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A STUDY OF PSYCHIATRIC ASPECTS OF HYSTERECTOMY

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SUMMARY

Thirty women patients who were hysterectomized for non-malignant pathologies were compared with thirty comparable patients who underwent other gynaecological operations. Each patient was subjected to semistructured psychiatric interview, standardised hindi version of G. H. Q., hindi version of PEN, I.P.I.S. and BDRI. The diagnosis was made according to I.C.D.-9. It was observed that patients undergoing hysterectomy do suffer significantly higher psychiatric morbidity (60%), had higher G.H.Q. and BDRI scores at the time of discharge from hospital.

Traditionally, hysterectomy has been ascribed adverse psychiatric sequelar. Kraft Ebing in 1890 has stated that psychoses were more frequently caused by hysterectomy than by any other surgical procedure (Raphael, 1972). Apparent support had come from some recent retrospective studies reporting an excess of psychiatric and somatic symptoms in post-hysterectomized women. Richards (1974) posits "Post hysterectomy syndrome", with depressed mood, hot flushes, urinary symptoms, fatigue, headaches, dizzines and insomnia. Dennerstein & Wood (1977) report deterioration of sexual functioning in one third of patients. Kaltreider & Wallance (1979) suggest a post-hysterectomy "stress response syndrome" as a reaction to the loss of child bearing capacity. Subramaniam and Subramaniam (1982) concluded that psychiatric disturbances are more frequent after hysterectomy than after other major gynaecological operations. About 20% of their patients who became psychiatrically ill after hysterectomy, had some symptoms of depressive illness. The previous personality pattern seems to be related to the tendency to get psychiatric disturbance. None of their sample, however, showed the clear cut hysterectomy syndrome described by Richards in 1974.

Four prospective studies published from 1977 to 1989 in sharp contrast to most earlier studies, concluded that hysterectomy seldom led to psychiatric disorder (Meikle and Brody, 1977 ; Martin and Roberts, 1977, 1980 ; Gath and Cooper, 1981, 1981a ; Gath et al, 1982 ; Coppen and Bishop, 1981). These discrepant findings can be explained largely in terms of research design and method. *First*, in nearly all studies the patients were assessed only after hysterectomy. Hence it is not clear whether any psychiatric morbidity detected after the operation was due to the operation itself or to the patient's pre-operative condition. *Second*, only a few studies have used standardized psychiatric measures (Hampton and Tarnasky, 1974 ; Meike and Brody, 1977; Martin and Roberts, 1980). The others

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have either been based on the investigator's clinical judgement, with little or no attempt to quantify data, or they have used indirect measures such as admission to mental hospital (Bragg, 1965), referral to a psychiatrist (Barker, 1968) or the prescribing of medication in general practice (Richards, 1973). *Third*, nearly all studies have used mixed gynaecological samples e.g. patients hysterectomized for menorrhagia, prolapse, cancer or in combination with abortion or child birth, with or without removal of both ovaries.

In view of the above objections the present study was planned with the following aims to find out the psychiatric morbidity in patients undergoing the operation for removal of uterus i.e. hysterectomy :

1. To determine psychiatric morbidity and its nature among patients undergoing hysterectomy.

2. To determine whether psychiatric manifestations after hysterectomy are its consequence.

3. To study the relationship of personality profile with pyschiatric manifestations after hysterectomy.

Material and Method

(i) Sample :

The present study consists of 30 patients undergoing hysterectomy for nonmalignant pathologies and another thirty patients for comparable gynaecological operations other than hysterectomy serving as control. These patients were admitted to department of gynaecology and obstetrics, S.M.S. Medical College, Jaipur from December, 1983 to February, 1984. The two groups were matched for education, economic status, domicile and marital status. However, the two groups could not be matched for age and parity on account of this being a factor in pathogenecity of conditions calling for hysterectomy and the other comparative surgeries.

(ii) Tools

A specially designed proforma was used for a thorough evalutaion of the patients. It included the identification data, socio-demographic data, personal history, detailed gynaecological history and examination, psychiatric history and mental status examinations. The following psychological instruments were used in addition to quantify the psychiatric status of the sample population. These were :

(1) standardised Hindi version of General Health Questionnarie GHQ (Goldberg, 1978).

(2) Hindi version of P. E. N. Inventory (Eysenck and Eysenck, 1963).

(3) Beck Depression Rating Inventory (BDRI) (Beck & Ward, 1961).

(4) Section (d) and (e) of Indian Psychiatric Interview Schedule (I.P.I.S.).

(iii) Technique :

Most patients were interviewed immediately after their gynaecological consultation before operation and at the time of discharge from hospital after operation. In all cases the husband and wife were interviewed separately. The interview was semi structured and all information was recorded in a carefully developed structured schedule. Following this they were subjected to Hindi version of G. H. Q. and P. E. N. inventory. Those subjects who scored 12 or more points on G. H. Q. or had high neuroticism (11+) or Psychoticism (7+) scores on P. E. N. were subjected to detailed psychiatric evaluation by using section (d) and (e) of Indian Psychiatric Interview Schedule (IPIS) and Beck's depression rating scale was also administered. The psychiatric diagnosis was made

according to ICD-9, which was confirmed by the consultant psychiatrist.

Observations

Both the groups were comparable on almost all socio-demographic characteristics excepting age. It is evident that the majority of patients of hysterectomy group were between 30-40 years and control group were between 20-30 years. The obvious difference in age distribution corresponds to the gynaecological pathologies which were indicated for operation in the two cases (Table I).

Five patients in the hysterectomy group and 2 in the control group had past history of psychiatric illness. After the

TABLE I—*Socio demographic data of Hysterectomy and Control group*

	Hysterectomy group (N=30)		Controlgroup (N=30)	
	N	%	N	%
Age (in Years)				
20—25	—	—	17	57
26—30	—	—	13	43
31—35	7	23	—	—
36—40	11	37	—	—
41—45	8	27	—	—
46—50	1	3	—	—
51 and above	3	10	—	—

TABLE II—*Scores on Psychological inventories of two groups pre and post-operatively*

	Hysterectomy Group (N=30)		Control Group (N=30)	
	Mean	s.d.	Mean	s.d.
G.H.Q.				
Pre operative	14.0	3.16	10.2	2.04
Post operative	21.0	2.56	12.0	2.99
	t=20.92, p<0.01		N.S.	
P.E.N.				
(i) Neuroticism				
Pre operative	10.11	1.56	9.2	3.21
Post operative	12.12	1.81	9.6	3.40
	t=6.05, p<.001		N.S.	
(ii) Extraversion				
Pre operative	9.14	1.98	8.16	2.20
Post operative	9.24	2.16	9.18	1.96
(iii) Psychoticism	N.S.		N.S.	
Pre operative	4.25	0.84	4.20	0.90
Post operative	4.95	0.62	3.90	0.59
	t=3.17, p<0.01		N.S.	
B.D.R.I.				
Pre operative	7.3	1.04	7.8	1.11
Post operative	13.3	2.01	7.6	2.90
	t=18.89, p<0.001		N.S.	

operation 4 patients develoved psychiatric illness in the hysterectomy group and none developed it in the control group

Table No. II is clearly showing that there is a significant increase in G.H.Q. and B.D.R.I. scores post operatively in hysterectomy group but a marginal difference though mildly significant was observed on neuroticism and psychoticism scores, whereas no significant difference was found in extroversion, pre and post operatively in both the group.

Table No. III shows frequency of the common psychiatric symptoms in the two groups-pre and post operatively. Patients of hysterectomy were found to suffer more with psychiatric symptoms. In the control group not much change was observed, however psychiatric morbidity had increased after operation.

Table No. IV shows the overall psychiatric morbidity in both the groups. In hysterectomy group only 8 (26%) patients were psychiatric cases pre-operatively while there were 18 cases (60%) post operatively. The increase is significant. For the control group no significant change is observed.

Table No. V is clearly showing that all the patients in both the group had neurotic disorder and none had psychosis.

Discussion :

The present study had found a significant increase in psychiatric morbidity after hysterectomy on psychiatric interview as well as on psychometric questionnaires. The nature of psychiatric morbidity was of neurotic disorder like reactive depression (20%), neurotic depression (10%), anxiety neurosis (26%), phobic neuroses (3%). These observations are supported by majority of studies in this field. The high risks of adverse psychological

TABLE III —*Frequency of psychiatric symptoms in the groups of patients pre and posloperatively.*

Symptom	Hysterectomy (N=30)				Control (N=30)			
	Pre		Post		Pre		Post	
	No. of cases	%	No. of cases	%	No. of cases	%	No. of cases	%
Loss of interest	8	26	13	43	6	20	4	14
Hypochondriacal preoccupation	9	30	12	40	5	16	3	10
Self blame	10	33	12	40	7	23	5	16
Free floating anxiety	9	30	12	43	6	20	4	14
Feeling of incompetence	9	30	12	40	7	23	6	20
Feelings of inferiority	9	30	12	40	3	10	—	—
Worries about sexual performance	10	33	14	46	10	33	8	26
Delayed sleep	12	40	16	52	7	23	4	14
Suicidal ideas	2	7	3	10	—	—	—	—
No intercourse	26	86	26	86	27	90	3	10
Difficult sexual relations	4	14	10	33	—	—	—	—
Phobia	6	20	8	26	4	14	1	3

TABLE IV—*Psychiatric morbidity in Patients of both groups.*

Psychiatric Morbidity	Hysterectomy group (N=30)				Control group (N=30)			
	Pre		Post		Pre		Post	
	No. of cases	%	No. of cases	%	No. of cases	%	No. of cases	%
Present	8	27	18	60	3	10	2	7
Absent	22	73	12	40	27	90	28	93

TABLE V—*Diagnostic break-up of the two groups as regards diagnostic categories*

Diagnostic categories	Hysterectomy group				Control group			
	Pre		Post		Pre		Post	
	No. of cases	%	No. of cases	%	No. of cases	%	No. of cases	%
Reactive depression	4	14	6	20	2	7	—	—
Neurotic depression	1	3	3	10	—	—	—	—
Anxiety neurosis	1	3	8	26	1	3	2	7
Phobic neurosis	2	7	1	1	3	—	—	—
Others	—	—	—	—	—	—	—	—
No psychiatric illness	22	73	12	40	27	90	28	93

reactions to hysterectomy have been reported by numerous other workers also (Lindemann, 1941; Stengel and Zeitlyn, 1958 ; Ackner, 1960 and Barglow and Gunther, 1965). These reactions have been described not only as depression (Barker, 1968, Richards, 1973, Subrahmaniam and Subramaniam, 1982) but also as agitation and insomnia (Lindemann, 1941), non-specific anxiety (Dreich and Bieber, 1956), reduced psychosexual functioning (Hollender, 1960; Ellison 1969, Dennerstein and Wood, 1977) and psychosomatic disorder (Zervos and Papaloucas, 1972).

Amongst five patients of hysterectomy having past history of psychiatric illness, four (80%) developed psychiattic illness post-operatively. This confirms the findings of Lindemann (1941), Melody (1962), Patterson and Craig (1963), Richards (1973) and Gath et al (1981) who found that patients with a history of psychiatric referral had a 50% risk of developing postoperative psychiatric problems.

The increase in psychiatric morbidity only in hsyterectomy group and not in comparable control group signifies the importance of uterus, which depends on her emotional investment in her uterus

and the functions that it symbolizes. Hollender (1960) said that hysterectomy is perceived as blow by nearly every woman. How different woman react to this operation depends mainly upon individual personality structure and feminine experience as well as on how the physician and family handle the situation. Kaltreider and Wallance (1979). also suggest a post hysterectomy "stress response syndrome" as a reaction to the loss of child bearing capacity.

Scores of three personality dimension e.g. Psychoticism, Extroversion and Neuroticism (PEN) in both the group did not have significant difference which is in contradiction to the findings of Gath et al (1982) and Subramaniam and Subravaniam (1982). Both these studies have demonstrated a relationship between preoperative neuroticism and postoperative psychiatric morbidity.

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