

PSYCHIATRIC ASPECTS OF HYSTERECTOMY

DEEPA SUBRAMANIAM¹, M.B.B.S., D.P.M.

S. K. SUBRAMANIAN¹, M.B.B.S., D.G.O.

S. X. CHARLES¹, M.R.C.O.G., M.P.H., F.I.C.S., F.A.C.S.

ABRAHAM VERGHESE¹, M.D., D.P.M., F.R.C. Psych., F.R.A.N.Z. G.P., F.A.M.S.

SUMMARY

A prospective psychiatric study of women undergoing hysterectomy conducted in Christian Medical College, Vellore, is described. About 20% of patients who had Hysterectomy developed depressive symptoms during the first year of follow up. Those who developed these symptoms had higher N score on Eysenck Personality Inventory and a higher M. R. Score on Cornell Medical Index before the operation when compared to those who did not develop psychiatric symptoms which suggests that the patients who have a higher score on Neuroticism are more prone to get psychiatric illness. It is emphasised that an attempt must be made to identify such patients who are more prone to get psychiatric disturbance in order to prevent or minimise these psychiatric disturbances. Prior consideration to these complications should be given before doing hysterectomy.

The uterus, besides being a vital organ, occupies a very special place in the woman's emotional thinking. Freud regarded the uterus as a significant symbol of femininity. Surgical operations on the uterus are productive of an "insult" to the emotional "equilibrium". The patient passes through a series of emotional experiences resulting in a crisis (Raphael, 1972). She has to contend with the unavoidable truth—the absence of the uterus which, she believes, gives her the grace, sexuality and femininity which is exclusively hers.

Review of literature :

As early as 1890 Krafft Ebing (Raphael, 1972) stated that psychoses were more frequently caused by hysterectomy than by other surgical procedures. It has only been in the last thirty five years that modern clinicians have seriously studied the psychological reactions to gynaecological surgery. Earlier studies although lacking comparison groups reported unfavourable post-operative psychological outcomes after hysterectomy in 30-80% of patients (Menzer et al, 1957). Lindemann (1941) found that significant depression which began about a month after surgery was twice as common

after pelvic surgery as after Cholecystectomy.

Drellich and Beiber (1958) found that the following were of concern to the women undergoing hysterectomy ; abrupt changes in appearance, fears of post operative pain, loss of excretory and sexual functions and loss of a strategic position in the household. Chynoweth (1973) was able to obtain a relation between a maladjusted outcome and neuroticism. The data which were significant in relation to a maladjusted outcome were concern over post operative sexual relationships, a history of several operations previously and poor interpersonal relationships in the family. Richards (1973) followed up 200 women who had hysterectomy and reported depression warranting treatment in 36.5% of patients. The tendency to develop depression was greater in the lower age group and if there was history of pre-operative depressive attacks.

Another approach to this problem is the study of psychiatric populations. A review of surgical history of women treated in psychiatric facilities reveals a higher incidence of recent gynaecological surgery than all other types (Hollender, 1960). Many stress the high incidence of pelvic

¹Christian Medical College, Vellore.

surgery in neurotic women. Doyle (1953) found that 40% of the hysterectomies were unwarranted. D'Esopo (1962) found that the uterus in many instances had been removed for psychosomatic symptoms. Baker (1968) in the controlled study of 729 Hysterectomies found significant depression requiring psychiatric referral to be twice as frequent in the hysterectomy patients when compared to a matched group undergoing Cholecystectomy. The incidence of psychiatric referrals prior to operation was the same for both. In 85% of those referred, the diagnosis was depression. Richards (1974) reported a "Post hysterectomy syndrome" consisting of depression, hot flushes, extreme tiredness, dizziness, headache, loss of weight and loss of libido regardless of whether the ovaries were removed or not. This was attributed to endocrine imbalance and the symptoms responded to oestrogens.

Barglow *et al.* (1965) compared tubal ligation and hysterectomy as means of elective sterilisation and found that tubal ligation was followed by better results emotionally. Husbands of hysterectomized women also show emotional and sexual difficulties (Daly, 1975).

Some of these above mentioned studies have been retrospective in nature, control groups have mostly been patients with other surgical procedures like Cholecystectomy and not major gynaecological surgery and one study has used Tubal ligation which is a minor procedure as the control group. This paper describes a study conducted at the Christian Medical College, Vellore to find out the Psychiatric aspects of Hysterectomy.

The objectives of the present study were to find out :—

- (1) the frequency and nature of psychiatric disturbances after hysterectomy when compared to a control group.
- (2) the relationship of the previous personality pattern with such complica-

tions and whether it is possible to predict which patients are more prone to get these complications and

- (3) whether factors such as expectations of the outcome of surgery, and whole hearted or reluctant acceptance of surgery, have any influence on post operative psychiatric disturbance.

MATERIAL AND METHOD

The sample for this prospective study was a group of patients needing major gynaecological surgery who were looked after in a particular Unit by the same team of surgeons at the Obstetrics and Gynaecology Department of the Christian Medical College and Hospital, Vellore. The Sample consisted of a Hysterectomy group who were women undergoing abdominal or vaginal hysterectomy and a Gynaecological surgery. Emergencies were not included in this group. Only patients coming from within an area of 50 sq. km. from Vellore town were included in the study. These were 50 women who had hysterectomy and they formed the experimental group. The control group consisted of 20 women who had major gynaecological surgery, other than hysterectomy. These two groups were matched for age and parity.

After a gynaecological assessment, a psychiatric assessment was done at least 5 days prior to the planned surgery. A semistructured interview schedule was used for the psychiatric interview. Eysenck Personality Inventory (E.P.I.) and Cornell Medical Index (C.M.I.) were also given after the psychiatric interview. These two instruments are widely used in Psychosomatic research to assess personality traits and neurotic symptoms. The E.P.I. measures neuroticism (N Score) and Extraversion (E Score) while C.M.I. measures neurotic symptoms (M. R. Score), (Lovell and Verghese, 1967). The psychiatric interview and the personality tests were repeated one week after surgery, two months

after discharge from hospital (1st follow up), and one year after discharge from hospital (2nd follow up). The experimental group (those who had hysterectomy) was compared with the control group with regard to the incidence and nature of psychiatric disturbance. Those who developed psychiatric disturbance after hysterectomy were compared to those who did not have any psychiatric disturbance after hysterectomy, to find out the factors, if any, which are associated with the development of psychiatric disturbance.

RESULTS

Table 1 shows the various pre-operative parameters studied. The hysterectomy group and the control group were similar in their pre-operative scores on E.P.I.N. Score and M.R. Score of the Cornell Medical Index.

TABLE I—Pre-operative Data

Parameters	Hysterectomy (N=50)		Control (N=20)		Significance
	N	%	N	%	
N. Score >14 ..	22	44	8	40	—N.S.
M.R. Scale >10 ..	22	44	6	30	—N.S.

10 (20%) of the hysterectomised women showed features of depression. No psychiatric problems were seen in the control group. The psychiatric morbidity at the first follow up is seen in Table 2.

TABLE 2—Psychiatric Morbidity—1st Follow-up

Diagnosis	Hysterectomy (50)		Control (20)	
	No.	%	No.	%
Depression ..	8	16	..	..
Anxiety State ..	1	2	..	..
Hysterical Reactions ..	..	..	1	5
Total ..	9	18	1	5

Three new cases of depression were seen along with the 5 women who were depressed post operatively. One patient was seen to be, suffering from an anxiety state. Among the women in the control group one case of a Hysterical reaction was seen. Table 3 shows the psychiatric morbidity at the second follow up (one year after discharge).

TABLE 3—Psychiatric Morbidity—2nd Follow up

Diagnosis	Hysterectomy (50)		Control (20)	
	No.	%	No.	%
Depression ..	9	18	..	..
Anxiety State ..	1	2	..	..
Hysterical Reaction ..	..	..	1	5
Total ..	10	20	1	5

The 8 cases of depression seen previously continued to be depressed. One more had depressive features. The patient with anxiety continued to be ill. The patient from the control group with Hysterical symptoms continued to be ill.

In Table 4, 20 patients who developed psychiatric symptoms after hysterectomy (PD+) are compared with those who did not have any psychiatric disturbance (PD-) in their preoperative E.P.I.N. scores and Cornell Medical Index M-R scores. Both these scores were significantly raised in the PD+ group.

TABLE 4—Comparison of Psychiatric Disturbance (PD+) Group [with the non disturbed (PD-)]

	PD+		PD-		p
	Mean	s.d.	Mean	s.d.	
N-Score ..	16.1	3.51	10.5	3.6	p<0.001
M.R. Score ..	17.8	5.61	8.15	3.5	p<0.001

Of those who consented whole heartedly to surgery 22.5% had psychiatric disturbance and of those who agreed reluctantly 66% patients had psychiatric disturbance and of those who were doubtful of the outcome, 50% had psychiatric symptoms. Of those who were more than 40 years old, 35.7% had psychiatric disturbance while 22.7% of those who were less than 40 years developed psychiatric disturbance. These differences were not statistically significant.

30% of patients who had hysterectomy felt that after the removal of the uterus they will not be able to work and will become weak. 36% felt that the menstrual blood will accumulate in the body and the patient will put on weight. 26% of the women reported that decrease in sexual desire will follow removal of "the vital organ" and 24% felt that sexual performance will be hampered after the removal of the uterus. Those who developed psychiatric disturbance after hysterectomy did not significantly differ from those who did not develop psychiatric symptoms, in these attitudes on hysterectomy.

DISCUSSION

The main findings of this study can be summarised as follows: Psychiatric disturbances are more frequent after hysterectomy than after other major gynaecological operations. About 20% of patients who had hysterectomy had some psychiatric disturbance as depressive illness. The previous personality pattern appears to be related to the tendency to get psychiatric disturbance. None of our sample showed a clear cut "Post hysterectomy syndrome" described by Richards in 1974. The fact that the depressed women who manifested symptoms during the immediate post operative period and first follow up continued to be depressed after one year, indicates that they should be helped by active psychiatric intervention.

The finding that a higher N Score

(E.P.I.) and M.R. Score (C.M.I.) in the pre-operative period are associated with a tendency to develop psychiatric disturbance after surgery is an important one. N Score of the E.P.I. is a good measure of neuroticism or emotional instability (Eysenck, 1964). A high M.R. Score effectively discriminates neurotic patients from normals (Culpan *et al.*, 1960). There is a high correlation between the N score and M.R. score. (Verghese, 1970). This observation suggests that those who develop psychiatric disturbance have a neurotic personality (high neuroticism) which makes them more vulnerable to develop psychiatric disturbance. As referred to before, for a woman, hysterectomy is an emotionally traumatic experience and those who have a higher degree of neuroticism develop psychiatric symptoms as a consequence to this operation. In another similar study which we are conducting on patients who undergo cardiac surgery, we find that those who have high neuroticism scores pre-operatively are more susceptible to get psychiatric disturbance in the post operative period. If patients who have a high degree of neuroticism are more prone to get psychiatric disturbance, it is important to make an attempt to identify these patients and help them before and after operation by the appropriate psychiatric intervention. The findings of this study suggest that Eysenck Personality Inventory and Cornell Medical Index are effective tools to do this.

It was found that many patients who had hysterectomy believed that hysterectomy would lead to poor sexual desire, poor sexual performance and general weakness when their attitudes were assessed before hysterectomy. Hence proper education and preparation of the patient is important before subjecting the patients to hysterectomy. Faulty attitudes to surgery may have a detrimental effect on the social adjustment of the patient, and therefore proper education to the patient is of vital

importance.

The major findings of this study should lead to a better understanding of the psychological aspects of hysterectomy and to an attempt to minimise the intensity and duration of psychiatric disturbance after hysterectomy. It must also be emphasised that one should consider these complications, before hysterectomy.

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