

Psychiatric Morbidity in Survivals of Mastectomy. An Egyptian Sample

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Thirty consecutive married women treated for breast cancer were compared with a randomly selected group of thirty-four female patients suffering from different kinds of malignancies. A structured interview was used to study both groups. The breast cancer patients were found to be less depressed and more emotionally stable than those suffering from other malignancies, suggesting that the diagnosis of malignancy was the more important factor in the psychosocial morbidity of these patients.

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INTRODUCTION

Many clinical studies have shown that mastectomy for breast cancer is associated with considerable emotional trauma. Women can respond to the experience of breast cancer with emotional distress, withdrawal from social activities, a loss of sense of attractiveness and sexual desirability, or with the subjective experience of alienation. These studies have usually centered around the immediate pre-and post-operative periods of their treatment and there has been few to concentrate on remote follow-up of those patients (Baker et al, 1994; Hannel et al 1997). Furthermore, those studies were carried out on women living in Western societies with cultural background very different from those of Egyptian (middle-east) women.

The aims of the present study were to ascertain:

- a) Psychosocial sequelae of mastectomy in our culture.
- b) Whether the emotional morbidity

of women undergoing mastectomy was any different from that of survivors of other cancers.

SUBJECTS AND METHOD

Over a period of six months, 30 consecutive married Egyptian females who were three years survivors of breast cancer were recruited for the study. They were compared with a control group of 34 Egyptian female patients who were survivors of other types of cancer for the same period of time: thyroid (n=10), stomach (n=6), colon and rectum (n = 13) and oesophagus (n =5). Both groups were comparable as regards age, time since commencement of treatment and the different modalities of treatment received (table I). None of the patients or the control group had any major postoperative complications, which could have prolonged their stay in the hospital. Patients with rectal cancer were those who underwent sphincter-conserving resections of the rectum; they did not have peritoneal wounds or colostomies.

Patients with breast cancer were those who had operable tumorous (T1,2

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No, 1 M0); they underwent mastectomy and subsequently received adjuvant radiotherapy, chemotherapy or both. None of those patients underwent any form of breast reconstruction. They all wore padded brassieres to conceal their deformity.

No patient in either group had a past history of mental illness or had sought psychiatric treatment before the onset of their present illness. No formal preoperative psychiatric assessment was made in any of those patients.

A structured interview was used to compare the groups; and positive responses were graded as mild, moderate or severe. All patients were interviewed by a single assessor. Particular attention was directed to:

a) Assessment of depression by the Beck Depression Inventory (BDI); cut off score of 12 was used in the assessment of patients. Inquiries were also made about the use of drugs or excessive use of tranquilizers and sedatives.

b) Changes in sexual activity and any special sexual problems that patients experienced.

c) Changes in interpersonal relationships within the family and among friends and neighbors.

In addition, both groups were tested with the Eysenck Personality Inventory (EPI) for neuroticism. Chi-squared analysis was used to detect any significant differences in the data between the two groups.

RESULTS

All women in the study agreed to participate, and co-operated fully in answering the detailed questions addressed to them. The majority of the patients studied were able to cope with the do-

mestic tasks of housework, washing cooking and shopping, and there were no significant differences in this respect between the two groups.

Depression was found in 46% of the breast cancer patients and 61% of the control group. In further questioning, over half of these patients reported that fears arising from a diagnosis of malignancy, anxiety over family and financial matters and the loss of a close relationship were causes of their depression. None of the breast cancer patients mentioned mastectomy as a cause of their depression. When specifically asked about feelings of loss of femininity or a sense of unworthiness in continuing the maternal role in the family, only 23% of the breast cancer and 1% of the control group reported such feelings. The breast cancer patients had a significantly lower DI scorer ($P < 0.01$) than those in the control group (Table II). In neither group was there any use of antidepressants nor were there any patients who were dependent on tranquilizers or sedatives.

Only five (16%) of the breast cancer patients and nine (26%) of the control group felt that their husbands were probably involved in extramarital affairs. Both groups experienced a decrease in frequency of sexual intercourse (moderate or marked decrease: breast cancer group 50%, controls 35%) and sexual satisfaction (moderate or severe: breast cancer group 60%, controls 32%, $P < 0.05$) when compared to their pre-illness levels (Table III).

In the sphere of family and social life, there were many differences. Women in the control group experienced greater difficulty in adjusting to family life; there were great parent-child tensions and more numerous instances of conflict with their children (56%) than in the breast cancer group (33%). A sim-

Table 1
Clinical Data of Sample and Control Groups

	Breast cancer N=30	Other cancers N=34
Mean age (years)	45.2 (SD± 11.4)	41.8 (SD± 9.7)
Mean time since start of treatment (years)	2.9 (SD± 1.8)	2.5 (SD± 3.0)
Treatment received		
Surgery alone	7	15
Surgery and drugs	7	8
Surgery, radiotherapy and drugs	16	11

Table 2
Depression and Loss of Femininity

	Breast cancer	Other cancers
Depression	14	21
Reasons for depression		
No reason	7	7
Financial matters	2	4
Changes in interpersonal relationships	3	4
Diagnosis of malignancy	5	6
Loss of femininity and changes in maternal role	7	6
Beck score	12.6 (± 10.4)	20.8 (± 8.9)

Table 3
Clinical Data of Structured Interview

	Breast cancer		Other cancers	
Social maladjustment	5	16%	21	62%
Loss of close relations	12	40%	19	56%
Increased parent-child conflicts	10	33%	19	56%
Decreased frequency of sexual intercourse	15	50%	12	35%
Decreased sexual satisfaction	18	60%	11	32%
Husband less affectionate	5	16%	9	26%

ilar finding was recorded in relationships with friends and near relatives; the control group (62%) found greater difficulty in social adjustment than women with breast cancer (16%). Furthermore, a greater number of women in the control group (56%) had suffered the loss of a close relationship over the last three years than those suffering from breast cancer (40%), but the difference was not statistically significant.

There was a significantly lower ($P<0.01$) EPI neuroticism score in the breast cancer patients.

DISCUSSION

The results show that several years after the diagnosis and treatment of breast cancer, there still remain a proportion of patients who had not recovered of the psychosocial morbidity of their illness of the breast cancer patients, 46% were found to be depressed at the mean period of three years. This figure is higher than that found in similar studies on western women (Morris et al, 1977) who found 20% at three years. The latter showed that there is no great difference in the proportion of women remaining depressed at one year, and at two years following mastectomy.

A further point of interest lay in the reasons elicited for depression. Loss of femininity and physical disfigurement did not appear to be the most important reasons for depression. Rather, fears arising from a diagnosis of malignancy, with its implications for incurability, recurrent disease and premature death, worries over family affairs, and fears regaining social acceptability appeared to be more important factors. This finding is reinforced by the fact that women in the control group (none of whom had undergone mastectomy) fared worse. It

might be assumed that this difference in the two groups could be attributed to differences in the modes of treatment received. Lyon (1977) had observed that radiotherapy is an important factor in post mastectomy depression, and one would have expected, considering the large number of breast cancer patients receiving radiotherapy, to observe a greater degree of depression in these patients than the control group. It would appear that the emotional trauma of mastectomy plays a secondary role in the aetiology of depression, and it is more than likely it has a similar role in the overall psychosocial morbidity of patients with breast cancer. Further evidence of this view comes from the studies of Sanger and Reznikoff (1981), who compared patients undergoing mastectomy with those having a breast-conserving surgical procedures for breast cancer. No significant differences could be found in body anxiety, general psychological adjustment, and marital satisfaction between these groups.

Maguire et al (1978) and Morris et al (1977) showed that 18% of patients undergoing mastectomy experienced moderate to severe sexual difficulties three months after treatment; at two years following treatment this figure has increased to 32%. It was even further observed that patients who deteriorated within the first three months after surgery were unlikely ever to return to their existing levels of adjustment. Carver et al (1993) found associations between neuroticism and poorer emotional support of their husband. Only 4% of breast cancer patients and 15% of the control group felt that their husbands were less affectionate than before their illness. Further study is necessary to ascertain the factors involved in the deterioration in sexual relationships with time.

Deterioration in physical health was

certainly not a factor, as the majority of women in both groups were able to cope with their daily household activities. It is more likely that the conservative attitude of Egyptian women to sex, and their natural reluctance to talk openly on sexual matters, were more important factors in their sexual maladjustment. None of the women had ever sought help from psychiatrists or any other physician. A noteworthy finding was that there was no significant difference between the groups in the number of women having sexual difficulties; which again would suggest that the emotional sequelae of mastectomy may not be the most important factor in the sexual morbidity of breast cancer patients.

Perhaps the most important finding in the present study is that postmastectomy patients were at no greater risk of developing psychosocial morbidity than patients with other malignancies. It may be argued that the long interval of time between treatment and assessment permitted the breast cancer patients to adjust themselves more easily than those with other malignancies. This may be relevant as mastectomy in eastern women may not cause the same degree of emotional distress it does in western women. Carver et al (1998) suggested that patients adjust more poorly to breast cancer if they are heavily invested in body image as a source of their sense of self-worth. May be the sexual symbolism of the breast differs in our culture than the western women. However, it is unlikely that these are valid reasons for the differences seen in both groups. Worden and Weisman (1977) have shown, in a similar study of western women that post-mastectomy women were no worse off than women suffering from Hodgkin's disease, malignant melanoma and cancer colon. A more likely explanation is that the diagnosis of ma-

lignancy, which was common in both groups, was a powerful factor in the psychosocial morbidity of these patients and that this overshadowed the emotional trauma of mastectomy in patients with breast cancer. It would appear from the present study that women with malignancies other than breast cancer could also develop serious psychosocial problems, and in many respects the need for therapy could be greater in these women than with breast cancer.

REFERENCES

- Baker, F. Wingard, J. R. and Cubrow, B. et al (1994) Quality of life of bone marrow transport long-term survivors. *Bone Marrow Transplant*, 13: 589-596.
- Carver, C. S. Christina Pozo, Suzanne D Harris et al (1993) How coping mediates the effect of optimism on distress: a study of women with early stage breast cancer. *Journal of Personality and Social Psychology*, 65: 375-389.
- Carver, C. S. Christina Pozo-Kaderman and Alicia Price (1998) Concerns about aspects of body image and adjustment to early stage breast cancer. *Psychosomatic Medicine*, 60: 168-174.
- Hann, D. M. Jacobson, P. B. Martin, S. C. et al (1997) Quality of life following bone marrow transplantation for breast cancer: a comparative study. *Bone Marrow Transplantation*, 19: 257-264.
- Lyon, J. S. (1977) Management of psychological problems in breast cancer. In B A Stoll (ed.) *Breast Cancer management-Early and Late*. London: Heinman Medical and Year Book medical.
- Maguire, G. P. Lee, E. G. Bevington, D. J. et al (1978) Psychiatric problems in the first year after mastectomy. *British Medical Journal*, 1:963-965.

- Morris, T. Greer, H. S. and White P (1977) Psychological and social adjustment to mastectomy. *Cancer*, 40: 2381-2387.
- Sanger, C. K. and Reznikoff, M. (1981) A comparison of the psychological effects of breast - saving procedures with the modified radical mastectomy. *Cancer*, 48: 2341 - 2346.
- Worden, W. J. and Weiseman, A. D. (1977) The fallacy in post-mastectomy depression. *The American Journal of Medical Sciences*, 271: 169-175.

المراضة النفسية

عقب استئصال الثدي في عينه مصرية

أجريت مقارنة ثلاثين سيدة مصرية تم شفاؤهن من سرطان الثدي بأربع وثلاثين سيدة كن يعانين من أشكال أخرى من السرطان بعد مرور ثلاث سنوات، تم ذلك من خلال مقابلة مقننة للمجموعتين، وقد وجد أن المجموعة الخاصة بسرطان الثدي كن أقل اكتئابا وأكثر استقرارا عاطفيا عن المجموعة الخاصة بأنواع السرطان الأخرى. وتشير تلك النتائج إلى أن الأهمية الكبرى في وجود المراضة النفسية اجتماعية لمرضى السرطان تكمن في تشخيص وجود السرطان كمرض وليس سرطان الثدي بعينه.