PSYCHOLOGICAL SCREENING FOR VASECTOMY

H. A. LYONS, M.B., F.R.C.P.I., F.R.C.Psych., D.P.M.
Consultant Psychiatrist to the Ulster Hospital, Dundonald

INTRODUCTION

The operation of vasectomy has had a very chequered career. It was first carried out on a dog by Sir Astley Cooper in 1823 and he accurately described the effects. In 1899 Harrison carried out a vasectomy to relieve enlargement of the prostate and this indication continued for several years. It has been carried out since the beginning of this century to prevent epididymitis as a complication following prostatectomy. Sharp (1902) started to carry out large numbers of vasectomies to give relief from the ‘habit of masturbation’ and in 1909 the same enthusiastic doctor started doing eugenic vasectomies in ‘defective individuals’. The eugenic movement grew and several of the States of America and some Western European countries passed legislation supporting compulsory sterilisation in certain conditions, and this practice reached major significance in the Nazi philosophy.

Another very dubious use of vasectomy in the early part of this century was for the purpose of rejuvenation and in the twenties and thirties hundreds of publications appeared from all parts of the world supporting this rejuvenation theory and these continued to appear until testosterone was isolated in 1935.

In the fifties and sixties vasectomies were carried out on a very large scale in India in an attempt to control population growth. This strategy by the Indian Government was one of the principal reasons for its downfall and mass vasectomies are no longer carried out in that country.

In the sixties contraceptive vasectomies were started in Western Europe and the U.S.A. The Simon Population Trust encouraged the procedure in England and favourably reported on the psychological and sexual effects of the operation. In 1972 vasectomy became available under the National Health Service. Prior to this date it was only carried out under the Health Service if there were medical indications.

The history of vasectomy is an unhappy one and guide lines must be developed to safeguard those who would later regret it. It will probably be replaced in the future by some more acceptable form of contraceptive, but in the meantime, it is important to exclude those men in whom vasectomy is unlikely to give a satisfactory long-term result.

Most of the papers dealing with the psychological aspects have concentrated on the post-operative effects. The Simon Trust (1969) found a very low incidence of psychological complications while Wolfers (1970) was rather more cautious and found 10 out of 82 respondents indicated some psychological problems arising from the operation and advised screening of applicants. Although reports concerning vasectomy have come from all over the world, none as yet has appeared from Ireland. The present paper is a prospective study of referrals to
a large district general hospital for vasectomy, with special emphasis on screening for unsuitable applicants.

This paper deals with the characteristics of those interviewed and the reasons why vasectomy was deferred or refused in some instances. A later report will deal with the post-vasectomy effects.

**Methodology:**

The patients were referred by general practitioners and were interviewed at a large district general hospital. Some of the men came from outside the normal catchment area of this hospital as the surgeon involved was interested in doing vasectomies. The men were requested to bring their wives with them and this was done in all cases. The husband was interviewed first and the wife immediately afterwards. This method was used firstly in an attempt to ascertain the true state of the marital relationship and secondly the sexual activity and response of each partner. Thirdly it acted as a check on the accuracy of the information, and in particular to ascertain from the wife if her husband had any sexual problems. A fourth point was to ascertain if there was a discrepancy between the partners in their assessment of the frequency and enjoyment of intercourse. Only on a few occasions were the couple seen together, for example, if it was considered that vasectomy was contra-indicated, or if the author had a doubt that both partners wanted a permanent irreversible method of contraception. In cases where it was considered that vasectomy was contra-indicated the reason was usually explained to the couple, but under certain circumstances to only one partner. The general practitioner was notified of the decision and it was left to him to advise or arrange for alternative methods of contraception. It is possible that some may have sought and had vasectomy elsewhere. The surgeon then saw the couple together and briefly explained the operation and the post-operative routine. Generally the vasectomies were carried out under local anaesthetic as an outpatient. The couples are presently being followed-up and the findings will be the subject of a further study.

At the interview by the psychiatrist a questionnaire dealing with social, marital, health, sex, contraception, and reason for decision was filled in. The time spent on each varied considerably and in those where there seemed to be some doubts, a considerably longer period of time was taken, and in some cases a second interview was arranged.

All couples were seen under the National Health Service.

**Results:**

There were 286 couples interviewed. Two men did not wish to bring their wives and these two are not included in the study. All the couples were married; three of the men and two of the women had been married previously. The age range for the men was 23 years to 49 years (mean age 32.9 years). The age range for females was 22 years to 45 years (mean age 30.5 years).
The number of children was usually small, the range being from one child to nine children (mean 2.7 children), but only one couple had more than six children. The age of the youngest child ranged widely from the unborn child to a young adult of 24 years (the mean age of the youngest child was just under two years). Six women were pregnant when interviewed and, if this was the first or second pregnancy, vasectomy was postponed for approximately one year.

As regards Social Class, according to the Classification of the Registrar General, there were fewer in Social Group I and V compared to the population distribution (Social group I 3.5%; population 10%. Social Group V 6% ; population 22%). The couples were seen over the period 1973-1977 and it was found that the social group varied with time. In the first two years 25 per cent were in Social Group I and II while in the years 1976 and 1977 this figure had dropped to 16 per cent. The couples were very largely protestant, namely 97 per cent while the expected figure according to the Belfast census of 1971 would be 70 per cent.

The length of time the couple had been married varied widely from 5 years to 25 years. The average length of time married was 9.3 years. Enquiries were made from each partner concerning the marital relationship and specifically if there had been any episodes of violence, separations or infidelity. It was considered that the answers given were a considerable under-representation of marital problems. Only twelve couples admitted to serious marital difficulties and in half of these couples vasectomy was refused. One couple proceeded to have a major marital 'row' when informed that vasectomy was contra-indicated.

The commonest problem relating to the couples sexual relationships was a fear of further pregnancies in the wives interviewed. This problem was mentioned spontaneously by 154 (53 per cent) women, and in most of these women this fear caused a strong inhibition of the sexual activity. Detailed questioning about impotence and premature ejaculation only discovered twelve men with these problems, nine of whom were refused vasectomy. When the wife was interviewed she was asked specifically if her husband had any sexual problems and in five of these cases the information came from the wife.

As regards the frequency of sexual intercourse, there was a wide variation from 'never now' to 'daily'. The mean for males was between two and three times per week and the mean for females was three times per week. The wives tended to estimate rather higher frequencies than their husbands. For example, 37 per cent of men gave a frequency of three or more times per week, while 48 per cent of females estimated this frequency. To the question of enjoyment of sexual relationships most men gave a positive response but many of the women stated that a fear of further pregnancies spoilt their sexual life.

As regards the contraceptive used, the majority of couples used the pill or the condom. There were 138 women currently taking the pill of whom 112 were satisfied but had read or been advised about possible long-term effects. In the later part of 1976 more women were seen who had been on the pill for many years and were quite satisfied but had either read about the possibility
of long-term effects or had been advised by their general practitioner to stop the pill. Of the 148 patients who were not currently on the pill, 109 had been on it at some stage and had developed side-effects, or had been advised to stop either because they had been on the pill for many years or had some medical condition making the pill contra-indicated. There were 92 couples currently using the condom, only two of these found it acceptable. Most couples objected to it on aesthetic grounds and many also found it unacceptable because of the higher risk of pregnancy with this method. Many of the couples interviewed had used the condom previously. Although widely used it would seem not a very acceptable method of contraception in this sample of married couples seeking vasectomy. Use of a male method might be above average in the sample as they are presenting with a request for a permanent state of male infertility. Few women used either an intra-uterine device (8) or a diaphragm (5). The former had been tried by some women and most had experienced menstrual disturbances. The diaphragm was generally not acceptable on aesthetic grounds. Coitus interuptus was practiced by 15 couples and six other couples did not appear to be using any method of contraception. In this sample the couples placed great stress on a highly safe method of contraception. This would probably explain the low usage of certain types of contraceptive methods. Those who had tried several methods of contraception and found all unacceptable were questioned especially carefully as it was considered that this might be indicative of a poor outcome of vasectomy.

A history of nervous illness, sufficient to require the help of a psychiatrist, was found in 23 of the females and 11 of the males. Twelve females had a history of post-natal depression. Four men were considered to have a problem with alcohol and two of them had frequent episodes of impotence. There were no schizophrenics in this study. The females showed a fairly high incidence of serious chronic physical illness (Table I). Only seven males (2.5 per cent) showed serious chronic physical illness. The women also showed a high incidence of obstetrical and gynaecological problems and these involved 54 women (19 per cent). Several other women gave a history of deep venous thrombosis and almost a fifth had varicose veins.

The couples were asked why they had decided to request a vasectomy and, apart from the obvious essential reasons that their families were complete and that the male wished to be permanently sterile, a wide variety of supporting reasons was offered, such as:

1. Being ‘easier’ for a male as not an ‘internal’ operation and could be carried out as an out-patient under local anaesthesia.

2. The fact that the wife ‘had been through enough’. By this was often meant a history of caesarean sections or miscarriages or being ill physically.

3. That other methods were not totally reliable.

The husband often said his wife would be pleased to be sterilized but male sterilization had practical advantages.

Vasectomy was refused in 26 cases (9 per cent). In 21 of these the decision was made at the initial interview and in five at a second interview. In some of
**TABLE I**

*Health of the Wives*

| Serious Physical Illness | History of Gynaecological Illness | History of Psychiatric Illness |
|-------------------------|----------------------------------|-------------------------------|
| Osteo-arthritis         | Caesarian Section                 | Neurotic Illness              |
| Osteosarcoma            | Miscarriages                      | Post-natal depression         |
| Renal pathology         | Termination of Pregnancy          |                               |
| Hypertension            | Difficult deliveries              |                               |
| Rheumatic Heart Disease | Repair operation                  |                               |
| Blind and cleft palate  | Frequent D. & C.                  |                               |
| Epilepsy                | Ovarian cyst                      |                               |
| Gall bladder disease    | Ectopic pregnancy                 | Deep venous thrombosis        |
| Thyroid disease         | Pre-eclamptic toxaemia            | Varicose Veins                |
| Carcinoma of breast     | Wife sterilised                   |                               |
| Coeliac disease         |                                  |                               |
| Asthma                  | 4                                | 54                            |
| History of Cerebral Haemorrhage | 1                            |                               |
| Severe burns            | 1                                |                               |
| Coarctation of the Aorta| 1                                |                               |
|                         | 28                               |                               |

these couples there was more than one reason, such as a combination of male sexual difficulties and an unstable marriage, but the principal reasons are given in Table II.

**TABLE II**

*Reasons for Refusal*

- Episodes of Impotence: 8
- Premature Ejaculation: 3
- Unstable Marriage: 6
- Husband having strong doubts concerning potency: 4
- Wife uncertain about further children: 2
- Wife seriously ill physically: 2
- Wife menopausal: 1

| Reasons for Refusal | Count |
|---------------------|-------|
| Episdes of Impotence| 8     |
| Premature Ejaculation| 3   |
| Unstable Marriage   | 6     |
| Husband having strong doubts concerning potency | 4 |
| Wife uncertain about further children | 2 |
| Wife seriously ill physically | 2 |
| Wife menopausal | 1 |

| Count |
|-------|
| 26    |

Vasectomy was deferred in 11 couples (4 per cent). The period of postponement was about one year. The reasons for deferment are given in Table III.
TABLE III

Reasons for Deferment

| Reason                                      | Count |
|---------------------------------------------|-------|
| Wife young with 1st or 2nd child under 1 year | 6     |
| First child very young with congenital heart disease | 1     |
| Neurotic uncertain couple                   | 1     |
| Wife pregnant and rather uncertain          | 1     |
| Wished to ‘think it over’                   | 1     |
| Some evidence of an unstable marriage       | 1     |

DISCUSSION

The typical couple who presented in Belfast requesting a vasectomy was aged in their early thirties, having been married about nine years and having two or three children. They were in the middle and upper social groups, protestants, and most had been well informed. Most had been using some contraceptive method in a responsible fashion for some years.

When the study was commenced there was an opinion from one of the Medical Defence Unions that it might be inadvisable to sterilize a male under thirty years of age. With the passage of time this seemed to be a very cautious approach and many men in the latter half of their twenties who have two or three children and a stable marriage would seem to be suitable for the procedure, if there are no contra-indications. Young women who are pregnant with their second child when interviewed present a problem because of the high infant mortality rate under one year of age, and most of these young mothers were deferred for a year.

The majority of those interviewed had already received counselling either from their general practitioner, or at a family planning clinic. It was not the role of the author or his surgical colleague to advocate vasectomy, or in those refused to recommend other contraceptive measures, but immediate referral back to the general practitioner or family planning clinic was arranged. It seemed unreasonable to the author to refuse or defer a young responsible couple purely on the grounds of age without offering some alternative help.

Few older men requested a vasectomy, and only 43 (14 per cent) were in their forties. The idea of rejuvenation by vasectomy, described by Steinback (1940), no longer exists and none of the men interviewed enquired about this possibility. The men in their forties had wives who had been on the pill for ten or more years and had been advised to find some alternative method of contraception. Generally there was not a wide discrepancy between the ages of the husband and wife. A wide discrepancy would probably have made one cautious about proceeding with a vasectomy. One couple was refused vasectomy as the wife was menopausal.
In Northern Ireland, although unemployment and bad housing are serious problems, one could not suggest that over-population is a major problem and in fact the population in Ireland generally has fallen very considerably in the last 150 years. Those who present for vasectomy do not have big families, the average being 2.7 children. Vasectomy would have very little effect on population trends. In those with large and problem families in Social Group V a vasectomy would probably be unacceptable and where vasectomy has been introduced as a means of controlling population growth, such as India, it has been a failure.

The age of the youngest child showed a wide range. The fact that those whose youngest child was in the teens or early twenties, would mention a dissatisfaction with their present contraceptive methods was mainly due to the recent report concerning the possible long-term effects of the contraceptive pill. (Royal Coll. of Gen. Practitioners 1977) (Vessey, M.P., McPherson K., Johnson B. 1977)

Those in Social Group V were under-represented. This is probably due to a non-acceptance of male sterilization among workingclass men.

The large proportion using the condom as current contraceptive was surprising, especially when the vast majority found it an unpleasant method and not particularly reliable. The possible explanation in this pre-vasectomy group is that there is more than average emphasis on male methods of contraception. The very low use of the intra-uterine device and diaphragm would support this view. The recent reports concerning the long-term effects of the contraceptive pill have increased the demand for vasectomies and this increase is likely to continue until some other safe and acceptable contraceptive method becomes available.

As regards the sexual and marital relationships of those interviewed, it would seem very likely that the problems encountered were an under-estimation. Apart from much more prolonged interviews over a period of time, this is a problem of methodology to which there is no simple solution. Possibly those obviously unsuitable for vasectomy were not referred, so some initial screening had already been carried out by the general practitioner.

The sexual habits do not necessarily reflect those of the community but the wide range of frequency of sexual intercourse and the average incidence of between two and three times per week are in keeping with the Kinsey figures for America. (Kinsey et al 1948 and 1953). The very high incidence of fear of pregnancy initially is surprising but on reflection, this must be one of the main motivating factors in bringing the couple to seek vasectomy. Nevertheless, it is rather surprising, when fear of pregnancy was such a prominent feature among the females, that female sterilization had not been sought earlier. The difference in estimation in the frequency of sexual intercourse between the sexes was a small but significant difference for which of course there could be two explanations and there is no way of ascertaining retrospectively which sex is estimating correctly. Of course, one must accept that in any individual the answers are very approximate, but the tendency for the wives to estimate higher was a consistent pattern throughout.
There has been much written about the reasons for deciding on a vasectomy. The fact that the male wishes to be permanently sterilized is an essential reason and also that both partners wish for no further children. It has been stated that the health of the wife should not be a factor (Wolfers 1974), but in this study the health of the wife was often a major reason for choosing a vasectomy and, as can be seen, there was a considerable incidence of morbidity among the females. It would seem to the author that, provided the primary desire to be permanently sterile is present, the health of the wife is a logical and reasonable consideration. The practical advantages of male sterilization compared to female sterilization as suggested by most of the men seemed sensible both to the couples themselves and to the economics of the health service.

The main aim in this study was to screen those seeking vasectomy, to exclude those whom the author considered would not respond well and would be more likely to develop complications. Pre-existing sexual problems in the male such as impotence and ejaculatory difficulties seemed definite contra-indications as it is likely that these problems would worsen with the passage of time and that the vasectomy would be blamed. Also the man with these problems has constant doubts and anxieties about his potency and these are likely to be increased by vasectomy. The man who has had only a few episodes of impotence probably when excess alcohol has been taken, may be suitable for vasectomy. How he and his wife feel about the episodes of impotence are the most important guiding factors. An unstable marriage is a contra-indication for obvious reasons and the husband having a vasectomy may exacerbate the marital discord, despite the partners' claim that it might settle their problems.

A few of the couples interviewed had not received sufficient counselling from their general practitioner, or at the family planning clinic and had not fully considered the implications of the procedure; these were either refused or deferred. If the wife is unlikely to survive a serious illness vasectomy would seem to be contra-indicated for her husband. Deferment was mainly on the grounds of age or not having fully considered all the implications. Jackson and others (1970) also deferred a number on the grounds of age but in her study no mention is made of refusal on grounds of sexual or marital problems.

An American paper by Uhlman (1974) lists reasons for refusing a vasectomy. A high percentage were regarded as too young but some reasons were listed which do not appear in the present series such as 'unmarried' and 'spouse unwilling to sign the consent form'. It would appear that the aims of the American Society for Voluntary Sterilization have had some impact. The aim of their organisation is vasectomy on demand for anyone over the age of twenty-one. To the author this would appear to be very unwise and if a policy such as this was adopted, vasectomy would once again become a highly controversial issue.

Contra-indications listed by Hymes (1977) are: a) Disagreement with the wife over the advisability; b) Consent to the operation on the basis of another person's urging; c) When sterilization appears to be an attempt to save an already failing marriage. These appear fairly obvious and probably reflect more social pressure in the U.S.A. to have a vasectomy. Hynes also states that prior psychiatric treatment does not carry a poor psychological prognosis. Certainly
in the present series those with a history of psychiatric illness were not refused, unless this illness led to definite sexual problems.

**SUMMARY**

A total of 286 men who presented for vasectomy were interviewed, and their wives were then interviewed separately. The age range was from 23-49 years. The number of children tended to be small, the mean being 2.7 children per couple. The length of time the couple was married varied widely from 5-25 years. In the screening interview special reference was made to emotional and sexual difficulties in the marriage. The contraceptive history and sexual practice of the couples is described. Serious chronic physical illness was reported in 10 per cent of the wives and 19 percent had a history of obstetrical and gynaecological problems. The reasons for the couple deciding to have a vasectomy are described. Vasectomy was refused in 26 men and in another 11 cases the vasectomy was deferred, the main contra-indications being sexual difficulties and an unstable marriage. These results are discussed.

Requests for reprints should be addressed to:

Dr. H. A. Lyons, Purdysburn Hospital, Saintfield Road, Belfast BT8 8BH.

**REFERENCES**

Astley Cooper (1830). *Observations on the Structure and Diseases of the Testis*. London: Longman.

Harrison, R. (1899). *Lancet* 2, 331-333.

Hynes, J. and Davis, J. A. (1977). *Nebraska Medical Journal*, 62, 96-98.

Jackson, P., Phillips, B., Prosser, E., Jones, H. O., Tindall, V. R., Crosby, D. L., Cooke, D. L., McGarry, J. M. and Rees, R. W. (1970). *British Medical Journal*, 4, 295-297.

Kinsey, A. C., Pomeroy, W. B., Martin, E. C. (1948). *Sexual Behaviour in the Human Male*. Philadelphia: Saunders.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., and Gebhard, P. H. (1953). *Sexual Behaviour in the Human Female*. Philadelphia: Saunders.

Royal College of Gen. Practitioners (1977). Oral Contraceptive Study. *Lancet*, 2 728-731.

Sharp, H. C. (1902). *New York Medical Journal*, 75, 411-414.

Sharp, H. C. (1909). *Journal American Medical Association*, 53, 1897-1902.

Simon Population Trust (1969). *Vasectomy: Follow up of 1000 cases*. Letchworth and London: Garden City Press.

Steinach, E., and Loebel, J. (1940). *Sex and Life*. London: Faber and Faber.

Uhlman, E. U. (1974). *Public Health Reports*, 89, 447-450.

Vessey, M. B., McPherson, K., Johnson, B. (1977). *Lancet*, 2, 731-733.

Wolfers, H. (1970). *British Medical Journal*, 4, 297-300.

Wolfers, D. and Wolfers, H. (1974). *Vasectomy*. London: Mayflower Press.