 (38·1%)	18 (32·7%)

RESULTS

Out of a total of 65 cases, 55 subjects completed their treatment. In the remaining 10 subjects the outcome was not known, as they discontinued their treatment after attending only a few sessions.

The degree of improvement was assessed as:

1. Recovered—In this group subjects were completely satisfied with their sexual performance and considered themselves as completely recovered.

https://doi.org/10.1192/bjp.128.2.194 Published online by Cambridge University Press

2. Improved—In this group subjects were able to perform coitus more often than before they attended the clinic; but they experienced occasional failure and were considerably less satisfied than the recovered group.
3. No change.

Patients were followed up for a further period of eight months. During this period they were seen on two or three occasions and their progress was noted. The results of treatment after the completion of their treatment and at eight months follow-up are summarized in Table II.

There was no significant difference in the outcome between treated and control subjects. The rate of recovery appeared to be related to the clinical categories. Groups 1 and 2 showed a significantly better recovery rate than Group 3 ($P < \cdot 01$). The higher rate of recovery seen in the controls is due to a higher number of Group 1 cases in this category.

Eight months follow-up showed no significant change in the outcome of Group 1 subjects; but a considerable number of subjects relapsed in Groups 2 and 3.

Age, social class and religion were not related to the rate of recovery. Although subjects in Group 1 had a lower mean age than those in Groups 2 and 3, they did not significantly differ in the age range (Group 1—17–49; Group 2—29–61; Group 3—31–58). A Chi-square test performed on subjects aged 31–49 years (thereby removing the age effect) showed a significant difference in the rate of recovery between Groups 1 and 3 ($\chi^2 = 10 \cdot 53$, d.f. 1, $P < \cdot 01$). Subjects who were married to a helpful partner either showed a good recovery or adjusted to their own low sexual capacity. Where the partners' sexual response and attitudes were at fault the outcome was poor. Long duration of disability was associated with poor outcome, which is a significant characteristic of Group 3 (Group 1/Group 3 $P < \cdot 05$).

TABLE II

Distribution of 55 impotent subjects according to treatment response. (A—After the completion of their treatment; B—Eight months follow-up)

Subjects	Chemotherapy			Masters and Johnson (mod)			No treatment (control)			Total Rec+Imp %	Significance*
	Rec	Imp	NC	Rec	Imp	NC	Rec	Imp	NC		
A Group 1 (N = 18) ..	4	1	1	4	–	–	7	1	–	89	G1/G2 N.S.
Group 2 (N = 20) ..	3	1	2	3	4	2	2	2	1	75	G2/G3 $P < \cdot 05$
Group 3 (N = 17) ..	–	1	3	–	4	4	–	1	4	35	G3/G1 $P < \cdot 002$
Total Rec/Imp (%)		63			67			72		67	Treatments/control N.S.
B Group 1 (N = 18) ..	4	–	2	4	–	–	7	–	1	84	G1/G2 $P < \cdot 02$
Group 2 (N = 20) ..	3	–	3	2	–	7	2	2	1	45	G2/G3 N.S.
Group 3 (N = 17) ..	–	–	4	–	1	7	–	1	4	12	G3/G1 $P < \cdot 001$
Total Rec/Imp (%)		44			33			68		47	Treatments/control N.S.

Rec = Recovered; Imp = Improved; NC = No change.
* Geigy Scientific Tables.

https://doi.org/10.1192/bjp.128.2.194 Published online by Cambridge University Press

Discussion

Opinions regarding the prognosis and the treatment of choice for impotence vary. Most workers agree that a number of patients recover after a discussion of their problem, or simple counselling (Wolberg, 1967), while a number of patients do not respond even after years of treatment (Stafford-Clark, 1954).

Many divergent forms of treatment having no common theoretical basis have been used, each claiming a significant success. Before the introduction of psychoanalysis, urologists used to treat impotence with steel bougies and silver nitrate instillation (Gross, 1887; Hohman and Scott, 1933). Psychoanalytical writers pointed out that whatever benefit these subjects received from urological treatment was a placebo effect (Menninger, 1935) and claimed that only psychotherapy could cure these cases by removing guilt and conflicts (Stekel, 1927; Stafford-Clark, 1954; Ellis, 1962; Hastings, 1963). Tuthill (1955) obtained a 77 per cent success rate in impotence by the use of testosterone preparations, while Friedman (1968) obtained 84 per cent recovery by desensitization. In recent years Masters and Johnson (1970) introduced a technique based on the principles of supportive psychotherapy and behaviour modification, with a very significant recovery rate (up to 80 per cent). Bancroft's (1972) modification of Masters and Johnson's technique in several respects did not significantly affect the results obtained by the original method. Contrary to the claims of such high success rates there are studies which show that the prognosis of impotence is poor. Johnson's (1965) retrospective study of Maudsley Hospital patients showed 31 per cent recovered or improved, and Cooper (1969) obtained 39 per cent recovered or improved with a treatment consisting of deep muscular relaxation, provision of optimal sexual stimulation and psychotherapy.

Generally impotence is regarded as a symptom of neurosis (Glover, 1949) caused by psychological or physical stress, and psychotherapy could therefore be considered to be the treatment of choice. However, several studies (Denker, 1946; Eysenck, 1960) have pointed out that the spontaneous remission rate in neurotic disorders does not vary significantly from that obtained by psychotherapy. It is possible that we may be dealing with a similar situation in the case of impotence. Whether the high success rate obtained with psychotherapy, hormone treatment or behaviour modification represents spontaneous remission or the beneficial effect derived from the specific therapy needs evaluation on the basis of properly conducted controlled studies.

In the present study subjects in Group 1 and 2 developed impotence in response to a psychological or physical trauma. The mean recovery rate of these two groups, though fairly high, was not far off the spontaneous remission rate of neurosis (Eysenck, 1960). The difference in the rate of recovery between these two groups was due to the fact that in Group 1 the stress primarily involved the subject himself, while in Group 2 the stress was linked with the partner's personality, and sexual response and with disturbed interpersonal relationships. Group 3 appears to be singularly different from the other two groups in that the subjects had an insidious decline in their sexual potency without any discernible aetiological factors. From the beginning of their sex life they consistently showed a low sex drive. In this group impotence does not appear to be neurotic in origin and is difficult to explain except in terms of inherent physiological factors (Ansari, 1975). A radio-immunoassay technique did not show that serum testosterone levels in Group 3 were significantly different from those of the other two groups (Ansari *et al.*, 1973); however, endocrine abnormalities have been reported by others (Cooper *et al.*, 1970; Fabre *et al.*, 1973; Legros *et al.*, 1973). Subjects in this group showed a very poor prognosis; none of them recovered completely, and those who showed improvement relapsed very soon. This confirms the findings of others that there is a group of patients who do not respond to any form of treatment (Stafford-Clark, 1954; Johnson, 1965; Masters and Johnson, 1970). It may, however, appear that the factors responsible for their poor prognosis are physiological rather than psychological.

Although a number of factors could have influenced the prognosis of the subjects in the no treatment (control) category, such as

https://doi.org/10.1192/bjp.128.2.194 Published online by Cambridge University Press

attendance at the clinic, physical examination and expectation of recovery, there is no doubt that neither chemotherapy nor behaviour modification proved to be any more effective than the simple reassurance or encouragement which these patients might have received while discussing their problem. It may also appear of considerable practical importance to recognize those subjects in whom the prognosis is likely to be poor in order to enable the couple to adjust to the situation, by explanation and support, rather than by lengthy treatments.

Acknowledgements

I am extremely grateful to Dr. David Enoch for his help and advice in the preparation of this paper. I would also like to thank Dr. Philip Ley for his invaluable help in statistical analysis.

References

Ansari, J. M. A., Glover, T. D., Racey, P. A. & Rowe, P. H. (1973) Endocrine studies on impotent men. Paper read at the Conference of the Society on Endocrinology, London.

—— (1975) A study of 65 impotent males. *British Journal of Psychiatry*, **127**, 337–41.

Bancroft, J. H. J. (1972) The Masters and Johnson approach to marital sexual problems used in a N.H.S. setting. Paper read at second annual conference of European Behaviour Therapy Association, Wexford, Ireland.

Cooper, A. J. (1968) A factual study of male potency disorders. *British Journal of Psychiatry*, **114**, 719–31.

—— (1969) Disorders of sexual potency in the male: a clinical and statistical study of some factors related to short-term prognosis. *British Journal of Psychiatry*, **115**, 709–19.

—— Ismail, A. A. A., Smith, C. G. & Loraine, J. A. (1970) Androgen function in 'psychogenic' and 'constitutional' types of impotence. *British Medical Journal*, *iii*, 17–20.

Dally, P. (1967) *Chemotherapy of Psychiatric Disorders*. London: Logos Press Ltd.

Denker, P. G. (1946) Results of treatment of psychoneuroses by the general practitioner: a follow-up study of 500 cases. *New York State Journal of Medicine*, **46**, 2164–6.

Ellis, A. (1962) *Reason and Emotion in Psychotherapy*. New York: Lyle Stuart.

Eysenck, H. J. (1960) The effects of psychotherapy. In *Handbook of Abnormal Psychology* (ed. H. J. Eysenck). London: Pitman.

Fabre, L. F., Jr., Pasco, P. J., Liegel, J. M. & Farmer, R. W. (1973) Abnormal testosterone excretion in men alcoholics. *Quarterly Journal of Studies of Alcohol*, **34**, 57–63.

Friedman, D. E. (1968) The treatment of impotence by Brietal relaxation therapy. *Behaviour Research and Therapy*, **6**, 257–61.

Geigy Scientific Tables (1970) Seventh Edition (ed. Diem, K. and Lentener, C.), p. 109. Basle: Geigy, J.R.

Glover, E. (1949) *Psychoanalysis*. London: Staples Press.

Gross, S. (1887) *Practical Treatise on Impotence and Sterility*. Edinburgh: Y. J. Pentland.

Hamilton, J. B. (1937) Induction of penile erection by male hormone substances. *Endocrinology*, **21**, 744–9.

Hastings, D. W. (1963) *Impotence and Frigidity*. Boston: Little, Brown and Company.

Hohman, L. B. & Scott, W. W. (1933) A combined psychiatric and urological study of sexual impotence. *Journal of Urology*, *xxix*, 59–76.

Johnson, J. (1965) Prognosis of disorders of sexual potency in the male. *Journal of Psychosomatic Research*, **9**, 195–200.

Legros, J. J., Franchimont, P., Palem-Vliers, M. & Servais, J. (1973) FSH, LH and testosterone blood level in patients with psychogenic impotence. *Endocrinologia Experimentalis*, **7**, 59–63.

Masters, W. H. & Johnson, V. E. (1970) *Human Sexual Inadequacy*. London: J. and A. Churchill.

Menninger, K. A. (1935) Impotence and frigidity from the standpoint of psychoanalysis. *Journal of Urology*, **34**, 166–83.

Rachman, S. (1961) Sexual disorders and behaviour therapy. *American Journal of Psychiatry*, **118**, 233–40.

Schneck, M. J. (1970) Psychogenic impotence with a hypnotherapy case illustration. *Psychosomatics*, **11**, 352–4.

Stafford-Clark, D. (1954) The etiology and treatment of impotence. *Practitioner*, **172**, 397–404.

Stekel, W. (1927) *Impotence in the Male*. (English version by Oswald Boltz.) New York: Boni and Liveright.

Teter, J. (1972) Treatment of endocrine impotence. *British Medical Journal*, *iv*, 114.

Tucker, E. C. (1971) Clinical evaluation and management of the impotent. *Journal of American Geriatrics Society*, **19**, 180–6.

Tuthill, J. F. (1955) Impotence. *Lancet*, *i*, 124–8.

Wolberg, L. R. (1967) *The Technique of Psychotherapy* (Part II). New York: Grune and Stratton, Inc.

Wolpe, J. (1958) *Psychotherapy by Reciprocal Inhibition*. Stanford California: Stanford University Press.

J. M. A. Ansari, M.Psych.Med., M.R.C.Psych., *Department of Psychiatry, University of Liverpool, 6 Abercromby Square, Liverpool, L69 3BX*

(*Received 24 March 1975*)

https://doi.org/10.1192/bjp.128.2.194 Published online by Cambridge University Press