

# Differences in Sexual Functioning Between Patients with Benign and Malignant Breast Tumors

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## ABSTRACT

*The aim of this study was to compare differences in sexual behavior between patients with benign and malignant breast tumors. A total of 187 patients treated for breast tumors (benign or malignant) at the General Hospital »Požega«, Croatia, filled in the questionnaire between January 2001 and May 2003. Patients were asked to fill in the questionnaire one to ten years after treatment of breast tumor, while they were on their regular control visit. Deterioration in sexual life experienced 36.27% of patients with benign tumors and 51.76% of patients with malignant tumor ( $p < 0.01$ ). The main reason of sex life impairment in both groups was distortion of body image perception. Most of partners did not change their behavior toward women with breast tumors (48.72% for benign group and 41.82% for malignant group,  $p > 0.05$ ). A great amount of women in both groups felt certain change in her »body image«, but in greater extent in malignant group (41.18% vs. 25.49%), ( $p < 0.05$ ). From our results we can see that patients in this study do not recognize need for consultation with their physician regarding sex life after treatment of tumor (41.18% for benign and 35.29% in malignant group). It can be concluded that considerable amount of attention should be given to psychological aspects of recovery which can improve prognosis and quality of life in general.*

**Key words:** sexual functioning, benign and malignant breast tumor, body image

## Introduction

Most diseases of the breast in women present as a palpable masses, inflammatory lesions, nipple secretions, or mammographic abnormalities. Although fortunately most are benign, cancer of the breast is the second most common cause of cancer deaths and one of the most dreaded diseases of women. Benign disorders of the breast include fibrocystic changes, epithelial hyperplasia, sclerosing adenosis, small duct papillomas and fibroadenomas<sup>1</sup>. It is important to emphasize that fibrocystic changes represent the single, most common disorder of the breast and account for more than half of all surgical operations on the female breast. In one study of postmortem autopsies, grossly evident fibrocystic changes were present in 20% and hystopatologic changes were present in 59% of women<sup>2</sup>. Malignant disorders of the breast include ductal and lobular carcinoma in situ, invasive ductal and lobular carcinoma, medullar carcinoma, colloid carcinoma, tubular carcinoma and invasive papillary carcinoma. As early as the sixteenth century, rudimentary attempts to gain local control of breast cancer were made, but the first widely accepted operation was introduced by Halsted in late nineteenth century<sup>3</sup>.

Fibrocystic changes and fibroadenomas, the two most common disorders of the breast occur at any age within the reproductive period of life but are more common between the ages of 20 and 40 years of age<sup>1</sup>. The incidence of breast cancer is negligible before age of 25, and peak incidence is in seventh decade of life<sup>1</sup>. Female sexuality is an extraordinarily complex process. The physician needs to be aware of the patient's sexuality and whether or not there are sexual concerns. Physiologic changes over the lifespan can interact with sexual performance as can a variety of disease processes. Partner and rela-

tionship issues must also be taken into account<sup>4</sup>. Women between 50 and 92, who have a current sexual partner, attribute at least some importance to sex, with many rating sex as 'very' or 'extremely' important<sup>5</sup>.

The value of any intervention, including those directed at women with cancer, is determined by judging its impact on both quantity of life and quality of life, and it is well known that an important aspect of quality of life is sexual functioning. The aim of this study was to compare sex life of women with breast tumors, before and after treatment, to identify psychological factors that influence sexuality, and to determine are there differences in sexual life between women who were treated for benign or malignant breast tumors.

## Materials and Methods

A total of 187 patients treated for breast tumors (benign or malignant) at the General Hospital »Požega«, Croatia, filled in the questionnaire between January 2001 and May 2003. Patients were asked to fill in the questionnaire one to ten years after treatment of breast tumor, while they were on their regular control visit. The questionnaire was especially prepared for this study. Although there are several validated sexual scales that could have been used, it is difficult to implement them into this study because of social, economic and educational characteristics of Croatia. There are 28 questions in the questionnaire. The first part of the questionnaire asked about some general information and the second part was designed to investigate possible sexual difficulties after breast tumor treatment. To explore the differences in sexual life, we have divided patients into two groups: 1) patients with benign tumors and 2) patients with malignant tumors. Statistical difference between distribu-

tion of answers to selected questions between these two groups of patients was determined through the use of the  $\chi^2$ -test. Table 1 presents basic distribution of patients according to type of tumor, marital status, level of education and type of treatment. Table 2 reveals their distribution according to age at diagnosis, age at first sexual intercourse, age at first marriage, number of deliveries, number of abortions and menstrual cycles. Table 3 presents basic distribution of patients according to favorite parent during childhood and puberty, attitude towards menarche and attitude towards first intercourse. Relationship with parents during childhood and puberty, parent's socioeconomic level, parental attitudes towards child sexuality and the openness of fam-

ily habits play an important role in sexual development<sup>6,7</sup>. Timing of first discussion of sexual intercourse contributes additional variance in several sexually risky behaviors, along with contribution of the amount of communication with both fathers and mothers<sup>8</sup>. Comfort with personal sexuality is associated with a comfort with menstruation as a normal, publicly acceptable event<sup>9</sup>.

## Results

Table 1 reveals statistically significant difference between two studied groups regarding marital status ( $p < 0.01$ ) and level of education ( $p < 0.05$ ). Difference in marital status can be explained by differences in age, because patients with malignant

**TABLE 1**  
DISTRIBUTION OF PATIENTS ACCORDING TO TYPE OF CANCER, MARITAL STATUS, LEVEL OF EDUCATION AND TYPE OF TREATMENT. DISTRIBUTION OF PATIENTS ACCORDING TO TYPE OF CANCER, MARITAL STATUS, LEVEL OF EDUCATION AND TYPE OF TREATMENT

	Benign N (%)	Malignant N (%)
Type of tumor	102	85
Marital status**		
Never married	9 (8.82)	3 (3.53)
Married	78 (76.47)	55 (64.71)
Divorced	4 (3.92)	2 (2.35)
Widowed	11 (10.79)	25 (29.41)
Level of education*		
University degree	10 (9.80)	7 (8.24)
Completed high school	47 (46.08)	25 (29.41)
Completed elementary school	45 (44.12)	53 (62.35)
Type of treatment		
Surgery <sup>#</sup>	102 (100)	60 (70.60)
Surgery <sup>#</sup> , irradiation		5 (5.88)
Surgery <sup>#</sup> , irradiation, chemotherapy		11 (12.94)
Irradiation		5 (5.88)
Chemotherapy		2 (2.35)
Irradiation, chemotherapy		2 (2.35)

\*  $p < 0.05$ , \*\*  $p < 0.01$ ,

<sup>#</sup> Surgery procedure in benign group was lumpectomy, and in malignant modified mastectomy.

**TABLE 2**  
DISTRIBUTION ACCORDING TO AGE AT DIAGNOSIS, AGE AT FIRST SEXUAL INTERCOURSE,  
AGE AT FIRST MARRIAGE, NUMBER OF DELIVERIES, NUMBER OF ABORTIONS  
AND MENSTRUAL CYCLES

	Benign N (%)	Malignant N (%)
Age at diagnosis**		
≤ 30 years	11 (10.78)	0
31–50 years	71 (69.61)	21 (24.70)
51–70 years	20 (19.61)	55 (64.71)
≥ 71 years	0	9 (10.59)
Age at first sexual intercourse		
≤ 19 years	44 (43.14)	41 (48.24)
20–24 years	52 (50.98)	36 (42.35)
≥ 25 years	5 (4.90)	8 (9.41)
Virgin	1 (0.98)	0
Age at first marriage		
≤ 19 years	35 (37.63)	25 (30.49)
20–24 years	42 (45.16)	46 (56.10)
≥ 25 years	16 (17.21)	11 (13.41)
Number of deliveries		
None	12 (11.77)	6 (7.06)
One	10 (9.80)	12 (14.12)
Two	59 (57.84)	44 (51.76)
Three	10 (9.80)	14 (16.47)
Four and more	11 (10.79)	9 (10.59)
Number of abortions		
None	64 (62.75)	43 (50.59)
One	20 (19.61)	22 (25.88)
Two	13 (12.75)	14 (16.47)
Three	2 (1.96)	3 (3.53)
Four and more	3 (2.93)	3 (3.53)
Menstrual cycles		
Regular	82 (80.39)	74 (87.06)
Irregular	20 (19.61)	11 (12.94)

\*\*  $p < 0.01$

tumors are older and more likely to be widowed (29.41% vs. 10.79%). Patients with benign tumors were treated surgically with lumpectomy alone, and those with malignant tumors were treated with modified mastectomy alone or in combination with radiation and/or chemotherapy.

From Tables 2 and 3 we can see that there is no statistically significant differ-

ence between two groups regarding age at first sexual intercourse, age at first marriage, number of deliveries and abortions, menstrual cycles, favorite parent during puberty, attitude towards menarche and attitude towards first intercourse ( $p > 0.05$ ). There was, only differences in age at diagnosis of tumor, which is understandable because benign breast tumors

**TABLE 3**  
DISTRIBUTION OF PATIENTS ACCORDING TO FAVORITE PARENT DURING CHILDHOOD AND PUBERTY, ATTITUDE TOWARDS MENARCHE AND ATTITUDE TOWARDS FIRST INTERCOURSE

	Benign N (%)	Malignant N (%)
Favorite parent during childhood*		
Mother	40 (39.21)	32 (37.65)
Father	14 (13.73)	1 (1.17)
Both	27 (26.47)	24 (28.24)
Brothers and sisters	14 (13.73)	20 (23.53)
No one	7 (6.86)	8 (9.41)
Favorite parent during puberty		
Mother	40 (39.21)	28 (32.94)
Father	7 (6.86)	1 (1.18)
Both	27 (26.47)	28 (32.94)
Brothers and sisters	14 (13.73)	20 (23.53)
No one	14 (13.73)	8 (9.41)
Attitude towards menarche		
Surprise	32 (31.37)	35 (41.18)
Happiness	3 (2.94)	4 (4.70)
Unhappiness	12 (11.76)	5 (5.88)
No attitude	55 (53.93)	41 (48.24)
Attitude towards first intercourse		
Nice	27 (26.73)	22 (25.88)
Painful	17 (16.83)	23 (27.06)
Unpleasant	9 (8.91)	11 (12.94)
No attitude	48 (47.53)	29 (34.12)

\*  $p < 0.05$

appear in younger age groups<sup>1</sup>. Favorite parent during childhood was somewhat different between groups ( $p < 0.05$ ). Patients with benign tumors had in greater number of cases father as a favorite parent during childhood (13.73% vs. 1.17%).

The aim of this study was to compare differences in sexual behavior between patients with benign and malignant breast tumors. Table 4 presents a comparison of the examinees attitudes regarding sexual life before and after treatment of breast tumors. It should be mentioned that period referred as »before treatment« covers the time before the diagnosis of breast tumor was established.

Our investigation showed that 88.24% of patients with benign tumors and 78.47% with malignant tumors were satisfied with their sexual life before diagnosis and treatment of disease. Only 1.96% patients with benign tumors did not have sexual intercourse, however 14.12% of patients with malignant tumors did not have sexual intercourse, which was a statistically significant difference ( $p < 0.01$ ). This difference can be explained by different age of onset of these two types of breast tumors (see table 1). After the treatment, the attitudes toward sexual life remained the same in 61.77% and 44.71% of patients with benign and malignant tumors, re-

**TABLE 4**  
A COMPARISON OF THE ATTITUDES OF EXAMINEES REGARDING SEXUAL LIFE BEFORE AND AFTER TREATMENT OF BENIGN AND MALIGNANT BREAST TUMORS

	Benign N (%)	Malignant N (%)
Attitude towards sexual life before treatment**		
Satisfied with it	90 (88.24)	65 (76.47)
Unsatisfied with it	10 (9.80)	8 (9.41)
Does not have intercourse	2 (1.96)	12 (14.12)
Attitude towards sexual life after treatment**		
Same	63 (61.77)	38 (44.71)
Worse	35 (34.31)	30 (35.29)
Better	2 (1.96)	3 (3.53)
Does not have intercourse	2 (1.96)	14 (16.47)
Reason of dysfunction in patients' sexual life after treatment		
Fear of pain	11 (31.43)	6 (20.00)
Painful intercourse	8 (22.86)	3 (10.00)
Impossible penetration	2 (5.71)	3 (10.00)
Other	14 (40.00)	18 (60.00)

\*\* p < 0.01

**TABLE 5**  
A COMPARISON OF THE ATTITUDES OF EXAMINEES REGARDING THEIR PARTNERS BEHAVIOR BEFORE AND AFTER BREAST TUMOR TREATMENT

	Benign N (%)	Malignant N (%)
Behavior of the partner after treatment		
Better	38 (48.72)	29 (52.73)
Worse	2 (2.56)	3 (5.45)
Same	38 (48.72)	23 (41.82)
Talking about sexual life with partner before treatment		
Yes	46 (54.76)	30 (52.63)
No	38 (45.24)	27 (47.37)
Talking about sexual life with partner after treatment		
Yes	43 (52.44)	32 (55.17)
No	39 (47.56)	26 (44.83)
Do you feel men fare better in life than women?		
Yes	61 (59.80)	57 (67.06)
No	1 (0.98)	1 (1.18)
Same	40 (39.22)	27 (31.76)
Are you satisfied with your marriage?		
Yes	60 (76.92)	42 (76.37)
No	4 (5.13)	3 (5.45)
Partly	14 (17.95)	10 (18.18)

spectively. Deterioration in sexual life experienced 36.27% of patients with benign tumors and 51.76% of patients with malignant tumor ( $p < 0.01$ ). These results indicate the existence of sexual dysfunctions following breast tumor treatment, which is more prominent in group of patients with malignant tumors. The main reason of sex life impairment in both groups was distortion of body image perception (this reason was the most common under term »other«), followed by fear of pain. This is consistent with fact that emotional and psychological factors are responsible for

majority of problems in sexual functioning.

Table 5 reveals a comparison of the examinees attitudes regarding their partner's behavior before and after treatment. The supportive role of the partner was already well recognized in the literature as a very important factor that can facilitate psychological recovery of the patients<sup>10</sup>. Most of partners did not change their behavior toward women with breast tumors (48.72% for benign group and 41.82% for malignant group,  $p > 0.05$ ), or they were more tender and caring (48.72%

**TABLE 6**  
A SURVEY OF SOME PSYCHOLOGICAL IMPLICATIONS FOLLOWING TREATMENT OF  
BENIGN AND MALIGNANT BREAST TUMORS

	Benign N (%)	Malignant N (%)
Attitude towards your body after treatment (body image)**		
Same as it was before treatment	76 (74.51)	50 (58.82)
Different than it was before	26 (25.49)	35 (41.18)
Do you feel more frightened for your health after treatment?		
More	47 (46.08)	36 (42.35)
Less	12 (11.76)	7 (8.24)
Same	43 (42.16)	42 (49.41)
Is sexual life, in your opinion, important after treatment?		
Yes	55 (53.92)	33 (38.82)
No	12 (11.76)	9 (10.59)
I do not know	35 (34.31)	43 (50.59)
Would you recommend this kind of treatment to other women?		
Yes	90 (88.24)	77 (90.59)
No	1 (0.98)	0
I do not know	11 (10.78)	8 (9.41)
What kind of consultation regarding sex life after treatment would you recommend to other women?		
Women and her physician	17 (16.67)	18 (21.18)
Women, her husband and her physician	22 (21.57)	17 (20.00)
Try, and if there are problems than consultation	42 (41.18)	30 (35.29)
I do not know	21 (20.58)	20 (23.53)
Have you ever use hormonal replacement therapy?		
Yes	13 (12.75)	7 (8.24)
No	89 (87.25)	78 (91.76)

\*\* $p < 0.01$

for benign group and 52.73% or malignant group,  $p > 0.05$ ). In table 5 we can also see that majority of patients were satisfied with their marriage (76.92% for benign group and 76.37% or malignant group,  $p > 0.05$ ) and breast tumor did not influence on talking about sex life, regardless of its histology ( $p > 0.05$ ). Majority of women in both groups (59.80% and 67.06%) feel that men fare better in life ( $p > 0.05$ ).

Table 6 shows some psychological implications following treatment of breast tumors. A great amount of women in both groups felt certain change in her »body image«, but in greater extent in malignant group (41.18% vs. 25.49%), and this was statistically significant ( $p < 0.05$ ). This can be explained by more invasive approach to treatment and use of adjuvant chemotherapy. Less than one half of patients in both group felt more frightened for their life after treatment (46.08% in benign and 42.35% in malignant group). It is very interesting that 53.92% of patients feel that sex life is important after benign, and 38.82% after malignant breast tumor, but this difference was not statistically significant. Patients in both groups would recommend same kind of treatment to other women with similar diagnosis. From our results we can see that patients in this study do not recognize need for consultation with their physician regarding sex life after treatment of tumor (41.18% for benign and 35.29% in malignant group). Most of patients in this study did not use hormone replacement therapy.

## Discussion

There is an evolving body of research and clinical literature that illuminates the variety of psychological and sexual sequels of a breast cancer diagnosis and treatment, and the interventions that may aid in recovery<sup>11,12</sup>. The inability to

recognize and treat these sexual disturbances is a common and serious problem.

Cosmetics plays an important role in sexual functioning after treatment of breast cancer. Surgical, radiotherapeutic, chemotherapeutic and host factors may influence cosmetic outcome<sup>13</sup>. Surgical factors include the extent of surgical resection, formation of scar, and extent of axillary dissection. Recently developed procedures like sentinel lymph-node biopsy and breast-conservation therapy, have greatly reduced poor cosmetic outcome after surgery. Radiation therapy factors include doses of radiation to the whole breast, overall duration of therapy, type and dose of boost and beam energy. These risk factors have tried to be eliminated by fractionation of radiation doses and by usage of brachytherapy or electron-beam boost therapy. Chemotherapy risk factors include cytotoxic agents used and different combination of drugs. Nowadays, however, many new, potentially effective chemotherapeutic drugs are under development, and we have to wait to see their effect on cosmetic and sexual functioning of women with breast cancer. Host factors include size and shape of the breast, age, race, compliance with care, concurrent medical conditions (such as diabetes, coronary disease, cerebrovascular disease). In this paper we have demonstrated that treatment of breast tumor, whether benign or malignant, influence perception of one owns body. This perception is, however, in greater extent distorted in malignant group, which is consequence of more invasive treatment. This can be explained by greater use of chemotherapy in this group of patients. Young-McCaughan showed that women treated with chemotherapy were 5.7 times more likely than women not treated with chemotherapy to report vaginal dryness, 3.0 times more likely to report decreased libido, 5.5 times more likely to report



dyspareunia, and 7.1 times more likely to report difficulty achieving orgasm<sup>14</sup>.

Buković investigated changes in sexual life in 83 patients with gynecological tumors. The main changes were noted regarding satisfaction with sexual life in general, enjoyment during the intercourse, frequency of the intercourse and orgasm<sup>15</sup>. The same author emphasized the need for consultations regarding sex life after diagnosis of gynecological tumor<sup>16</sup>. However, this study did not confirm these results, but this can be attributed to different populations questioned in these two studies. Population in this study was mainly from rural areas and of lower education. However, healthcare professionals must acknowledge the scope of the impact of cancer treatment on sexuality, include such information as part of the informed consent process, and provide appropriate education and referral<sup>17</sup>. Oncology professionals should initiate communication about sexual difficulties, perform comprehensive assessments, and educate and counsel patients about the management of these difficulties<sup>18</sup>.

Chemotherapy has been shown to be associated with short and long-term effects on sexual functioning and quality of life in breast cancer<sup>19</sup>. Endocrine therapy in breast cancer appears not to affect levels of sexual functioning, although this may depend on the age of the woman<sup>14</sup>. Sexual self-schema appears to be an important concept in predicting sexual dysfunction<sup>19</sup>. More research is still required to identify how sexual dysfunction is affected in different groups of women and how best to help women who experience sexual difficulties.

Thors reviews studies in which sexual functioning in breast cancer survivors has been investigated. With regard to treatment effects, evidence suggests that breast cancer patients who undergo chemotherapy are at high risk for sexual dysfunction after treatment<sup>18</sup>. In con-

trast, findings indicate that no significant difference exist in sexuality between women treated by lumpectomy and those treated by mastectomy<sup>20</sup>.

Breast cancer has the potential to be most devastating to the sexual function and self-esteem of premenopausal women, and younger women with breast cancer have more severe emotional distress than older cohorts<sup>21,22</sup>. Systemic treatment (adjuvant chemotherapy) disrupts sexual function by causing premature menopause, vaginal dryness, loss of bleeding, loss of sexual sensations, and loss of womanhood<sup>21,23,24</sup>. Research on mastectomy versus breast conservation across all ages of women has demonstrated that general psychological distress, marital satisfaction, and overall sexual frequency and function do not differ between the two treatment groups, but women with breast conservation do rate their body image more highly and are more comfortable with nudity and breast caressing<sup>21</sup>. This is supported by this study, where it can be seen that women with benign breast tumor rate their body higher, as a consequence of less invasive treatment (no chemotherapy and radical operations). Future studies should use rigorous methodology and focus on the impact of premature menopause and the effectiveness of sexual rehabilitation for younger women<sup>21</sup>.

Previous reports suggest that problems in sexual functioning may be common among long-term (> 5 years) breast cancer survivors. To investigate this issue further, Broeckel examined the characteristics and correlates of sexual functioning in women diagnosed with breast cancer at least 5 years previously and treated with adjuvant chemotherapy and in an age-matched comparison group of women with no history of cancer. Compared with women with no history of cancer, long-term breast cancer survivors reported worse sexual functioning ( $p = 0.01$ ), characterized by greater lack of

sexual interest, inability to relax and enjoy sex, difficulty becoming aroused, and difficulty achieving an orgasm. Additional analyses indicated that severity of vaginal dryness was significantly ( $p = 0.05$ ) related to poorer sexual functioning among long-term breast cancer survivors<sup>23</sup>.

The main limitation of this study was that results are collected from women born in relatively small part of Croatia, and they do not necessarily apply to other populations. It also must not be forgotten that patients with benign breast tumors are younger, and that this can be partly responsible for better sexual function in younger women. However, we have clearly showed the existence of sexual dysfunctions following breast tumor treatment, and that main reason of impairment was distortion of body image perception (this was greater in malignant group). It is also noteworthy to mention that most of the patients are aware of importance of sexuality after treatment of breast tumor. Further studies are necessary to evaluate individual impact of chemotherapy and invasive surgery on sexual function in women with malignant tumors, and to evaluate impact of different chemothe-

rapeutics that are used for treatment of breast cancer on sexual function.

### Conclusion

This study revealed different problems and difficulties regarding sexual life in women with benign and malignant breast cancer. Our study showed that sexual functioning after treatment of breast tumors is worsened, especially in women with malignant type of tumors. The role of the partner is referred to as very positive and supporting. Patients also felt some differences in »body image« perception, but greater amount of patients felt these differences in malignant group of patients. From our results we can see that patients in this study do not recognize need for consultation with their physician regarding sex life after treatment of tumor, which can be explained by level of education and rural living place. Sexual life was recognized as an important part of life after treatment of breast tumors. Regarding above mentioned, can be concluded that considerable amount of attention should be given to psychological aspects of recovery that can improve prognosis and quality of life in general.

### REFERENCES

1. COTRAN, R. S., S. C. LESTER, The breast. In: COTRAN, R. S., V. KUMAR, T. COLLINS (Eds.): Robbins pathologic basis of disease. (W. B. Saunders Company, Philadelphia, 1999). — 2. BARTOW, S. A. Pathol. Annu., 17 (1982) 93. — 3. DEGENSHEIN, G. A., F. CECCARELLI, Breast, 3 (1977) 28. — 4. MORLEY, J. E., F. E. KAISER, Med. Clin. North Am., 87 (2003) 1077. — 5. GOTT, M., S. HINCHLIFF, Soc. Sci. Med., 56 (2003) 1617. — 6. LARSSON, I., C. G. SVEDIN, Acta Paediatr., 90 (2001) 436. — 7. DEEHAN, A., C. FITZPATRICK, Ir. Med. J., 86 (1993) 130. — 8. CLAWSON, C. L., M. REESE-WEBER, J. Sex. Res., 40 (2003) 256. — 9. REMPEL, J. K., B. BAUMGARTNER, Arch. Sex. Behav., 32 (2003) 155. — 10. VAN DE WIEL, H. B., W. C. SSHULTZ, F. G. HALLENSLEBEN, F. G. THURKOW, J. BOUMA, Eur. J. Gynaecol. Oncol., 9 (1988) 275. — 11. BRANSFIELD, D. D., Int. J. Psychiatry Med., 12 (1982) 197. — 12. RABINOWITZ, B., Curr. Womens Health. Rep., 2 (2002) 140. — 13. McCORMICK, B., C. HUDIS, A. HEERDT, P. I. BORGAN, D. D. DERSHAW, L. K. TAN, C. A. PEREZ, M. E. TAILOR, Breast cancer. In: HOSKINS, W. J., C. A. PEREZ, R. C. YOUNG (Eds.): Principles and practice of gynecologic oncology. (Lippincott Williams and Wilkins, Philadelphia, 2000). — 14. YOUNG-MCCAUGHAN, S., Cancer Nurs., 19 (1996) 308. — 15. BUKOVIĆ, D., I. RUDAN, D. GORSKI, D. BUKOVIĆ, Jr., Coll. Antropol., 20 (1996) 1. — 16. BUKOVIĆ, D., T. STRINIĆ, M. HABEK, I. HOJSAK, H. SILOVSKI, I. KRHEN, I. MALOČA, M. RADAN, Coll. Antropol., 27 (2003) 1. — 17. WILMOTH, M. C., J. A. ROSS, Cancer Pract., 5 (1997) 353. — 18. THORS, C. L., J. A. BROECKEL, P. B. JACOBSEN, Cancer Control, 8 (2001) 442. — 19. STEAD, M. L., Curr. Opin. Obstet. Gynecol., 15 (2003) 57. — 20. WILMOTH, M. C., J. TOWNSEND, Cancer Pract., 3 (1995) 279. — 21.

SCHOVER, L. R., J. Natl. Cancer. Inst. Monogr., 16 (1994) 177. — 22. DORVAL, M., E. MAUNSELL, L. DESCHENES, J. BRISSON, Cancer, 83 (1998) 2130. — 23. BROECKEL, J. A., C. L. THORS, P. B. JACOB-

SEN, M. SMALL, C. E. COX, Breast Cancer Res. Treat., 75 (2002) 241. — 24. WILMOTH, M. C., Cancer Nurs., 24 (2001) 278.

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## **RAZLIKE U SEKSUALNOM FUNKCIONIRANJU IZMEĐU PACIJENTICA SA DOBROĆUDNIM I ZLOĆUDNIM NOVOTVORINAMA DOJKE**

### **S A Ž E T A K**

Cilj ove studije je odrediti postoje li razlike u spolnom životu kod pacijentica nakon dobroćudnog i zloćudnog tumora dojke. Pacijentice koje su prije 1 do 10 godina liječene od tumora dojke u Općoj bolnici Požega su u razdoblju od siječnja 2001. i svibnja 2003. ispunile upitnik koji je posebno osmišljen za ovo istraživanje. Pogoršanje spolnog života primijetilo je 36.27% pacijentica s dobroćudnim tumorom dojke i 51.76% pacijentica sa zloćudnim tumorom dojke ( $p < 0.01$ ). Najčešći razlog navedenog pogoršanja bila je promjena percepcije o vlastitom tijelu. Većina pacijentica nije primijetila promjene u ponašanju kod svojih partnera (48.72% u dobroćudnoj skupini i 41.82% u zloćudnoj skupini,  $p > 0.05$ ). Većina je pacijentica promijenila sliku o vlastitom tijelu, više u skupini pacijentica sa zloćudnom novotvorinom (41.18% vs. 25.49%), ( $p < 0.05$ ). Pacijentice u ovoj studiji nisu prepoznale potrebu za konzultacijom s liječnikom u vezi spolnog života nakon liječenja novotvorine dojke (41.18% u dobroćudnoj skupini i 35.29% u zloćudnoj). Iz gore navedenog, može se zaključiti da je potrebno više pažnje posvetiti psihološkom aspektu liječenja novotvorine dojke što može poboljšati prognozu i kvalitetu života općenito.