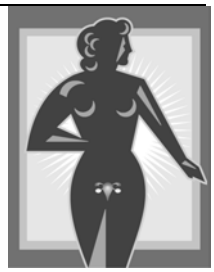
Arousal disorders in women: complaints and complexities



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ABSTRACT

- Female sexual arousal disorders constitute a varied spectrum of difficulties, ranging from the total absence of genital or subjective pleasurable arousal to feelings of persistent genital arousal in the absence of sexual desire.
- Arousal disorders can be associated with physical factors (eg, vaginal dryness) or psychological factors (eg, anxiety, distraction), or a combination of both. The most common complaint is the absence of subjective sexual excitement or pleasure despite adequate physical arousal (eg, lubrication).
- Pharmacological and physical treatments include the use of oestrogen, lubricants and vibrators. There may be a place for drugs that increase vasocongestion and vasodilation.
- Psychological therapy addresses inhibitions, and interpersonal and motivational factors.

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FEMALE SEXUAL AROUSAL DISORDER has been defined as "the persistent or recurrent inability to attain or maintain sufficient sexual excitement, causing personal distress, which may be expressed as a lack of subjective excitement or genital lubrication/swelling or other somatic responses".[1] Subjective arousal includes both mental excitement and an awareness of sexual pleasure. Hypoactive sexual desire disorder has been defined as "the persistent or recurrent deficiency (or absence) of sexual fantasies, and/or desire for, or receptivity to, sexual activity, which causes personal distress".[1] Women may have adequate lubrication and even muscle tension, but may not report any awareness of psychological excitement. In fact, psychophysiological research studies often find a dysynchrony between objective measures of vasocongestion and self-perception of genital engorgement or subjective excitement.[2,3]

Until recently, female sexual arousal disorders received little attention. Despite the fact that a significant number of both younger and older women complained of lubrication difficulties and lack of subjective arousal, complaints of low desire and anorgasmia received greater research and clinical attention. It was only after the impressive success of sildenafil citrate (Viagra) in treating male erectile dysfunction that female arousal problems moved to centre stage. In the past 5 years, disordered, diminished or absent female sexual arousal has become the focus of considerable research, in the hope that phosphodiesterase-5 inhibitors (such as sildenafil citrate), hormonal preparations and/or various mechanical devices or vibrators might enhance vasocongestion and sexual sensation.

Reliable and enjoyable sexual arousal is one of the most important components of the female sexual response cycle in that it helps launch sexual desire for many women. Especially for older women or women in relationships of long duration, it is feelings of subjective arousal, rather than intrinsic desire, that help trigger sexual interest.[4] Furthermore, lack of sufficient sexual arousal may be responsible for orgasmic and/or sexual pain problems in women.

The actual prevalence of arousal complaints is difficult to determine, as there is tremendous overlap between arousal and desire problems in women.[5] Most women, as well as most clinicians, have difficulty differentiating problems of arousal from problems of desire. It is sometimes helpful to know which complaint came first and which is the most troubling for the woman. The most common complaint is genital arousal (lubrication and muscle tension) without awareness of subjective sexual excitement or pleasure. The spectrum of arousal complaints and a list of questions that are useful in evaluating arousal difficulties are shown in Box 1 and Box 2.

A unique problem that has recently been identified is that of persistent sexual arousal. While uncommon, it is reported to be extremely distressing for women who experience it. The condition is characterised by feelings of spontaneous and persistent genital arousal that occur without any conscious awareness of sexual desire.[6,7] These feelings of physiological arousal, which can occur despite the absence of a stimulus, persist for extended periods (days or weeks) and do not subside even if the woman has one or more orgasms. Many women do not report this complaint to their physician because of feelings of shame or embarrassment, and are relieved to learn that the complaint is not unknown.

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Treatment

Pharmacological/physical approaches

For women who complain of impaired or absent lubrication and who are oestrogen-deprived, oestrogen supplementation is quite effective. There are many oestrogen delivery systems, including pills, creams, and vaginal rings. One potential difficulty is that systemic oestrogen replacement via the oral route may increase blood levels of sex-hormone-binding globulin, resulting in a reduction of bioavailable testosterone. This can have the unwanted effect of impairing sexual desire, further compounding the initial problem.

There are various over-the-counter lubricants that are quite effective for relieving vaginal dryness, as well as

1: Spectrum of female arousal disorders

- Physical sexual arousal disorder (absent or impaired physical sexual arousal). Self-report may include vaginal dryness and reduced or absent sensitivity of the breasts, nipples and genitalia.
- Psychological sexual arousal disorder (absence of or markedly diminished psychological excitement and feelings of sexual pleasure from any type of sexual stimulation).
- Combined physical and psychological sexual arousal disorder (absence of both physical and psychological arousal, despite the woman reporting sufficient and desired sexual stimulation).
- Dysphoric arousal (genital arousal that is accompanied by unpleasant feelings). This may be a consequence of past history of negative sexual experiences (eg, sexual abuse/coercion/trauma).
- Persistent sexual arousal (persistent, intrusive and uncomfortable feelings of genital arousal without conscious awareness of sexual desire).

vibrators and devices that can facilitate bloodflow to the genitals.

Considerable research is underway exploring the use of phosphodiesterase inhibitors for the treatment of female arousal disorders. Vasoactive drugs (such as sildenafil citrate) may increase clitoral vasocongestion, while adrenoceptor agonists (such as phentolamine and yohimbine) may help with generalised vasodilation. However, although pharmacological or hormonal approaches may help increase vasocongestion and lubrication, they may not measurably increase subjective excitement.

Psychological approaches

A variety of psychological and interpersonal factors can impede sexual arousal. These include lack of attraction (sexual, emotional, or both) to the partner, sexual boredom, negative emotions (such as guilt, shame, anxiety, anger and resentment), upsetting thoughts or feelings associated with arousal, and, most significantly, distraction or inattention to the sexual context.[8] Mothers of infants, for example, often report an inability to focus on their partner or their sexual sensations. Consequently, even though the woman's body responds appropriately to sexual caresses, she may be mentally disengaged and unaware of any sensations of arousal.

2: Questions for assessing sexual arousal complaints

- When did your arousal problem begin? What was different then?
- What sexual activities or kinds of touching do you find sexually arousing?
- If your partner provided more of the kinds of touching that you enjoyed, would you still have a problem with sexual arousal?
- Do you become excited or "turned on" mentally as well as physically during sexual stimulation?
- Do you have difficulty staying focused during sexual activity? If yes, what interferes?
- Do you experience changes in your pulse rate and respiration when stimulated sexually?
- Do you experience pleasurable sensations (feelings of warmth, tingling, increased sensitivity) in your clitoris and vagina with sexual stimulation?
- Do you become lubricated or "wet" with sexual stimulation?
- How often is intercourse difficult or painful because your vagina feels dry and tight?
- Do you need to use a vaginal lubricant for intromission?

When a woman seeks help for a sexual arousal disorder, it is important to examine possible underlying factors that may facilitate or interfere with sexual arousal. A woman may be motivated to be sexually active in order to become pregnant, to avoid punishment or to satisfy a partner. On the other hand, she may be motivated to resist sexual arousal in order to thwart a partner, avoid flashbacks associated with past sexual abuse, or to resist feelings of loss of control associated with sexual abandonment. Psychological treatment usually involves exploring the individual inhibitions and interpersonal factors that diminish arousal, and increasing the conditions that facilitate it, such as the use of erotica, fantasy or sexual aids. Therapy is sometimes indicated for resolving inhibitions that may arise from fear of abandonment or loss of control, or feeling unentitled to sexual pleasure.

Treatment for persistent sexual arousal

Treatment for persistent sexual arousal is elusive. A careful and thorough pelvic examination is essential, as well as an evaluation of hormonal, neurological, anatomical and/or pharmaceutical contributions. Duplex ultrasound may be helpful in identifying abnormal clitoral blood flow. Some authors have reported success with cognitive reframing of the arousal as a healthy response,[9] while others have tried antidepressants, antiandrogenic agents and anaesthetising gels. To date, no single cause for the condition has been identified, so no single treatment can be recommended. In a recent case, a 55-year-old woman complained she had experienced clitoral engorgement since the age of 18. An internal pudendal arteriogram revealed a 3 cm pelvic arteriovenous malformation with a single arterial link to the clitoral artery. The woman reported relief after embolisation (Irwin Goldstein, Institute of Sexual Medicine, Boston University School of Medicine, personal communication). This is the only case report, to my knowledge, of an obvious physical cause. While not a currently recognised arousal dysfunction, any report of persistent genital arousal should be taken seriously and possible causes should be investigated.

Conclusion

Female sexual arousal disorders constitute a varied spectrum of difficulties ranging from the total absence of genital or subjective pleasurable arousal to feelings of persistent genital arousal in the absence of sexual desire. There is much unknown about the various physical, anatomical and psychological causes and effective treatments for these complaints, but it is important to take them seriously, as they may be responsible for other female sexual dysfunctions, including hypoactive desire, anorgasmia and sexual pain.

Competing interests

The author is a consultant to and holds stock in Pfizer.

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