

Evaluating Sexual Dysfunction in Women

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Sexual dysfunctions are common in women. However, they are detected rarely by their gynecologists in part because the patient, health care provider, or both may be reticent to raise the topic. This article attempts to provide diagnosis and treatment information about sexual function and dysfunction patterns for the purpose of providing more thorough patient care.

Although the epidemiologic data about the incidence and prevalence of sexual dysfunction are sparse, there are several notable findings. Sexual dysfunctions are reported by women across the life span. Table 1 summarizes the data from a random probability sample of more than 1,600 women (age range, 18–59) of different racial and ethnic backgrounds (75% white, 12% black, 7% to 9% Hispanic, with a residual of 3%), educational, and economic levels. These data report “problems within the last year,” with lack of sexual desire reported by nearly one third of the sample and orgasmic difficulties reported by nearly 25% of the sample.¹ In a clinic-based sample of 329 healthy women (age range, 18–73) at an outpatient gynecologic clinic, 28% (figures rounded) were no longer sexually active. Overall, 38% of the women reported anxiety or inhi-

bition during sex; 18% of the women reported frequent intercourse pain; and 58% of the women reported significant orgasm difficulties.²

Another reported finding is that sexual relationship satisfaction is not exclusively determined by sexual functioning. In the study just mentioned, 68% of the women reported being somewhat to very satisfied with the overall sexual relationship despite their reported sexual difficulties.² Similarly, happily married women have reported a rather high rate of sexual dysfunction (63% in one study).³ Women may tolerate a certain level of sexual dysfunction before calling it a problem or reporting marital dissatisfaction.

Factors Impacting Sexual Responsiveness

Sexual responsiveness is determined by an interaction of physical, psychosocial, and relationship factors. Changes in one area often overlap with and influence changes in the others. The following briefly summarizes key elements in each category.

PHYSICAL FACTORS

A healthy vascular and neuroendocrine system contributes to adequate sexual func-

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TABLE 1. Prevalence of Female Sexual Dysfunction by Age (N = 1,622)

Age	Lacks Sexual Interest (%)	Trouble Lubricating (%)	Unable to Orgasm (%)	Pain During Sex (%)	Sex Not Pleasurable (%)
18-24	32.0	19.3	26.0	21.5	26.6
25-29	32.3	18.2	24.4	18.8	26.2
30-34	29.5	16.2	27.7	14.2	26.5
35-39	37.6	18.1	26.9	13.0	18.3
40-44	36.0	15.9	20.8	12.5	18.7
45-49	33.7	22.6	18.8	10.3	15.4
50-54	30.2	21.4	20.2	7.4	15.3
55-59	37.0	24.8	29.8	8.7	16.4
Overall	33.4	18.8	24.1	14.4	21.2

Adapted from Laumann EO, Gagnon JH, Michael RT, Michaels S. *The Social Organization of Sexuality*. Chicago: The University of Chicago Press, 1994. © 1994 by Edward O. Laumann, Robert T. Michael, CSG Enterprises, Inc., and Stuart Michaels. Used with permission.

tioning. The absence of depression, anxiety, and panic also contribute to adequate sexual functioning. Specific biochemical indicators that interfere with desire and response include *decreased* alpha adrenergic and cholinergic activity, dopamine, leutinizing hormone-releasing hormone, androgens, and *increased*, serotonin, gamma-aminobutyric acid, cortisol, and progesterone.⁴ Conditions or medications that impact these chemical balances may impair sexual response. Nerve damage caused by illness or trauma (for example, multiple sclerosis, and occasionally, hysterectomy complications) also may impact sensation and orgasmic capacity. Recreational drugs (e.g., alcohol, heroin, or methadone) dampen physical sexual arousal. In small doses, alcohol may have psychological benefits that override the physiologic impairment. Cocaine and amphetamines enhance subjective reports of desire and arousal, but they delay or inhibit orgasm. If one continues to use these drugs, they will experience a decrease in sexual satisfaction.

PSYCHOLOGIC FACTORS

The most common psychological factor is some type of acute or chronic stress as indicated by the symptoms of fatigue, sleep disturbance, and distractibility. Acute or

chronic stress often sounds similar to depression symptoms. Other important psychological factors include gender identity, sexual identity, sex-role satisfaction, sexual knowledge and attitudes, as well as negative body image. Negative body image in women appears to be pandemic and begins at pubescence or earlier. Conditions that may augment body image problems are aging, illness, surgical scarring, trauma, and body weight.

INTERACTIONAL FACTORS

A person's remote and immediate history with family or intimate figures appears to impact partner choice. For example, a woman who has been sexually abused as a child may choose a partner who is not very sexually interested in her but is a reliable, safe person. The interactional factors that often can impact sexual functioning include the following: child or adult physical or sexual abuse, attachment issues and sexual patterns in prior relationships, current relationship quality and commitment, and the degree of similarity or differences of sexual preferences between partners. There is not a singular pattern to indicate the manner in which earlier experiences predict future functioning. However, the degree to which earlier sexual experiences are linked to

frightening, manipulative, painful, taboo, or degrading emotional contexts often will contribute to later sexual attraction and avoidance patterns.

The interaction of physical, psychological, and interactional factors is the rule rather than the exception. For example, early sexual experiences that involved pain and interpersonal manipulation, may contribute to a sexual identity in which sex is avoided and a pattern of hypoactive sexual desire. On the other hand, undetected or untreated depression may include the symptom of decreased libido, which the woman's partner perceives as personal rejection. The decreased libido may result in the partner's resentment and in increased conflict in the current relationship.

Lifespan Experiences and Women's Sexuality

The most universal life span experiences for women are menstruation, menopause, and aging; the majority of women also become pregnant. We will briefly discuss these areas as they relate to what we know about sexuality. With regard to the lifetime likelihood of women to use a variety of medications and the impact of medications on sexual response, we have included a section on psychopharmacology and sexual response.

MENSTRUAL CYCLES

Data relating sexual desire and activity to menstrual cycle phase have been conflicted with methodologic inconsistencies. If the studies are restricted to those that separated sexual desire/interest (intraindividual sexuality) from sexual behavior with a partner (interpersonal sexuality) and those that attempted some endocrine documentation of menstrual cycle phase, several tentative statements can be made:

- Testosterone in women is highest in the middle third of the cycle (late follicular to early luteal phases).⁵

- Sexual desire has been found in one study to be at its lowest point around midcycle, shortly after ovulation.⁶
- Higher levels of desire have been reported somewhat consistently in the early to midfollicular phase, possibly up to ovulation, with conflicting findings in the late luteal phase.⁶
- Sexual activity with a partner has been found to increase in essentially all phases of the cycle, which indicates the complexity of interpersonal determinants of sexual interaction.
- Well-being and sexual interest appear to be correlated.⁷

One can summarize the findings to date as showing women to demonstrate more variability and less predictability than men in hormone-sexual behavior relationships. In fact, it is difficult to consistently find correlations between average testosterone and sexual response in normal, healthy premenopausal women.⁸ Researchers must observe those women who have less than average levels of testosterone (for example, owing to the use of certain oral contraceptives) or observe women with high levels of testosterone to find the associations between sexual desire/behavior and testosterone levels.⁹ For this reason, testosterone-sexuality relationships in women have been described as probably curvilinear.

PREGNANCY, LACTATION, AND POSTPARTUM

As a pregnancy develops, sexual activity declines. There is little documentation of sexual desire and responsiveness across the full term of pregnancy. Masters and Johnson¹⁰ noted a decrease in sexual desire in nulliparous women and typically an increase in sexual responsiveness in the second trimester, which fits many clinical reports as well. Barring medical contraindications, sexual intercourse and orgasm are currently thought to be safe for the fetus.

According to one prospective study of primiparous women, sexual intercourse resumed in most women by the twelfth week after delivery.¹¹ Intercourse frequency was

reduced, compared with levels before birth. One of the few studies that examined differences between mothers who had one child (child's mean age = 53.6 months) and non-mothers found that mothers had less frequent sexual activity and greater erotophobic attitudes toward sex.¹²

The impact of lactation on sexual response and activity has been rather overlooked. One prospective study of 90 primiparous women found that women who persisted in breast feeding compared with those who did not did not experience sexual attitude or activity changes relative to levels before pregnancy. However, those who continued to breast feed were more likely to experience decreased sexual desire and enjoyment and an increase in coital pain.¹³ These authors later found an association between low androgen levels and loss of sexual desire. Because elevated prolactin inhibits ovarian functioning, it is possible that this factor contributes to both low desire (testosterone decrease) and vaginal discomfort (estrogen decrease). However, psychosocial factors, including greater sleep deprivation and need to remain more available to the infant, may play a role in the desire decreases. The presence of depressive symptoms postpartum also may play a role in decreased desire. In addition, it is common for women to resume sexual activity for their partner's sake, despite vaginal pain. This experience could contribute to decreased sexual interest.

MENOPAUSE AND HORMONE REPLACEMENT THERAPY

A decrease in sexual activity does occur in a significant percentage of menopausal women; these changes cannot be ascribed to any specific hormonal changes of menopause.^{14,15} Studies that have compared different gonadal steroids in menopausal women have found the following:

- Estrogen decreases are associated with decreased vaginal lubrication and atrophic vaginitis in approximately 10% of postmeno-

pausal women, which may in turn cause coital pain and decreased sexual interest.

- Women who are more sexually active either interpersonally or with masturbation have less vaginal atrophy.¹⁶
- Administering estrogen improves the vaginal lubrication and atrophic conditions, but it does not necessarily increase sexual desire or activity.
- Administering androgens has been shown to increase desire and pleasure for masturbation, but it was associated only in surgically menopausal women with an increase in coitus and orgasm from coitus.^{15,17}

What contributes to the sexual changes around menopause, if hormonal factors do not play a major role? Aging is one possibility. A slowing and decrease in the intensity of the sexual response pattern accompanies aging. The patient then requires more direct and prolonged stimulation than during earlier decades. The psychosocial issues concomitant with aging may also be important. Aging in most industrialized cultures brings a desexualization of women, which impacts the image the woman has of herself and that others have of her. In addition, for single, divorced, or widowed heterosexual women, there are simply fewer male partners available. Finding partners is less of an issue for lesbian couples. For women in long-term relationships, the sexual patterns may have become routine and uninteresting. In addition, a middle-aged woman's similarly middle-aged partner may have sexual dysfunctions or issues that make sex difficult and embarrassing; thus, sex is avoided. The years between 50 and 70 are marked with significant social changes as well, including children leaving home and retirement, which call on partners to reexamine personal life values and interpersonal relationships. Sometimes the priority of sexuality in a person's life changes differentially for the two partners when they recognize their loss of youth and readjust the marital relationship. Recommitment or dissolution can result.

Hormone replacement therapy, which in-

volves estrogen or estrogen and progesterone compounds, appears to be helpful to sexual response by decreasing vaginal atrophy and dryness. It decreases other menopausal symptoms such as headaches, insomnia, hot flashes, and certain memory losses. Addressing these symptoms helps women feel better. This feeling of well-being in turn contributes to their healthier outlook and, thus, patients potentially are more interested in sex. Although most research suggests that endogenous variations in testosterone have no particular effect on sexual desire on young women, there is evidence that the loss of sexual desire caused by oophorectomy in premenopausal women before menopausal may be restored with the use of testosterone or a testosterone-estradiol combination.^{17,18}

The use of androgens has been found to have a more direct effect on sexual desire, sexual arousal, and an overall sense of well-being.¹⁹ However, current research has focused on supraphysiologic levels of androgens. The most crucial issue is the long-term health effects of taking androgens, particularly in terms of how they impact the cardiovascular system. To date, there is no clear evidence concerning this particular issue.

HYSTERECTOMY

A percentage of women may experience some physiologic differences in sex after the removal of their uterus. Scar tissue may prevent full ballooning of the vagina, which makes intercourse more difficult. The loss of the uterus results in diminished total vasocongestion and the lack of uterine contractions, which may trouble some women. Internal scarring or nerve damage from the surgery may on occasion result in pain or lack of feeling during or after sexual intercourse. When oophorectomy also is performed on a premenopausal woman, her available estrogen and testosterone are suddenly dramatically lowered with the possible impacts already mentioned for these hormones. It may be an important factor

that menopause naturally occurs at a more gradual pace, usually 3–7 years, than the artificially quick time-frame occasioned by the surgical removal of the ovaries. In addition, postmenopausal ovaries essentially cease to secrete estradiol; however, they do produce notable quantities of testosterone and androstenedione from the ovarian stromata, which are obviously not available to women who undergo oophorectomies.

The reasons for hysterectomy and the age of the women experiencing the surgery may be important variables contributing to sexual adjustment after surgery. Surgery for cancer, particularly in younger women who might have otherwise expected to have children, is likely to be more generally and sexually disruptive than surgery for benign disorders. In fact, surgery for benign disorders accounts for 90% of hysterectomies performed in the United States.²⁰ If the surgery results in relief from distressing symptoms such as chronic pain, endometriosis, excessive uterine bleeding, or cancer risk, adaptation after surgery has a good chance of being positive on a variety of quality of life measures.²¹ On occasion, hysterectomy does result in partner rejection and feeling less feminine; however, these are uncommon or transient responses for most women.

The frequency of sexual problems after hysterectomy has been difficult to document because of the different conditions, patient variables, and surgical procedures used. To provide some indications, two recent studies are summarized. In the first study, 97 women who had experienced hysterectomy were compared with 249 women who had not. The national sample was comprised mainly of women who were white (95%), married (81%), and college educated (100%) (mean age, 53.6 and 53.4 years old).²¹ Women in the hysterectomy group reported more sexual satisfaction. Only 22% of the women who had hysterectomies, compared to 34% of the nonhysterectomy women, reported a sexual problem. Path analyses indicated that for women with hysterectomies, the variables that were sig-

nificant in explaining sexual satisfaction, in order of their relative effects, were the lack of physiologic health problems, the ability to reframe problems, and the support of family and friends. In the Maine Women's Health Study, women (age range, 25–50 years) were observed before and after undergoing hysterectomies. All were undergoing hysterectomies for nonmalignant disorders and were observed at 3, 6, and 12 months after surgery.²² Of the 355 patients with complete data, 49% of the women reported “no interest in sexual activity” before surgery, and 75% reported the same complaint at 12 months after surgery; 44% of the women reported “no enjoyment of sexual activity” before surgery, and 84% reported no enjoyment after surgery. In addition, new problems after surgery included the following: 7% of the women reported a lack of sexual interest; and 1% reported lack of enjoyment of sex at both 6 and 12 months after surgery. The results of this study indicate a high overall level of sexual problems in this particular sample. They also indicate that hysterectomy was in fact correlated with an increase in sexual complaints at 6 and 12 months after surgery.

There is some debate concerning whether to preserve the cervix during hysterectomy. Hasson²³ argues that cervical retention is the favorable option because of the medical risk/benefits, unless there is proper positive indication to remove it. When it is compared with supracervical hysterectomy, total hysterectomy has been found to be related to the following conditions/problems: increased morbidity during surgery and after surgery, vaginal shortening, vault prolapse, and oviductal prolapse. In addition, more bladder and bowel dysfunction possibly can be caused by the loss of nerve ganglia associated with the cervix. The cervix also plays a role in sexual arousal and orgasm that is caused probably by the Frankenhauser uterovaginal plexus. Kikku et al.²⁴ observed women during the 3-year period after surgery. They found no differences in surgical procedures on coital

frequency or libido, but dyspareunia decreased more after the supracervical surgery. Significant orgasm decreases also occurred at 1 year for the total hysterectomy group.²³

PHARMACOLOGIC INFLUENCES ON SEXUAL BEHAVIOR

Medications are a common source of sexual dysfunction because many drugs impact the neuroendocrine and/or the vascular systems that are required for adequate sexual desire and response. There are three possible manners in which many medications may affect sexual functioning: peripherally, hormonally, and centrally. Adrenergic blockade or anticholinergic activity peripherally may delay or inhibit orgasm. Elevated prolactin levels and beta-endorphins have been implicated in sexual function. Changes in neurotransmitters (e.g., dopamine and serotonin) have been reported to adversely influence sexual functioning.²⁵ The research on sexual side effects of medications is far less available for women than for men. For example, hypotensive agents and diuretics have long been implicated in the sexual problems of men, but almost no research exists regarding the effects of these medications in women. An exception to this lack of research is a study by Meston and Gorzalka that found a decrease in vaginal pressure pulse and blood-volume responses to erotic material when healthy volunteers were receiving clonidine vs. a placebo.²⁶

Antipsychotic medications have been reported to either increase or decrease sexual desire and arousal and to delay or inhibit orgasm.²⁵ The frequency of sexual dysfunction secondary to antipsychotic drug treatment is difficult to assess given that: (1) the sedative effects of the medications and the decrease in mobility associated with extrapyramidal side effects may influence sexual function and (2) research indicates that patients with a history of psychosis often demonstrate a low level of sexual functioning before the onset of mental illness. Thus, comparisons of the patient's sexual func-

tioning before and after medication administration is difficult.

The mechanism of action by which the major tranquilizers influence sexual function has been most commonly attributed to antidopaminergic action, although these medications also act as peripheral or central antagonists (at alpha-adrenergic, serotonergic, histaminergic, and muscarinic receptors), or both. Any or all of these drug reactions may be related to sexual side effects. Though controlled studies are rare, it is clear that most *antidepressant medications* cause sexual side effects, which have been reported in 40–75% of patients.²⁷ Several reviews suggest that sexual side effects are more commonly a consequence of treatment with selective serotonin reuptake inhibitors (SSRIs) than with tricyclic or monoamine oxidase inhibitor antidepressants. The most frequently reported antidepressant-induced sexual side effects are delayed or inhibited orgasm and decreased sexual desire. The latter type of side effect is difficult to evaluate because decreased libido is a common symptom of depression.

Occasional reports also have been made of yawning and of spontaneous orgasms caused by clomipramine and fluoxetine treatment, respectively. Serotonergic systems have been implicated in antidepressant-induced side effects, although data are conflicting as to whether the role of serotonin on sexual behavior is primarily inhibitory, excitatory, or mixed.

Different agonistic/antagonistic serotonin receptor subtypes and/or receptor down-regulation, which leads to changes in serotonin release can best explain this apparent contradiction.²⁵ Increased amounts of serotonin may influence the sexual response by working either directly or indirectly on central or peripheral mechanisms, or both. Changes in orgasmic ability also might be explained in terms of an inhibition in noradrenergic input, which is caused by increased serotonin levels.

Antidotes to the decreased libidinal effects of antidepressants have included de-

creasing dosages, switching to bupropion, and giving either cyproheptadine or yohimbine before coitus to patients already receiving SSRIs.^{27–29} Yohimbine, which is a presynaptic alpha-adrenergic blocker, and cyproheptadine, which is an antiserotonergic and antihistamine drug, have been found to reverse the SSRI-induced anorgasmia when received 60–90 minutes before sexual contact is planned. Unfortunately, although effective in reversing sexual side effects, cyproheptadine also has been shown to induce drowsiness and cause a reoccurrence of depressive symptoms. This finding is probably caused by the antiserotonergic properties of cyproheptadine. The side effects of SSRIs are also improved by taking brief drug holidays. For example, the patient may refrain from taking the medication from Friday morning until Sunday noon. A drug holiday may be recommended particularly for the faster acting SSRIs (e.g., sertraline, paroxetine).

Diagnosis and Treatment of Sexual Dysfunction

Sexual dysfunctions in women can be diagnosed rapidly. Table 2 shows the major categories that the American Psychiatric Association's *Diagnostic and Statistical Manual*, fourth edition (DSM-IV) uses as a guide for clinical assessment.³⁰ There are six major categories that provide a thorough description of the extent of the sexual problem when they are modified by the following variables: lifelong/not lifelong and generalized/situational. It is important to ask about each basic category (even if the patient states only one) and to identify the dysfunction that occurred first. For example, a pain disorder that occurs after an orgasmic disorder suggests a different treatment from a pain disorder that preceded an orgasmic disorder. In addition, the symptoms must be accompanied by marked distress or interpersonal difficulty to qualify as a disorder in the DSM-IV.

TABLE 2. Female Sexual Dysfunctions**Sexual desire disorders**

Hypoactive sexual desire disorder: persistent or recurrent absence or deficit of sexual fantasies and desire for sexual activity; take into account factors that affect sexual functioning such as age, sex, life context; rule out other psychiatric disorders such as major depression anxiety.

Sexual aversion disorder: persistent or recurrent aversion to and avoidance of genital contact with a sexual partner; rule out other psychiatric disorders such as major depression, anxiety or obsessive-compulsive disorder.

Sexual arousal disorder

Partial or total lack of physical response as indicated by lack of lubrication and vasocongestion of genitals, or

Persistent lack of a subjective sense of sexual excitement and pleasure during sex; (this criterion is omitted from DSM-IV, but it is important for clarification).

Orgasmic disorder

Persistent delay or absence of orgasm. Lack of coital orgasm is usually considered a normal variation of female sexual response if the woman is able to experience orgasm with a partner using other, noncoital methods. Take sexual experience into account.

Sexual pain disorders

Dyspareunia: recurrent genital pain before, during, or after intercourse; rule out physical disorder, vaginismus and lack of lubrication.

Vaginismus: recurrent involuntary spasm of the outer third of the vagina interfering with or preventing coitus; rule out physical disorder or other psychiatric disorder (rare).

Sexual dysfunctions not otherwise specified

Examples: anesthesia with arousal and orgasm; genital pain during noncoital activities; lack of pleasure during sex.

Sexual satisfaction

A woman may be satisfied despite the preceding symptoms, but the partner may be dissatisfied; the problem may be a difference in desire rather than hypoactivity of one partner.

Modified DSM-IV classification with expansion. From Schover, LR, Friedman J, Weiler S, et al., The multiaxial problem-oriented diagnostic system for the sexual dysfunctions: An alternative to DSM-III. *Archives of General Psychiatry*. 1982;39:614-619.

DESIRE DISORDERS***Hypoactive Sexual Desire Disorder:***
Diagnosis

Hypoactive sexual desire disorder is a common complaint. Thirty percent to 50% of patients in therapy clinics report the condition.

There are two major problems with this diagnosis: (1) There are no norms for sexual desire across ages and (2) The reasons for the development and maintenance of the complaint are variable and imprecise, which suggest that it is a heterogeneous diagnosis. Among the important physical factors impacting desire are general health, depression, hormonal status, and use of both prescription and recreational drugs. Medications reported to decrease sexual interest include tricyclic, monoamine oxidase inhibitor, SSRI antidepressants, lithium, and cer-

tain antipsychotics.²⁵ Psychologic and interpersonal factors are commonly involved. The following factors often impair sexual desire:

- sudden events (such as job loss or family trauma);
- cumulative factors (such as the psychological response to aging, which is an especially sensitive issue in women because of the stricter cultural norms for women's attractiveness);
- life milestones (such as children leaving home);
- ongoing relationship distress.

Treatment

Appropriate treatment depends on the outcome of the assessment of the patient's health and psychosocial issues. Generalized and life-long low sexual desire suggest the need for a screening for endocrine disorders, illness, and long-term medication use.

Depression is a possible diagnosis in women with low sexual desire. The use of testosterone has been shown to increase desire, but it is viewed cautiously as a long-term intervention because of its potential cardiovascular side effects. Kaplan and Owett³¹ recommended the administration of low doses of testosterone in women with clear androgen deficiencies (e.g., those produced by bilateral oophorectomy or chemotherapy) because the therapy provides replacement for low androgen levels. However, these authors do not state recommended dosage levels, except to note that in one patient, 15 mg of testosterone enanthate in aqueous solution (bimonthly injections) restored libido and orgasmic response, with no signs of virilization. Other chemical treatments (e.g., yohimbine and dopamine agonists) all appear to carry more of a placebo than a true effect on low desire. However, there may be a subgroup that is still undescribed for whom these interventions are effective. Antidepressants may help depression-related low desire, although many of these medications at least initially decrease sexual desire.

The patient also may benefit from information conveyed by the physician. For example, a woman can be informed that there are no current norms for sexual desire in different age groups. On the other hand, sexual desire is not expected to go from 2–3 times per week to zero times per week between the ages of 20 and 40, unless something is wrong. Desire and behavioral frequencies (the latter more dependent on the availability of a partner) remain quite stable in women. They decrease gradually with age or in the context of a long-term relationship in most couples, regardless of sexual orientation. There are no data about the percentage of couples who stop having sex while maintaining a good relationship. This occurrence may be more common in lesbian couples.

If there is no medical disorder, individual or couples therapy can be recommended. A controlled treatment study on hypoactive

sexual desire has not been published, and differential effectiveness of treatment is likely but unknown. However, the clinical literature provides an estimate of the effectiveness of treatments. Hypoactive sexual desire is one of the more difficult sexual disorders to treat with psychotherapy.³² One study showed a success rate of less than 50%. Treatment duration varies; often, 15–45 sessions are scheduled. Better treatment outcomes are associated with the absence of a “global and lifelong” desire disorder and with strong commitment to a relationship.

Sexual Aversion Disorder:

Diagnosis

A much rarer desire disorder, sexual aversion disorder, usually is accompanied by low sexual desire and occasionally by vaginismus or dyspareunia. Women with this disorder may have a history of sexual or physical abuse. They may have extensive negative, unexpressed feelings about their relationships. Physical factors rarely are involved, although there may be concomitant significant anxiety or obsessive compulsive symptoms that may respond to specific treatment.

Treatment

Psychologic intervention that combines individual and couples therapy, can be useful. Therapy typically includes learning cognitive-behavioral techniques, desensitization, and working through past issues of abuse. Couples work often focuses on conflict areas, emotional differences, and issues of control. Specific aversions of phobic dimensions (e.g., aversion to semen) can be difficult to remove. These may need to be addressed incompletely and related behaviors minimized whenever possible. In occasional cases, a significant level of anxiety augments rather modest aversion symptoms, and a course of anxiolytics can be helpful. However, it is probably wise to have a clinician who is experienced in sexual and anxiety disorders give a second

opinion before administering an antianxiety medication. These medications may cause potential sexual side effects. Although no outcome statistics are available for sexual aversion, the duration and success of therapy are estimated to be similar to those of hypoactive sexual desire.

SEXUAL AROUSAL DISORDERS

Diagnosis

These disorders are uncommon in women unless there are concomitant menopausal, dyspareunia, or anorgasmic symptoms. Although physical and subjective sexual arousal are not necessarily correlated in women, a continual lack of lubrication may lead to discomfort in sex. This factor will then impair subjective arousal. Also, women's partners sometimes interpret lack of lubrication to mean lack of interest, which can result in a distressed sexual relationship.

Treatment

Reviewing possible physical causes for this complaint is the first step. The recommendation of topical lubricants such as K-Y Jelly (Johnson & Johnson, Skillman, NJ), Astroglide (Biofilm, Vista, CA), or estrogenic compounds depends on the woman's physical condition and her risk factors for estrogen therapy. If the woman has another, concurrent sexual dysfunction that preceded her sexual arousal problem, (such as, lack of orgasm or genital pain) that condition should be addressed first and the woman provided with a referral for therapy. The effectiveness of treatment for sexual arousal disorder is essentially unknown because the condition is so rarely treated in the absence of pain or orgasmic dysfunction.

ORGASMIC DISORDERS

Diagnosis

These disorders are common sexual complaints, approximately 10% of women report global, lifelong lack of orgasm, and at

least 50% of women report situational and intermittent orgasmic problems. Until recently, it has been rare for an orgasmic problem to have a physical basis, although it is important to review carefully any history of surgery, use of recreational drugs and alcohol, and medication. With the advent and frequent prescription of SSRI antidepressants, reports of medication-induced anorgasmia have become more frequent. Orgasm delay also can occur with other medications, including the monoamine oxidase inhibitor and tricyclic antidepressants, and with certain antipsychotic drugs (such as, thioridazine and trifluoperazine).

Psychologic and interpersonal factors frequently contribute to lack of orgasm. These factors may include family messages about sex as "shameful," a view of the parents as untrustworthy or abandoning, unpleasant earlier sexual experiences, or ineffective current sexual techniques of both partners. Male partners of nonorgasmic women often are quite distressed by and feel responsible for the woman's orgasm problem. Although the partner can be helpful by providing physical and emotional attention, taking primary responsibility for a woman's orgasm is counterproductive; it can contribute to a continuing lack of orgasm because the woman is likely to feel pressured to perform. The woman often feels inhibited and embarrassed about lack of orgasm. These feelings may make her less likely to disclose the problem to a primary care provider than if she had a sexual pain problem.

Treatment

There is rarely a physical cause for primary (lifelong, generalized) orgasmic disorder. There is evidence that it can be treated effectively by masturbation, traditional sex therapy techniques, or both. Individual, group, and couples therapy have been shown to be effective. Books are available dealing with body image, relaxation, self-observation, tolerance of sexual arousal tension, acceptance of sexual feelings, and sen-

sual touching that may be used alone or with a partner.³³ Lack of progress using any of the techniques described in the books should be evaluated by a brief therapy consultation. Therapy is usually effective in the 88–90% range for becoming orgasmic during masturbation; it is effective in the 75% range for experiencing orgasm in partner activities. Fifteen to 20 therapy sessions usually are scheduled, unless there are serious issues in the woman's history (e.g., sexual assault, other interpersonal trauma, or serious conflicts). Situational or intermittent problems with orgasm are more likely to be related to relationship problems and require additional therapy.

SEXUAL PAIN DISORDERS

Dyspareunia: Diagnosis

Compared with other sexual pain disorders, dyspareunia has the most variable presentation. Dyspareunia is recurrent genital pain before, during, or after intercourse. Its diagnosis requires a careful physical examination to identify the type of pain. During the examination, the physical basis of dyspareunia, which may be injury, endometriosis, scarring, or unusual skin sensitivity may be found. Pain of a diffuse, long-term nature is more difficult to treat. The clinician should keep in mind the possibility of referral during the assessment to evaluate potential psychological factors that could be addressed simultaneously. Psychologic factors include development issues such as guilt and shame surrounding sex, traumatic sexual events (e.g., rape or even painful sex from consensual experiences), and relationship distress (e.g., unresolved conflicts and anger).

Treatment

Dyspareunia may be related to organic factors, not all of which can be treated. For example, pain sensitivity may remain after scar tissue is removed. Nevertheless, referral to a psychotherapist could help because behavioral patterns and emotions (such as,

fear or tension) may be maintaining the pain. Informing the patient when no further treatment for the physical pain can be provided is important. In addition, it is useful for the patient to discuss with her partner the need to rely on noncoital sexual expression. Low doses of antidepressants may provide temporary help for dyspareunia. However, they should be considered reluctantly, only after consultation with a specialist in sexual disorders because of the likelihood of the medications affecting desire or orgasmic response. Referral to a specialist also may help in managing the pain by finding ways for the patient to control her focus and relax.

Vaginismus: Diagnosis

Vaginismus is recurrent, involuntary spasm of the outer third of the vagina. Because vaginismus interferes with intercourse, it often is accompanied by much embarrassment on the part of the patient and frustration for the couple. Vaginismus is less common than dyspareunia. Both dysfunctions are infrequent, and account for approximately 10% of sexual complaints. A primary care provider is likely to see patients with this disorder when symptoms have existed for some time. In these patients, either relationship distress or desire for pregnancy is prominent. Again, a careful physical examination and questioning about the initial conditions under which symptoms appeared is important. Once these facts are established, the vaginismus response is enduring and usually requires both a mechanical and a psychological approach to treatment. Psychologic factors typically include the following:

- past and present strong sexual inhibition;
- less commonly, sexual trauma (rape or incest);
- unexpressed negative feelings toward a sexual partner or other important male figures;
- phobia about sexual response or intercourse;
- a pain-tension-pain cycle that maintains itself independently of overt psychological factors.

Treatment

The usual recommendation is for the patient to use a series of graduated dilators coupled with relaxation. Gradual involvement of the partner includes his use of dilators or fingers, gradual insertion of his penis, and reliance on the woman's guidance to control the pace and duration of the sexual activity. For severely phobic women, additional techniques and systematic desensitization may be necessary. Although clinicians 20 years ago reported rapid and easy success with vaginismus (average, 10–14 sessions), they currently report more demanding problems. Perhaps patients with milder problems are being treated through self-help methods. There is a book available on this topic by Valins³⁴ that has been reported to be a useful resource.

SCREENING AND REFERRAL

Given the demands of a busy gynecologic practice, examination of sexuality issues often falls by the wayside. There are several possible approaches to ensure that this material is covered and does not interfere with other medical problems that also need to be evaluated.

One possibility is providing on any written history that patients fill out themselves, a checklist that includes current sexual problems. One could simply list "desire," "arousal," "orgasm," "pain," and the patient could then check them. One could also do this in the form of an interview, particularly during the first session with the patient. Written material also can be used to cue a follow-up interview. However, at a first visit, it is somewhat less likely that patients will respond to this material until they are more comfortable with their physician. However, it does make sense to ask. Patients can decide whether they want to answer.

The kinds of questions to ask patients include asking them simply, "Do you have any current sexual concerns or problems?" and, "Does the problem bother you enough that you would like to do something about

it?" The reason for asking the second question is that a fair number of people do have sexual problems, but they are not interested in pursuing treatment. If the physician is not able to provide treatment for the individual patient, he/she can inform the patient of the extent to which the problem can be treated and provide a referral. It is probable that the gynecologist is not able to treat a substantial percentage of patients with sexual problems and instead should rely on referring and getting feedback from the patient.

It is important for the clinician not to assume that a patient is heterosexual until that fact has been made clear by the patient. Some sexual complaints (such as, vaginismus) are less common in lesbian women, whereas other complaints are just as common. For example, lack of lubrication can be a bothersome issue, regardless of sexual orientation.

With respect to referring to a specialist, a gynecologist is in a unique position to know of competent experts who can deal with sexual problems and with whom patients are able to have a successful experience. The indications for referral include the following factors:

1. If the physician is uncertain of the diagnosis, it may be wise to obtain a consultation from a specialist to ascertain the appropriate treatment.
2. The factors surrounding the sexual problem appear to be in an area in which the gynecologist has very limited expertise. This might include psychological and interpersonal factors, as well as the nonphysical consequences of illness or normal physiologic processes.
3. Another indication for referral might be a patient who is having a difficult time recovering from either routine or more complex surgery and would like to discuss the sexual and perhaps physical disfigurement side effects. Usually, the gynecologist does not have time to address these topics, and it is wise to give patients a place to come to terms with some of these issues. Remember that although a gynecologist may contribute to saving a patient's life (e.g., a mastectomy), there can be psychosocial consequences to

this surgery that impact a woman's ability to function sexually and feel attracted to a partner. This situation is particularly true for women who have had aggressive treatment for their breast cancer and who are younger. Their partners tend to remain quite interested in an active sex life.

It is important to make sure that the patient understands the reason for the referral. In referring to a nonmedical specialist such as a psychiatrist, a psychologist, or a social worker, it is important to state that both normal and problematic sexual functioning are established to be a result of an interaction of the mind and the body. Remind the patient that this specialist understands and will work with both physical and psychological factors to maximize a patient's ability to function well. The recommendation of a therapist to treat recovery from rape, sexual abuse, or physical abuse might be accompanied by a statement, "some people find that therapy speeds the recovery process." In the case of marital or relationship therapists, it might be worthwhile to mention that distressed relationships take a toll on individual family members' health, work efficiency, and general functioning. Perhaps the most important message that patients need to hear is that a referral will increase the likelihood that the problem will be addressed as quickly and thoroughly as possible, with less cost to health and quality of life.

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