

COVER STORY

OBG
MANAGEMENT



Break the silence

Discussing sexual dysfunction

Pearls

from

Barbara S. Levy, MD

Long a taboo subject among women and many physicians, a new openness about sexual dysfunction is emerging. As the gatekeepers of female reproductive health, Ob/Gyns can play a pivotal role in evaluating and managing these complaints.

In a recent U.S. survey, 43% of female respondents reported being dissatisfied with their sexual functioning, a significantly higher percentage than among male respondents.¹ Even more disturbing were separate findings: 71% of adults 25 and older believed their physician would dismiss any sexual concerns they might bring up, while 68% avoided discussing sexual dysfunction with their doctors for fear of embarrassing them.²

These statistics highlight clinicians' inability to elicit information about and treat sexual disorders in women. Many Ob/Gyns feel they lack the necessary background in fundamental science and psychology to competently evaluate and treat sexual complaints. It is difficult to approach these problems without a complete understanding of the physiology and psychology of female sexual response.

But times are changing. The availability of sildenafil to treat male erectile dysfunction has dramatically increased our patients' awareness of sexual disorders, as has the open discussion of sexual dissatisfaction on the talk-show circuit. Patients are increasingly likely to expect their health-care providers to evaluate and treat sexual complaints. The following pearls offer a framework for assessing sexual dysfunction, as well as guidelines for therapeutic intervention.

Raising the subject. Although women are gradually opening up about sexual dysfunction, I try not to assume that they will raise the subject themselves. A case in point: Among 308

patients taking selective serotonin reuptake inhibitors (SSRIs), 55% reported sexual dysfunction when the physician asked them about it directly compared with only 14% who reported it spontaneously.³ Many women may not realize sexual complaints are an acceptable subject of discussion for their gynecologic visit, while others may feel uncomfortable talking about sex in general.

I usually begin by asking whether the patient is sexually active and, if she is, whether sex is satisfying to her and her partner. I also ask, "Do you have any concerns about your sexual functioning?" Since this question is sufficiently broad to encompass just about any complaint, it sometimes is helpful in triggering a discussion. If the woman has significant concerns, I follow up with a thorough sexual history.

Assessing your attitudes. As an American College of Obstetricians and Gynecologists (ACOG) technical bulletin points out, the physi-

cian should be conscious of any biases he or she holds about certain sexual practices or preferences and should "learn to listen to and discuss ideas and behaviors that conflict with these biases without displaying discomfort."⁴ When a patient first begins to talk about her sexual functioning, few things are

Barbara S. Levy, MD



A lack of desire for sex is the most common sexual complaint.

Dr. Levy is clinical assistant professor of OBG at the University of Washington School of Medicine in Seattle and at Yale University School of Medicine in New Haven, Conn. She also serves on the OBG MANAGEMENT board of editors.

more troubling than a harried or distracted physician. If you feel that the patient's concerns require more attention than you are able to provide during that visit, schedule a future appointment to tackle the subject. I usually tell patients that it is too important a subject to try to address in the short time allocated to their current visit.

Exploring the history. A thorough history can make all the difference in pinpointing the underlying cause of a patient's dysfunction.

Decreased interest in sexual activity is rarely caused by a hormonal imbalance.

I usually have my nurse take a general medical history, including medications. I then meet with the patient in my office (with her clothes on!) and focus on areas such as prior surgeries, endometriosis, prior pelvic surgery or trauma, vaginal or vulvar pain complaints, and depression. Although our intake form asks about domestic violence or a history of physical or sexual abuse, I always make it a point to ask again. Patients are often embarrassed to discuss these issues and will not divulge such sensitive information initially.

The physical exam. I perform a comprehensive physical, including a pelvic exam. This involves checking the introitus for signs of atrophy or vaginitis and palpating the Bartholin's glands, urethra, and bladder for tenderness. Also, examine episiotomy scars for hypersensitivity and assess the patient for cervical-motion tenderness.

Then evaluate vaginal tone, looking specifically for spasm or difficulty with relaxation of the levator musculature. I want to distinguish between abdominal wall and pelvic-floor muscle tension as potential sources of pain. (The vaginal portion of the examination should be performed with a single digit and only one hand.) Finally, check for masses, and examine the posterior cul-de-sac. Depending on the findings of the examination, I may order laboratory studies or imaging.

Classifying dysfunction. Disorders of female sexual function are divided into 4 areas, described in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (Table 1). They are:

- disorders of libido, which are central in

origin, i.e., they originate in the brain and central nervous system;

- disorders of arousal, which are presumably peripheral/physical (frequently caused by vascular disease and diabetes limiting the vascular supply to the genitalia, or by estrogen deficiency);
- an inability to achieve orgasm; and
- pain disorders.

This division, while not necessarily inaccurate, overlooks the complexity of female sexuality. In

women, the libido is better described as a striving for emotional closeness and intimacy rather than simply the sexual drive. Women have fewer spontaneous sexual thoughts and fantasies throughout the biological life span than men and are often unaware of or inattentive to signs of their own physical arousal.⁵⁻⁸ Environmental signals such as romance, a feeling of being cherished, and emotional closeness are more likely to call their attention to physical sensations.

A new model. Trying to assess female sexual complaints using only a biological model is unlikely to be successful. The social environment, hormones, drugs, physical abnormalities, and women's deep psychological issues all have an impact on their sexual encounters. Thus, I find a biopsychosocial model more useful for assessing complaints. I typically explore 4 areas: physical, psychological, relational, and situational. Using these categories of inquiry, I am able to address the complexities of my patients' complaints and assess each component of sexual dysfunction in the DSM-IV classification.

Disorders of libido or desire. A lack of desire for sex is the most common sexual complaint and the most difficult to assess quickly. It is typically further classified as either hypoactive sexual desire disorder (HSDD) or sexual aversion disorder (SAD). The first is a deficiency or lack of sexual fantasies or thoughts and/or the desire for sexual activity, while SAD is a phobic aversion to and avoidance of sexual contact with a partner.⁹ HSDD may be caused by psychological or emotional factors or be secondary to endocrine disorders or other

medical problems. In contrast, SAD is usually psychological or emotional in origin, frequently deriving from physical or sexual abuse or childhood trauma.

Often the problem may be related to differing expectations between partners regarding the frequency of their desire for sexual contact. Some people are very happy with weekly or monthly sex, while others think 3 times a day is not enough! And despite media hype to the contrary, decreased interest in sexual activity is rarely caused by a hormonal imbalance. Although testosterone levels decline with age, natural menopause does not trigger a dramatic alteration in them. At menopause, estrogen levels decline much more rapidly than ovarian androgen production, decreasing sex hormone binding globulin (SHBG) and effectively increasing free testosterone levels. However, during the perimenopausal

anovulatory time frame, as well as with oral estrogen therapy, SHBG is increased, which may reduce free testosterone levels and contribute to a noticeable and rapid decrease in sexual desire in some circumstances.

Premenopausal women may note decreased libido when taking oral contraceptives (OCs) or other medications that suppress ovarian androgen production. However, in these women, the adrenals remain a source of androgen, which may explain why decreased libido is not a universal complaint in this population. Chronic anxiety, stress (both physical and emotional), depression, chronic pain, and longstanding insomnia all deplete the adrenals and are associated with a decrease in libido. Androgen replacement is rarely successful in these patients.

I usually begin my evaluation by asking the patient if she has experienced discomfort with sexual activity. If she reports that

Types of female sexual dysfunction

TABLE 1

TYPE*	SYMPTOMS	TREATMENT	COMMENTS
Disorders of desire or libido: –Hypoactive sexual desire disorder (HSDD) –Sexual aversion disorder (SAD)	HSDD: Deficiency or absence of sexual fantasies or desire SAD: Phobic aversion to and avoidance of sexual contact with a partner	HSDD: Trial of testosterone in deficient women. Modify medications for underlying diseases SAD: Refer for psychologic counseling	Most women with low libido and normal ovarian function will not respond to normal levels of testosterone treatment
Disorders of arousal	Inability to attain or maintain sexual excitement	Treat underlying physical disorder. Consider sildenafil, local vasodilating agents, and appropriate estrogen replacement. Refer for psychologic/sexual counseling	Isolated arousal disorders are uncommon in women
Orgasmic disorders	Primary: The patient has never experienced orgasm Secondary: The patient has recently become anorgasmic	Correct underlying pharmacologic problem (change of dosage or medication) and/or refer for psychologic/sexual counseling	Look for over-the-counter and herbal supplements as etiologies as well
Pain disorders –Dyspareunia –Vaginismus –Noncoital sexual pain	Dyspareunia: Genital pain with intercourse Vaginismus: Involuntary spasm of the muscles comprising the outer third of the vagina Noncoital pain: Genital pain with noncoital sexual stimulation	Correct underlying perineal trauma (eliminate soaps and harsh chemicals) and medical conditions (infection and endometriosis). Try physical therapy (pelvic-floor biofeedback). Refer for counseling	Pelvic pain is multifactorial. Search for history of molestation or abuse in these women

*These categories also may be classified according to the etiology of the disorder and whether it is lifelong or acquired, generalized or situational.

Sexual functioning and history assessment

DATE: _____
Patient: _____ MR#: _____ Visit#: _____
Weight (lb): _____ BP: _____ Pulse: _____ Temp: _____ DOB: _____

SEXUAL FUNCTIONING

Chief complaint: _____
Date of last menstrual period: _____ Pregnant: Yes No Lactating: Yes No
Date of last Pap: _____ Abnormal Pap? (dates): _____
Contraception: _____
Medications: _____
Genital hygiene (e.g., soaps, douches): _____
Sensitivities/allergies: _____
No. of pregnancies: _____ No. of live births: _____ No. of cesareans: _____
Menopausal: Yes No Age/date of menopause: _____
Bleeding/spotting since menopause? Yes No
Marital status: Single Married Divorced Widowed
Recent change in desire? Yes No Date of onset: _____
Pain during intercourse? Yes No First noted: _____
Pain location/characterization (e.g., vestibule/burning): _____
Pain occurs: Always Usually Sometimes Rarely Other _____
Foreplay: Always Usually Sometimes Rarely Never
Arousal: Normal Abnormal Orgasmic: Yes No
Genitals: Dryness Erythema Pruritus Discharge Other _____
Sexual desire over last month: Very high High Moderate Low Very low Absent
Frequency of intercourse last month: _____ Orgasms (% of time): _____

HISTORY

Smoking: Yes No Cigarettes/day: _____
Alcohol: Yes No Drinks/week: _____
Fatigue: Yes No Recent change in: Sleep Appetite Moods Weight
Chronic diseases: _____
Hypertensive: Yes No
STD: Yes No Specify: _____
PID: Yes No
Gyn cancer: Yes No Specify: _____
Breast cancer: Yes No Current status: _____
Surgeries/dates: _____
Sexual violence: Yes No Ongoing? Yes No
Other conditions/stresses: _____
Home life/relationship: _____
Occupational exposures: _____

sex has become painful when it wasn't in the past, a careful physiologic assessment is indicated. I look for genital atrophy, tearing, and vaginismus when evaluating patients with decreased sexual desire.

Relational and situational factors are extremely important in evaluating complaints of diminished libido. Many women are exhausted by their roles as mother, daughter, spouse, and productive member of the workforce. Thus, an assessment of the patient's social situation is critical. Professional counseling may be required to help women learn to limit their commitments and accept the need for "downtime."

Management strategies for patients with diminished libido incorporate correction of any vulvar and vaginal atrophy, counseling to improve communication between the patient and her partner, and the identification and treatment of any underlying psychiatric problems. The addition of testosterone may be useful for patients on OCs or oral hormone replacement therapy (HRT) and women with surgical menopause or menopause secondary to chemotherapy.⁹ In other patients with low libido, the benefit of testosterone is less clear. I prefer compounded 1% or 2% testosterone in PLA cream or petrolatum (depending on whether the patient prefers a cream or an ointment). Patients should apply $\frac{1}{8}$ teaspoon to thin skin daily. The ointment may be smoothed directly on the genitalia for added lubrication and rapid improvement in atrophic symptoms. Women who are survivors of domestic and/or sexual abuse will require psychotherapy by a trained counselor.

Arousal disorders. In women, arousal disorders are characterized by an inability to achieve or maintain sexual excitement, which manifests itself as a lack of subjective pleasure or a lack of genital or other somatic responses.¹⁰ Complicating the diagnosis is the fact that the physiologic changes that occur when women are aroused often are difficult to separate from those linked to desire. In general, however, when diminished desire precedes decreased

arousal, HSDD is the diagnosis. Even so, just as in men, diseases affecting blood flow or innervation to the genitals can cause arousal disorders in women. Unfortunately for Ob/Gyns, it is much easier to assess these problems in males, since the physiological lack of responsiveness is quite obvious in men.

Women may complain of dryness or decreased sensation in the genitals, or they may experience pain with intercourse. Any of these may be related to reduced engorgement of the tissues and diminished transudation of lubrication across the vaginal epithelium. Estrogen deficiency is a common cause of recent-onset arousal disturbance in patients with a normal level of sexual desire. In perimenopausal and menopausal women, oral or transdermal estrogen replacement in doses sufficient to relieve vasomotor symptoms may

Key points

- Forty-three percent of U.S. women report being dissatisfied with their sexual functioning.
- Female sexual dysfunction is divided into 4 categories: libido, arousal, orgasm, and pain.
- Factors that contribute to sexual dysfunction are distortion or inflammation of pelvic structures, pelvic or abdominal trauma or surgery, medications, depression, and chronic medical conditions.
- A biopsychosocial model of inquiry is recommended for assessing sexual complaints, emphasizing 4 areas: physical, psychological, relational, and situational.

not reach the epithelium of the urogenital tissues to correct atrophic changes. In these women, as well as breastfeeding mothers, topical estrogen may improve vaginal elasticity, lubrication, and engorgement. Women taking OCs or long-acting progestational agents also should be carefully assessed for vaginal atrophy. If it is present, topical estrogen will bring dramatic improvement.

Medications known for causing erectile dysfunction in men also should be assessed in women. These include antihypertensives and some antidepressants. In addition, disease states such as hypertension, diabetes mellitus, and peripheral vascular disease may diminish

continued on page 81

Sexual abuse: a hidden factor in female dysfunction

At least 25% of women have been physically or sexually molested at some time during their lives.¹ These episodes of violence can create significant barriers to psychological and physical well-being, particularly in women who were molested as young children. Feelings of arousal often go unrecognized because these women are dissociated from their bodies—a defense mechanism learned in early childhood. If they experienced significant pain with their initial sexual experience, their bodies may respond with natural avoidance, muscle spasm, and withdrawal. Even when a relationship is safe and loving, these responses may remain unconscious and difficult to control.

For these reasons, I always inquire about a history of physical or sexual violence, although patients often won't admit to such a history. For example, they may not define their experience as "abuse" if it involved date-rape, forced sexual intercourse in the context of a steady relationship, or inappropriate touching and molestation without penetration. To explore the subject, I repeat key questions after the nurse takes the initial his-

tory, watching for any degree of hesitation or other subtle changes in body language, as these may yield clues about a significant past event. In addition, women who suffered childhood abuse often have multiple tension-related complaints such as irritable bowel syndrome, migraine headaches, urinary frequency, poor sleep, and chronic pelvic pain.

Sometimes I drop the issue of abuse during the history (which I always conduct in my office with the patient fully clothed), but raise the subject again while conducting the physical examination, especially if I note significant embarrassment or difficulty with breast or pelvic exams. I then might say something like: "You know, we often see this kind of tenseness and anxiety with exams in people who have been hurt in the past. Are you sure no one has ever hurt you—perhaps during an exam?" This can defuse the situation and allow a patient to open up, encouraged by your expertise and interest in her. She may feel safe enough to discuss experiences that have haunted her for many years.

—Barbara S. Levy, MD

REFERENCE

1. American College of Obstetricians and Gynecologists. *Women's Health Stats and Facts*. Washington, DC: ACOG; 2002:11.

vasodilation and sensation in women as well as men (*Table 2*). Drugs such as sildenafil may help increase local blood flow in women when erotic stimuli and the central desire for sexual activity remain intact, although the use of sildenafil in women is still in the experimental stages. Recent studies questioning the effectiveness of sildenafil in women may have been limited by the difficulty of clearly distinguishing arousal from desire disorders. Sildenafil will do nothing to improve libido.

As I mentioned earlier, it often is difficult and not particularly useful clinically to distinguish desire from arousal dysfunction. Also, women may be unaware of vascular congestion and lubrication occurring in the genitals, particularly if they have experienced sexual assault. Dissociation is a common defense mechanism in victims of phys-

ical violence, and close physical contact and genital touching may trigger this response.

Women also may be distracted from bodily sensations when other factors—e.g., a crying baby, noisy teenagers, financial concerns, or fatigue—interfere with intimacy. I commonly ask patients how they respond when they are alone with their partners on vacation. If the arousal response is normal under those conditions, I reassure the patient that the cause of her complaint is neither hormonal nor physical. Rather, I encourage her to take time to create opportunities for sensuality and closeness with her partner without external distractions.

Inability to achieve orgasm. Of the 4 categories of dysfunction, this is probably the easiest to assess. First, I ascertain whether the patient has ever experienced orgasm. Women who

Medications* and medical conditions that may affect sexual functioning

TABLE 2

MEDICATIONS	
• Alprazolam (& other benzodiazepines)	• Methadone
• Amphetamines (& similar anorexic drugs)	• Methyl dopa
• Bromocriptine	• Nonselective beta adrenergic blockers
• Chemotherapeutic agents	• Olanzapine
• Chlorpromazine	• Paroxetine
• Cimetidine	• Phenelzine
• Citalopram	• Phenobarbital
• Clomipramine	• Reserpine
• Clonidine	• Sertraline
• Diazepam	• Spironolactone
• Fluoxetine	• Tamoxifen
• Haloperidol	• Timolol
• Imipramine	• Trazodone
• Isocarboxazid	• Venlafaxine
MEDICAL AND OTHER CONDITIONS	
Organic disorders	Chronic diseases
• Cancer, especially gynecologic cancer	• Arthritis
• Endometriosis	• Cardiovascular disease
• Fibroids	• Chronic lung disease
• Hypoestrogenism	• Chronic pain
• Ovaries in the cul-de-sac	• Diabetes
• Pelvic infection	• Urinary incontinence
Conditions	• Depression
• Pregnancy	• Vulvar dystrophy
• Lactation	• Fibromyalgia
• Menopause	• Chronic fatigue syndrome
• Spinal-cord injury	

*Source: The Medical Letter. 1992;43(August 7).

haven't will likely require referral to a licensed sexual therapist.

If a woman has been orgasmic in the past, but complains about anorgasmia, inquire about changes in medications or over-the-counter (OTC) or herbal remedies.

Further, when a patient reports that sex no longer feels like it used to, she should be carefully assessed for depression. There are several brief questionnaires, e.g., the Beck inventory, that can easily be incorporated into a gynecologist's office routine to screen for depression.

Relational issues can negatively affect orgasmic function as well. Some women may continue to permit sexual activity even when they feel angry, used, or abused by their partner. Sexual activity may even be forced upon them. Similarly, the social situation can interfere with a woman's ability to achieve orgasm. Women with small children frequently split their attention between the sexual activity and surveillance of the

household for crying babies. This inattention to physical sensations can preclude satisfactory arousal and orgasm.

Finally, some women complain about difficulties achieving orgasm during penile-vaginal intercourse. This situation requires some education of both the patient and her partner. While approximately 25% to 30% of women may at times achieve orgasm with intercourse alone, the vast majority require clitoral stimulation. At times, with sufficient mental and physical stimulation, a woman may experience orgasm without direct stimulation, but that is the exception, not the rule. Women anxious about needing clitoral stimulation in order to climax should be reassured that they are sexually normal and functional.

Pain disorders. Pain disorders include dyspareunia, vaginismus, and a new category called "noncoital sexual pain disorders."¹⁰ Dyspareunia may be secondary to medical conditions such as vestibulitis, vaginal atrophy, or infection, or it may be psychologic in origin. It may

even contain both physiologic and psychologic elements. In contrast, vaginismus is a conditioned response to fear or pain. It is a reflex contraction of the levator ani muscles in response to attempted penetration and, except in extremely rare cases, is involuntary and out of the patient's control. It is a learned response to painful attempts at penetration.

In general, pain disorders are easier to evaluate than disorders of libido and arousal. After all, our training emphasizes careful pelvic examination to isolate areas of concern. Unfortunately, if a physician does not understand normal female sexual responses, he or she may mistake an arousal disorder for "bump dyspareunia"—a sensation deep in the pelvis as though something is being hit.

In women, arousal elongates the vagina by approximately 30% and tents the uterus up and out of the cul-de-sac as the tissues engorge, unless the structures are tethered by adhesions and pelvic pathology. Penetration and deep thrusting before a woman is adequately aroused will commonly cause bump dyspareunia. Even in women with significant adhesions or endometriosis, attention to foreplay to assure arousal prior to intercourse often can alleviate discomfort.

I begin my assessment by asking the patient whether the pain occurs with every sexual encounter or is positional or related to the menstrual cycle. Does the pain occur at initial penetration or is it experienced deep in the pelvis? Pain around the time of menses would lead me to suspect endometriosis or adenomyosis as an etiology, whereas pain with penetration is more likely related to vaginismus or vulvovaginal disorders.

An abdominal exam can help identify tense muscles, a clue to a possible history of abuse. I then direct my attention to the vulva, looking for areas of tenderness at the introitus that suggest vulvar vestibulitis. I also look for atrophic changes or signs of chemical irritation. Many women consider their genitalia "dirty" and scrub the vulva with antibacterial soap several times a day. Pain with penetration can be dramatically reduced by paying attention to perineal hygiene and avoiding irritating chemicals, soaps, and commercial products sold to keep women "fresh."

I examine the vagina initially without a speculum, paying careful attention to the muscle tone of the levators. Women who have a pelvic floor like a rock, i.e., you find yourself fighting the muscles throughout the exam, have been sexually abused until proven otherwise. Involuntary levator contraction can be a withdrawal response precipitated by early painful penetration attempts. (Physical therapy with biofeedback using external sensors along the pelvic floor is highly successful in creating conscious awareness of the muscle tension and in treating vaginismus.)

As the bimanual examination is completed, I look for fixation of the internal genitalia or tender nodules suspicious for endometriosis.

In evaluating the relational component of pain, I ask about any difficulties, particularly discrepancies in expectations between women and their partners, as these can result in complaints of pain.

Management strategies for pain disorders include treatment of underlying gynecologic conditions such as endometriosis, physical therapy to teach relaxation of the pelvic-floor musculature, perineal hygiene to relieve dry, inelastic external genitalia, and estrogen to treat atrophic changes. ■

REFERENCES

1. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. *JAMA*. 1999;281:537-544.
2. Marwick C. Survey says patients expect little physician help on sex. *JAMA*. 1999;281:2173.
3. Montejo AI, Llorca G, Izquierdo JA, et al. Sexual dysfunction secondary to SSRIs. A comparative analysis in 308 patients. *Actas Luso Esp Neurol Psiquiatr Cienc Afines*. 1996;24(6): 311-321.
4. American College of Obstetricians and Gynecologists. *Sexual dysfunction*. ACOG Technical Bulletin #211. Washington, DC: ACOG; 1995.
5. Basson R. Female sexual response revisited. *J Soc Obstet Gynecol*. 2000;378-83.
6. Laan E, Everaerd W, Van der Velde J, et al. Determinants of subjective experience of sexual arousal in women: feedback from genital arousal and erotic stimulus content. *Psychophysiol*. 1995;32:444-451.
7. Andersen BL, Cyranowski JM. Women's sexuality: Behaviors, responses and individual differences. *J Consult Clin Psychol*. 1995;63:891-906.
8. Basson R. Female Sexual Response: The role of drugs in the management of sexual dysfunction. *Obstet Gynecol*. 2001;98:350-353.
9. Schifren JL, Braunstein GD, Simon JA, et al. Transdermal testosterone treatment in women with impaired sexual function after oophorectomy. *N Engl J Med*. 2000;343:682-688.
10. Basson R, Berman J, Burnett A, et al. Report of the international consensus development conference on female sexual dysfunction: definitions and classifications. *J Urol*. 2000;163:888-893.

The author reports no financial relationship with any companies whose products are mentioned in this article.