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Sexual Dysfunction and Signs of Gynecologic Cancer

BARBARA L. ANDERSEN, PhD[*], **PETER A. LACHENBRUCH, PhD**[†], **BARRIE ANDERSON, MD**[‡], and **CHARLES DEPROSSE, MD**[‡]

[*] Department of Psychology, The University of Iowa, Iowa City, Iowa

[†] Division of Biostatistics. School of Public Health, University of California, Los Angeles, California

[‡] Department of Obstetrics and Gynecology, The University of Iowa, Iowa City, Iowa

Abstract

Forty-one women recently diagnosed with early-stage cervical or endometrial cancer and a matched group of healthy women in no gynecologic distress, participated in a detailed assessment of their sexual functioning. Data included the range and frequency of sexual behavior, level of sexual responsiveness, and the presence of sexual dysfunction. Multivariate analyses of variance indicated that prior to the onset of cancer signs/symptoms the gynecologic cancer patients reported similar patterns of sexual activity and responsiveness as the healthy sample. With the appearance of disease signs, however, the gynecologic cancer patients reported experiencing significant sexual dysfunction symptoms. While sexual morbidity is typically conceptualized as occurring after the diagnosis and treatment of cancer, these data indicate that such changes are a major source of variation in describing the prediagnosis sexual status of the gynecologic cancer patient.

Many of the leading causes of death in the United States are chronic and progressively disabling diseases (*e.g.*, cardiovascular disease, cancer) which result in years of limitation and altered life style. For this reason, there has been an increasing number of investigations on the psychological outcomes following such diagnoses. Within the cancer domain, attention has focused on treatment-induced neuropsychological deficits[1] and residual affective distress[2] and pain,[3] among others. Relatively little attention has been paid, however, to the sexual outcomes following cancer diagnosis and treatment.[4]

To document the sexual outcomes of chronic illnesses such as cancer, sophisticated research strategy, design, and assessment methods are necessary. In terms of strategy, sufficient retrospective data are available from study of some cancer sites (*e.g.*, breast, gynecologic, prostate) so that prospective designs of the nature, timing, and possible etiology of sexual distress would advance knowledge. It is likely that such designs would, however, be "modified" prospective ones, in that study would begin shortly after diagnosis but prior to treatment. The task at that time would be to document the previous healthy "baseline" of sexual responding and the presence and nature of any recent changes in sexual functioning with the appearance of cancer signs/symptoms. The possibility of such change as a source of variance in documenting baseline responding has been discussed previously in reference to gynecologic cancer patients.[5]

In addition to prospective assessment of the cancer group, it would be important to obtain relevant comparison groups in the research design. A sample of healthy individuals in no distress could be used to estimate the base rate of sexual distress and dysfunction that occur under normal circumstances. Survey research has indicated that the frequency of sexual

Address for reprints: Barbara L. Andersen, PhD, Department of Psychology, The University of Iowa, Iowa City, IA 52242.

concerns, difficulties, or dysfunctions among healthy individuals is not negligible.[6] Such a sample should be matched to the cancer sample on the variables which would potentially covary with sexual outcomes (*e.g.*, age, menopausal status, presence of a sexual partner, *etc.*). Other comparison groups, such as one with benign disease in the same organ system, might be important when examining posttreatment outcomes. While cause–effect statements could not be made in either case, the specific contribution of malignant disease and cancer treatment could be estimated and distinguished from normal levels of sexual distress or levels following related treatments for nonmalignant disease.

In previous studies,[7–9] investigators have used a single measure, such as the frequency of a particular sexual behavior (*e.g.*, intercourse), indication of responsiveness (*e.g.*, presence/absence of orgasm), or an estimate of global sexual satisfaction. These single measures illustrate three dimensions of sexuality which need comprehensive assessment. First, the change in the frequency of current sexual activity, including intercourse, is related to sexual satisfaction and adjustment among healthy women[10] and couples.[11] It would be important to include a wide range of activities when studying cancer patients, however, in that some activities (such as intercourse) may undergo considerable disruption due to disease symptomatology or subsequent treatment effects, whereas others (such as kissing, body caressing) need not. Second, while the role of orgasm in individual and couple sexual enjoyment is clear,[12] responses during all phases of the sexual response cycle (*i.e.*, desire, excitement, orgasm, resolution) are relevant, since data indicate that cancer patients may also experience other phasic disruptions, such as reduced excitement due to pain or disrupted resolution with postcoital bleeding.[4] Third, an important distinction to be made when estimating sexual satisfaction is to distinguish sexual problems which are so significant that diagnosis of sexual dysfunction is appropriate. According to Diagnostic and Statistical Manual-III criteria,[13] this includes the presence of a sexual difficulty or change and significant patient distress. It is important to note that while sexual activity may change following cancer treatment, this circumstance is not necessarily distressing to all patients.[14–17]

The current investigation was designed to illustrate the above research issues with a gynecologic cancer group, document the healthy "baseline" of sexual response, and provide initial data on changes in sexual functioning concurrent with early signs of gynecologic cancer.

Subjects

Forty-one newly diagnosed patients with gynecologic cancer participated. All were undergoing tumor workup prior to treatment for early cervical (Stage **I** n = 18; Stage **II** n = 15) or endometrial (Stage I n = 8) cancer. All were scheduled for treatment, consisting of either radical surgery (*i.e.*, radical hysterectomy or total abdominal hysterectomy) or radiotherapy (*i.e.*, external beam plus intracavitary cesium) or combination therapy.

Forty-one women attending an outpatient gynecology clinic for routine exams served as the healthy subjects. To be eligible for participation, a woman must not have had gynecologic surgery within the previous 3 years or anticipate surgery or pregnancy within the next 2 years.

Measures

A structured interview and self-report questionnaires assessing sexuality were the data of interest. Three major areas of sexual functioning were included: (1) current range and frequency of sexual behavior; (2) a detailing of the woman's sexual responding through each phase of the sexual response cycle, desire, excitement, orgasm, and resolution;[18,19] and (3) determination by the interviewer if diagnostic levels of sexual dysfunction were present using DSM-III criteria.[13] Listed below into "factors" are the *a priori* groupings of the interview or

questionnaire data used for statistical analyses. Measures within a factor are conceptualized as representing the construct.

The contribution of medical factors to sexual distress was also examined. A general physical and pelvic exam was conducted on all patients.

Sexual History Factor

Age in years of first intercourse experience.

Number of different sexual partners prior to age 20 years.

Range of past sexual activity—The Sexual Activities scale from the Derogatis Sexual Functioning Inventory[20] was used to assess the range of past sexual activities. The scale includes 24 heterosexual sexual behaviors, ranging from kissing to intercourse. Respondents endorsed those items that had occurred at least once in their entire sexual life. Scores could range from 0 to 24.

Current Sexual Behavior Factor

Frequency of sexual intercourse and partner kissing—This was expressed in terms of instances in the previous month or in the month prior to any gynecologic symptoms.

Range of current sexual activity—The Sexual Activities scale[20] was also used to assess the range of current sexual activities. Respondents went through the list and endorsed those items that had occurred in the last month or in the month prior to the appearance of any gynecologic symptoms. Scores could range from 0 to 24.

Global sexual evaluation[§]—A 9-point scale was used, with descriptors ranging from "could not be worse" (0) to "could not be better" (9), with "adequate" (4) as the midpoint. Subjects picked one statement that best described their present sexual life.

Sexual Desire Factor

Symptomatology[§]—Subjects were asked the presence or absence of five symptoms (*e.g.*, no interest in initiating sexual activity, refusal of intercourse/foreplay) indicative of a desire phase difficulty drawn from the work of Kaplan[18] and Masters and Johnson.[19] A total score from 0 to 5 was used.

Locus of desire problem[§]—Subjects were asked how many of five high frequency sexual activities (*e.g.*, "friendly" kissing/hugging, intercourse) for which they have a lack of desire if a desire problem was present. Activities were selected from the work of Kaplan.[18] A total score from 0 to 5 was used.

Activity discrepancy—Subjects provided preferred frequencies of sexual intercourse and partner kissing during the previous month. A discrepancy between actual behavioral frequencies obtained earlier and those for each activity were obtained. One discrepancy score for each activity was used.

Subject's judgment of the presence of a desire problem[§]—A 5-point rating scale (0 = no desire problem, 1 = rarely, 2 = sometimes, 3 = frequently, 4 = always a desire problem) was used for the subject to rate the frequency of current desire phase difficulties.

[§]The items marked throughout with this symbol were include 4 for an abbreviated assessment, as described later.

Distress rating[§]—A 5-point rating scale was used for the subject to rate her current distress over desire problem, if present, as follows: (0 = absolutely no distress, 1 = slightly distressing, 2 = moderately distressing, 3 = very distressing, 4 = extremely distressing).

Evaluator's judgment[§]—A 5-point rating scale was used for the interviewer to judge the likelihood of a desire-phase difficulty for the subject on the basis of the interview information: (0 = unlikely to be a desire problem, 1 = somewhat unlikely, 2 = not sure, 3 = somewhat likely, 4 = likely to be a desire problem).

Sexual Excitement Factor

Symptomatology—Subjects were asked their awareness of six symptoms (*e.g.*, breast enlargement and/or nipple erection, sex flush, vaginal lubrication) selected from the work of Masters and Johnson[19] and Hoon and Hoon.[10] A total score from 0 to 6 was used.

Sexual arousal—A Sexual Arousal Inventory[21] included 28 sexual/erotic experiences for which subjects rated each activity from −1 (adverse effect) to 5 (always causes sexual arousal) in terms of their present feelings when engaging in the activity. The items were summed for a total score ranging from −28 to 140.

Sexual anxiety—A Heterosexual Behavior Hierarchy— Female Form[22] scale included 21 autoerotic and couple sexual behaviors, and respondents rated each item from 0 (no anxiety) to 7 (very much anxiety). Items were summed to a total score from 0 to 147. Numerous investigators have noted that the presence of sexual anxiety is a significant disrupter for sexual excitement.

Subject's judgment of the presence of an excitement problem[§]—A 5-point rating scale was used for the subject to rate the frequency of current difficulties.

Distress rating[§]—A 5-point rating scale was used for the subject to rate their current distress over the excitement difficulty, if present.

Evaluator's judgment[§]—A 5-point rating scale was used for the evaluator (interviewer) to judge the likelihood of an excitement difficulty.

Orgasm Factor

Symptomatology—Subjects were asked their awareness of five symptoms (*e.g.*, awareness of vaginal contractions, change in respiration) selected from the work of Masters and Johnson, [19] Hoon and Hoon,[10] and Newcomb and Bentler.[23] A total score from 0 to 5 was used.

Frequency of orgasm[§]—This includes the subject's current estimation of orgasm frequency in percentage of intercourse occasions attempted.

Subject's judgment of the presence of an orgasmic problem[§]—A 5-point rating scale was used to rate the frequency of orgasmic difficulties.

Distress rating[§]—A 5-point rating scale was used for the subject to rate her distress about orgasmic difficulty, if present.

Evaluator's judgment[§]—A 5-point rating scale was used for the evaluator to judge the likelihood of orgasmic difficulty.

Resolution Factor

Symptomatology—Subjects were asked their awareness of six symptoms (*e.g.*, general muscular relaxation, feeling of general release) selected from the work of Masters and Johnson.[19] A total score from 0 to 6 was used.

Subject's judgment of presence of a problem with the resolution period§—A 5-point rating scale was used for the subject to rate the frequency of current difficulties.

Distress rating§—A 5-point rating scale was used for the subject to rate her distress about resolution phase difficulties, if present.

Evaluator's judgment§—A 5-point rating scale was used for the evaluator to judge the likelihood of resolution difficulties.

Evaluator's Diagnosis of Sexual Dysfunction§

Presence or absence of five DSM-III[13] sexual dysfunctions were noted. They include inhibited sexual desire, inhibited sexual excitement, inhibited female orgasm, and functional dyspareunia.

Medical Assessment

System evaluation—An examining physician evaluated the existence of nonmalignant disease and associated therapy for the following systems: cardiovascular, pulmonary, gastrointestinal, genital tract, urinary tract, neurologic, endocrine, hepatic, hematologic, and musculo-skeletal during a general physical exam with the subject. A rating scale from 0 to 4 for each system was used (0 = no condition/normal, 2 = moderate and/or transient symptomatic requiring no therapy, 4 = most severe and/or life threatening).

Urinary, gastrointestinal and general symptoms/signs—Twenty-one common symptoms/signs frequently reported by gynecology patients were evaluated. Each is rated by the physician during the general physical exam and interview with the subject. A 4-point scale from 0 to 3 was used (0 = normal/no sign/symptom, 1 = mild, 2 = moderate, 3 = severe).

Pelvic examination findings—The examining physician evaluated 15 areas of vaginal, external genitalia, or pelvic disease sign/symptom findings or treatment effects. Examples include the vagina (*e.g.*, caliber, epithelium, bleeding), external genitalia (*e.g.*, loss of sensation, edema), or pelvis (*e.g.*, pain). Each area was evaluated on a 4-point scale (0 = normal, 1 = mild, 2 = moderate, 3 = severe). The 15 areas were assembled from empirical research on pelvic disruption with gynecologic conditions.[24'25]

Demographic Information

Demographic information included the subject's age, marital status, and length of time with the current partner, education and current occupation, and personal and family income from the previous year.

Procedure

All women were outpatients at a large university hospital. Potential subjects were not approached for participation if they met any of the following exclusion criteria: age younger than 20 years or older than 70 years; history of mental disorder or organic brain syndrome resulting in hospitalization for more than 2 days; physically disabling illness or injury;

significant sensory deficit; education less than eighth grade; previous cancer diagnosis or diagnosis other than early stage cervical or endometrial cancer.

Potential cancer subjects had received a definitive diagnosis 1 to 2 weeks previously and had been referred to the Division of Gynecologic Oncology within the Department of Obstetrics and Gynecology for further evaluation and treatment. Of those cancer patients contacted for participation, there was a 4% refusal rate, with the primary reason being that the woman described herself as “too upset” or “overwhelmed.”

Subjects for the healthy outpatient group were selected from weekly rosters of women scheduled for a routine gynecologic exam. Potential subjects with a comparable age (±5 years) and menopausal status as a cancer subject were each mailed a letter one week prior to their clinic visit. Within 4 days, each letter was followed with a telephone call from a research assistant who described the investigation and the reasons why her participation was solicited. Some women also called and volunteered after receiving the letter. There was a 15% refusal rate; the primary reason for refusal was that the potential subject described herself as “too busy.”

All women were evaluated by a resident physician and the medical assessment data completed. Following the exam and the obtaining of informed consent, sexual assessments were conducted in the outpatient clinic or nearby research office the same or following day. A 1-hour individual structured interview was conducted by a female interviewer experienced in the assessment and treatment of sexual dysfunction and the psychological aspects of cancer.

The sexual portion of the interview was done in a straightforward manner for the healthy women; however, a modified procedure was necessary for the cancer patients. Women were asked to report sexual responses *immediately prior* to any recent symptomatic period which led to seeking medical care. Following completion of these data, women were then briefly requestioned for sexual responses during the recent symptomatic period. The items marked above ([§]) were included for this abbreviated assessment.

Results

Comparison of Gynecologic Cancer Patients Prior to Cancer Sign/Symptom Onset and Healthy Women

The measures grouped to reflect factor scores were first analyzed with a one-way multivariate analysis of variance (MANOVA), since the measures were conceptualized as reflecting complementing aspects of the same construct. Comparison was made between the healthy women and the “healthy” period for the gynecologic cancer patients (*i.e.*, sexual responses prior to any recent change due to gynecologic signs/symptoms). For the first factor reflecting sexual history, there was an overall significant difference between the samples, $F(3, 69) = 5.51$, $P < 0.01$. Follow-up univariate analyses for two measures of the factor were also significant: Past Sexual Activities scale, $F(1, 79) = 7.17$, $P < 0.01$, and the age at first intercourse, $F(1, 74) = 10.67$, $P < 0.01$. In contrast, there were no significant differences between the groups in terms of the number of different sexual partners. Means for the two groups on these variables are provided in Table 1.

There was a significant difference between groups on the current sexual behavior factor, $F(4, 76) = 6.53$, $P < 0.01$. Follow-up analyses, however, revealed that this difference was largely accounted for by the Current Sexual Activities scale, $F(1, 79) = 16.89$, $P < 0.01$. Means are displayed in Table 1.

To assess sexual response cycle disruption, separate MANOVAs were conducted for the desire, excitement, orgasm, and resolution factors. Only for the excitement factor were significant group differences detected, $F(5, 71) = 2.30$, $P < 0.05$. Follow-up univariate analyses for each measure of the excitement factor revealed significant differences for the Sexual Arousal Inventory only, $F(1, 78) = 6.42$, $P < 0.01$. Means are displayed in Table 1.

McNemar chi-square analyses were conducted to examine the differential presence of diagnosed sexual dysfunction for subject pairs of healthy women and cancer patients. Analyses indicated no difference in the frequency of sexual dysfunction for the DSM-III diagnoses of inhibited sexual desire, excitement, or orgasm, and functional dyspareunia.

Analyses of variance (ANOVAs) were conducted on the medical assessment data. No significant differences were found between the groups on the system evaluation and for urinary or gastrointestinal signs/symptoms. As might be expected, significant group differences were found with the measures of general symptomatology (*e.g.*, fatigue, loss of appetite, sleep problems), $F(1, 80) = 8.39$, $P < 0.05$, and the pelvic examination findings, $F(1, 80) = 4.63$, $P < 0.05$. In combination, these data indicated that the groups were comparable in terms of nonmalignant disease or conditions; however, the gynecologic cancer patients reported general debilitation and pelvic disruption (*e.g.*, vaginal bleeding, pelvic pain).

Comparison of Gynecologic Cancer Subjects During Previous Healthy and Recent Symptomatic Periods

An abbreviated sexual assessment was conducted for those women with cancer reporting any recent disruption in sexual responsiveness (n = 38). There was disruption of the sexual response cycle when repeated measures MANOVA comparisons were made. These differences included: desire factor, $F(3, 38) = 14.08$, $P < 0.001$; excitement factor, $F(2, 38) = 22.96$, $P < 0.001$; orgasm factor, $F(3, 37) = 6.69$, $P < 0.001$; and the resolution factor, $F(2, 38) = 23.88$, $P < 0.001$. Follow-up univariate analyses also revealed significant differences for all measures comprising each factor. In addition, significant differences were also found on the global evaluation scale, $F(1, 39) = 33.95$, $P < 0.001$, indicating that women evaluated their sexual life as having recently undergone substantial change from a global rating of “good” to a rating of “somewhat inadequate.” Mean values for all measures are displayed in Table 2.

McNemar chi-square analyses indicated significant differences in the frequency of the DSM-III sexual dysfunctions: inhibited sexual desire, $\chi^2(1, n = 41) = 16.2$, $P < 0.001$; inhibited sexual excitement, $\chi^2(1, n = 40) = 14.22$, $P < 0.001$; inhibited orgasm, $\chi^2(1, n = 40) = 12.0$, $P < 0.001$; and dyspareunia, $\chi^2(1, n = 40) = 13.0$, $P < 0.001$. As the data patterns were similar across diagnoses, the data for the frequency of inhibited desire and orgasm are provided in Table 3 for illustrative purposes.

In view of the magnitude of sexual disruption during the recent cancer sign/symptom period, descriptive analyses were performed. Table 4 provides data on the presenting disease complaints for the women and whether they were associated with concomitant sexual dysfunction. When sexual response cycle disruption was reported, women were asked to estimate the duration of disruption and its stressfulness. Duration estimates for each were as follows: desire, 5 months; excitement, 4 months; orgasm, 5 months, and resolution, 4 months. The mean distress estimate across all patients was “moderately distressing” for each response cycle phase disruption.

Discussion

This investigation provides preliminary data on three issues relevant to the understanding of sexual morbidity among cancer patients: (1) the research issues in limited prospective study

of cancer patients; (2) the provision of "baseline" data for a gynecologic sample; and (3) the provision of initial data emphasizing the appearance of sexual dysfunction with the early signs/symptoms of gynecologic cancer.

With comparison of the healthy women and cancer patients prior to disease symptomatology, significant differences in the expected direction were observed. These included the sexual history factor of early intercourse (noted in other research as relevant for squamous type cervical cancer) and the medical evaluation of gynecologic symptomatology. The cancer sample also reported having experienced significantly fewer different sexual activities during their lifetime; however, the significance of this finding remains to be determined. One possible clinical implication is that the remediation of sexual difficulties in treated gynecologic cancer patients might be more difficult than expected. If traditional sexual activities (*e.g.*, intercourse) become difficult or impossible, alternative sexual activities are often suggested.[26] Such a suggestion may require additional information provision or possibly be met with little enthusiasm by women who had a more limited repertoire of sexual behaviors prior to cancer diagnosis and treatment.

When sexual response cycle and sexual dysfunction measures were analyzed, only a single difference between the healthy women and cancer patients prior to disease sign/symptom onset was found. The samples were statistically equivalent, for example, on excitement and orgasm symptomatology, frequency of orgasm during intercourse (approximately 60% of the occasions attempted), and reporting that their sexual life was generally "good." Thus, this "baseline" assessment and comparison with healthy women was important in documenting that the women who were subsequently diagnosed with gynecologic cancer described similar levels of sexual activity and satisfaction as healthy women.

The appearance of sexual problems during the gynecologic symptom period was a stark contrast to the previously satisfactory sexual lives enjoyed by the women with cancer. While the difficulties were pervasive, the data are revealing in how the sexual problems were manifest. For example, during the prediagnostic period, a variety of symptoms indicative of inhibited sexual desire were reported (Table 2). There was also variability in the frequency with which each symptom was reported. The most common symptom a woman would report is having no interest in initiating or in responding to their partner's initiations for sexual activity. It was much less likely that women would avoid or refuse intercourse; however, even these behaviors were more frequent than previously. There were also differences in the locus of the desire problem; women reported having little loss of desire for nonsexual, affectionate kissing, yet a substantial loss of desire for intercourse was experienced.

Approximately 75% of the women with cancer experienced sexual dysfunctions. It is likely that such obvious and disruptive sexual problems influenced the women to negatively interpret their gynecologic disease signs/symptoms. Several women of menopausal age, for example, reported that they initially thought the episodes of postcoital bleeding were indicants of menopause; however, postcoital bleeding and dyspareunia did not coincide with some women's understanding of menopause. They then wondered if the bleeding could mean something else. To several other women, the loss of sexual desire was disturbing. Some rationalized that their lives were currently too busy or fatiguing, while others could not suggest a satisfying reason to themselves as to why their sexual interest could change remarkably. Prior to the current data, sexual morbidity is typically conceptualized as occurring after the diagnosis and treatment of cancer. These data indicate, however, that it was a major source of variation in describing the prediagnosis sexual status of the gynecologic cancer patient.

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Table 1

Comparison of Healthy Women and Gynecologic Cancer Patients Prior to Cancer Sign/Symptom Onset on Sexual Functioning Variables

Sexual factor	Cancer patients	Healthy patients
Sexual history*		
Age in years at first intercourse experience†	17.2	19.2
Number of different sexual partners prior to age 20	1.7	2.0
Number of previous sexual activities†	19.9	21.5
Current sexual behavior*		
Frequency of intercourse per month	8.6	8.1
Frequency of partner kissing per month	94	93
Number of current sexual activities†	12.0	16.4
Global sexual evaluation	5.6	5.2
Sexual desire		
Sexual excitement*		
Symptomatology	3.8	3.7
Sexual arousal†	62	75
Sexual anxiety	31	23
Subject's judgment of a problem	0.34	0.39
Evaluator's judgment of a problem	0.45	0.49
Orgasm		
Resolution		

*Indicates significant MANOVA, $P < 0.05$.

†Indicates significant univariate analysis, $P < 0.01$.

Table 2

Comparison of Sexual Functioning for Gynecologic Cancer Subjects Before and After Cancer Sign/Symptom Onset

Sexual factor	*M* Values	
	Before symptoms	After symptoms
Desire*		
Symptomatology†	1.2	2.7
No interest in initiating†	.32	.65
No interest in responding to partner's initiations‡	.29	.67
Not feeling "sexy" or interested in having sex‡	.24	.63
Avoiding sexual encounters‡	.12	.30
Refusing intercourse‡	.26	.43
Locus of problem		
Nonsexual, "friendly" kissing/hugging§		.06
Sexual, intimate kissing/hugging§		.23
Having nude body touched§		.50
Intercourse§		.83
Subject's judgment of problem†	.63	3.1
Evaluator's judgment of problem†	.89	3.4
Sexual excitement*		
Subject's judgment of problem†	.34	2.8
Evaluator's judgment of problem†	.41	3.2
Orgasm*		
Frequency of coital orgasm†	.62	.29
Subject's judgment of problem†	.58	3.0
Evaluator's judgment of problem†	.61	3.4
Resolution*		
Subject's judgment of problem†	.24	3.0
Evaluator's judgment of problem†	.29	3.2
Global sexual evaluation†	5.6	3.4

* Indicates significant MANOVA, $P < 0.01$.

† Indicates significant univariate analysis, $P < 0.01$.

‡ Rating scale: 0 = absent, 1 = present.

§ Rating scale: 0 = no problem; 1 = a problem. Data are provided for those women indicating a desire problem (n = 23).

Table 3

Frequency of DSM-III Inhibited Sexual Desire and Orgasm Diagnoses for Gynecologic Cancer Subjects Before and After Cancer Sign/Symptom Onset

	Recent symptom period	
	No dysfunction	**Dysfunction present**
Inhibited sexual desire*		
Previous healthy period		
No dysfunction	17 (42%)	19 (46%)
Dysfunction present	1 (2%)	4 (10%)
Inhibited female orgasm*		
Previous healthy period		
No dysfunction	26 (63%)	12 (29%)
Dysfunction present	0	3 (7%)

*$P < 0.001$.

Table 4

Presenting Gynecologic Cancer Signs/Symptoms and Concomitant Sexual Dysfunction

	Sexual dysfunction(s)	
Gynecologic cancer signs/symptoms	**Absent**	**Present**
None	2	1
Fatigue only	0	3
Postcoital bleeding only	2	7
Other bleeding and/or vaginal discharge only	3	1
Pain only (other than coital or postcoital)	0	1
Multiple signs/symptoms	4	16
Total*	11	29

* Numbers only total 40 since one woman sought treatment and ended all sexual activity with one nonpainful episode of postcoital bleeding.