

Summary of the Recommendations on Sexual Dysfunctions in Women

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Summary of Committee. For the complete report please refer to *Sexual Medicine: Sexual Dysfunctions in Men and Women*, edited by T.F. Lue, R. Basson, R. Rosen, F. Giuliano, S. Khoury, and F. Montorsi, Health Publications, Paris 2004.

ABSTRACT

Introduction. Women's sexual dysfunctions include persistent or recurrent disorders of sexual interest/desire, disorders of subjective and genital arousal, orgasm disorder, pain and difficulty with attempted or completed intercourse. There are limited recommendation/guideline documents pertaining to the diagnosis and treatment of women's sexual dysfunctions.

Aim. To provide recommendations/guidelines concerning state-of-the-art knowledge for the clinical management of women's sexual dysfunctions.

Methods. An International Consultation in collaboration with the major sexual medicine associations assembled over 200 multidisciplinary experts from 60 countries into 17 committees. Committee members established specific objectives and scopes for various sexual medicine topics. The recommendations concerning state-of-the-art knowledge in the respective sexual medicine topic represent the opinion of experts from five continents developed in a process over a 2-year period. Ten experts from four countries compiled the Recommendations on Sexual Dysfunctions in Women.

Main Outcome Measure. Expert opinion was based on grading of evidence-based medical literature, widespread internal committee discussion, public presentation and debate.

Results. Recommendations and guidelines concerning the various sexual dysfunctions were updated. A comprehensive assessment of medical, sexual and psychosocial history is recommended for diagnosis and management planning. Indications for general and focused pelvic genital examination and laboratory testing are included. Recently revised definitions for sexual desire/interest disorder, arousal disorders (genital, subjective, combined and persistent), orgasm disorder, dyspareunia and vaginismus are presented. An evidence-based approach to management is provided.

Conclusions. There is a need for more research and scientific reporting, re-assessment, and management of women's sexual dysfunction including long-term outcome studies.

Key Words. Female Sexual Dysfunction; Diagnosis and Treatment of Women's Sexual Dysfunction; Desire Disorder; Arousal Disorder; Orgasm Disorder; Sexual Pain Disorder

Introduction

Women's sexual dysfunctions include persistent or recurrent disorders of sexual interest/desire, disorders of subjective and genital arousal, orgasm disorder, pain and difficulty with attempted or completed intercourse.

Assessment of Women's Sexual Dysfunction

The framework for assessment of sexual dysfunction is to assess predisposing, precipitating and maintaining factors. When there is a current sexual relationship, both partners need to be evaluated to understand the aforementioned factors. Collaboration between different disciplines is recommended for optimal assessment. Current contextual environmental factors are commonly etiologically important. Especially for lifelong sexual dysfunctions, developmental and past relationships, as part of the past history, are also commonly etiologically relevant. Assessing co-morbidities of woman's sexual dysfunction is very germane.

Medical and Psychosocial History

A comprehensive medical and psychosexual history is highly recommended for all sexual dysfunctions (Table 1). Further assessment of the woman is recommended if she discloses a history of past sexual abuse. This includes assessment of the woman's recovery from the abuse (with or without past therapy), whether she has a history of recurrent depression, substance abuse, self-harm or promiscuity, if she is unable to trust people, especially those of the same gender as the perpetrator, or if she has an exaggerated need for control or need to please (and inability to say no). The details of the abuse may be needed, especially if they were previously unaddressed. Assessment of the sexual dysfunctions per se may be deferred temporarily.

Further details regarding the components of enquiry for the individual dysfunctions are recommended. These include arousal disorders—subjective, combined and genital, sexual interest/desire disorder, orgasmic disorder, dyspareunia and vaginismus.

Table 1 Components of a comprehensive sexual, medical, psychosocial history

	Biological	Psychosocial	Sexual
Symptoms	Establish current general health	Establish current mood and mental health	Establish the sexual difficulties in her own words (e.g., cannot become aroused, always has pain with intercourse)
Present context	Clarify current medications/substance abuse, level of fatigue, presence of non-sexual pain	Identify nature and duration of current relationship. Societal values/beliefs impacting the sexual problems	Clarify the context when activity is attempted, including type of sexual stimulation, the woman's feelings toward her partner at the time, the safety and privacy of the situation
Past Context	Establish past medical history	Particularly for lifelong sexual problems, it is often necessary to at least briefly clarify developmental history, particularly relationships with caregivers, siblings, traumas, and losses	Clarify past sexual experiences alone and partnered, wanted, coercive and abusive
Onset	Document past medical, psychiatric details at time of onset of sexual problems	Clarify circumstances including relationship at time of onset of sexual problems	Enquire if there was a time when the above sexual problems were not present (when was that time and what were the sexual circumstances)
Generate full picture of her current sexual response	If relevant medical context is present, obtain details regarding effects on sexual activity, e.g., cardiac compromise, or neurological deficit	Evaluate personality factors including control issues, ability to express non-sexual emotions	Establish the rest of the sexual response cycle (sexual interest, arousal, orgasm, satisfaction, and freedom from pain associated with sexual stimulation or intercourse)
Role of the partner	Clarify partner's medical health	Clarify partner's mood and mental health, partner's reaction to sexual problems	Establish her partner's sexual response cycle
Distress	Level of distress regarding medical issues	Level of distress regarding psychosocial issues	Reaction to the sexual difficulties, degree of distress

When assessing arousal disorders, it is recommended to clarify which component(s) of arousal is absent/problematic (Figure 1). This will allow sub-typing of the arousal disorder so as to guide choice of therapy.

Frequently these dysfunctions are comorbid, e.g., sexual interest/desire disorder and subjective or combined sexual arousal disorder. For all or any of them, etiological factors should be assessed (Figure 2) and often a number of factors will contribute to the dysfunction. Occasionally women with emotionally traumatic pasts reveal that their sexual interest occurs only when emotional closeness with a partner is absent. In such cases, there is inability to sustain that interest when and if emotional intimacy with the partner develops. This is a fear of intimacy and is not strictly a sexual dysfunction.

For assessment of women's orgasmic disorder it is recommended that clarification be made regarding the following. Are orgasms absent and/or very delayed and/or markedly reduced in intensity? Is there adequate and acceptable stimulation with her partner and/or with masturbation? Is the degree of trust and safety she feels she needs present? Is there fear of letting go of control? What does she fear may happen that could be negative? Is information regarding women's sexual response needed for one or both partners? This information will guide choice of therapy.



Figure 1 Assessment of components of women's sexual arousal.



Figure 2 Assessment of etiological factors in women's complaint of low sexual desire/low sexual interest.

In the case of dyspareunia and vaginismus, clarification of the aspects of her pain, her fear of pain, and avoidance responses are recommended (Table 2).

A detailed medical enquiry with review of systems is highly recommended for all sexual dysfunctions (Table 1). This would include screening for depression as, regardless of antidepressant use, depression is consistently related to sexual dysfunction, particularly to low sexual desire.

Assessment of the psychosocial and psychosexual history is strongly recommended for all sexual dysfunctions (Table 1).

Physical Examination

The genital exam is often highly informative and can be very therapeutic, but its intimate nature demands there must be a reason for its inclusion. A focused pelvic genital exam is highly recommended in the following circumstances:

- For women with dyspareunia, especially those with lifelong pain and difficulty with penile entry, an educational exam is recommended.
- For women diagnosed with vaginismus, done in progressive stages once fear of vaginal entry has lessened with therapy, an educational exam is advocated.
- For women with genital arousal disorder, information will be limited because the genitalia are in non-aroused state but estrogen deficiency or

Table 2 Clarification of pain with attempted intercourse**1 Pain**

Where does it hurt? How would you describe the pain?
 Is the pain with penile contact to the opening of your vagina, once the penis is partially in, with full entry, after some thrusting, after deep thrusting, with the partner's ejaculation, after withdrawal, with subsequent micturition?
 Do you find your body is tensing when your partner is attempting, or you are attempting to insert his penis? What are your thoughts and feelings at this time?
 How long does the pain last? Does touching cause pain? Does it hurt when you ride your bicycle or when you wear tight clothes? Do other forms of penetration hurt (tampons, fingers)?

2 Pelvic floor muscle tension

Do you recognize the feeling of pelvic floor muscle tension during sexual contact?
 Do you recognize the feeling of pelvic floor muscle tension in other (non-sexual) situations?

3 Arousal

Do you feel subjectively excited when you attempt intercourse?
 Does your vagina become sufficiently moist? Do you recognize the feeling of drying-up?

4 Consequences of the complaint

What do you do when you experience pain during sexual contact? (Continue/stop whatever is causing the pain?)
 Do you still continue to include intercourse or attempts at intercourse, or do you use other ways to make love instead?
 If so, are you both clear intercourse will not be attempted?
 What consequences does the pain have on the rest of your sexual relationship?

5 Biomedical antecedents

When and how did the pain start? What tests have been done? What treatment have you received?

more rarely, disease such as connective tissue disorder, can be identified.

- For women with combined arousal disorders likely there will be no abnormality. Nothing arouses these women mentally/subjectively, be it written, visual, non-genital physical stimulation, and the evidence to date is that their genital response is healthy. Nevertheless, a "normal" exam is highly informative to the woman. It is also possible that a woman with combined arousal disorder goes on to become estrogen deficient—adding physical vulvar atrophy to her longstanding problems of disconnection from genital events.
- For women with neurological disease affecting pelvic nerves where a detailed neurological genital exam is also necessary, clarify light touch, pressure, pain, temperature sensation, anal and vaginal tone, voluntary tightening of anus and vagina and bulbocavernosus reflexes.

- For women with a history of pelvic trauma.
- For women with any disease potentially affecting genital health.
- For women with acquired and lifelong orgasmic disorder even if otherwise healthy. A normal examination is of reassurance value.
- When the history indicates, the opportunity for Pap smear/STD investigation should be taken.

A general physical exam is highly recommended as dictated by the general medical enquiry, for women with chronic illness and as part of good medical care, for example evaluation of blood pressure, breast exam, etc.

Although frequently no laboratory investigations are needed for assessment of the sexual dysfunction per se, certain situations may require laboratory testing. Laboratory investigations should be guided by the general medical assessment, for example, fasting blood glucose or TSH. When an infective etiology for dyspareunia remains possible, vaginal, cervical and vulval discharge microscopy/cultures should be performed. When investigational testosterone therapy is contemplated, accurate assays of free testosterone or accurate assays of total testosterone and SHBG are required. The Sodergard equation can be reliably used to calculate free testosterone if total testosterone, albumin and SHBG are known. This method requires a reliable determination of total testosterone and SHBG; albumin is quantified by routine methodology.

No rapid, simple assay of total testosterone has been shown to produce reliable results in women with low testosterone levels. Liquid chromatography (LC)-MS/MS appears to provide the most reliable measurement of low testosterone concentrations. Measurement of free testosterone by analogue assays are notoriously unreliable, particularly at the lower end of the normal female range and are not recommended for use. Regardless of which assay is used, a thorough validation of each method is required. The validation should include assay sensitivity, precision, accuracy and specificity.

Diagnosis of Women's Sexual Dysfunction*Recently Revised Definitions*

Definitions of women's sexual dysfunctions and models of sexual response that underlie these definitions have recently been revised. Women's

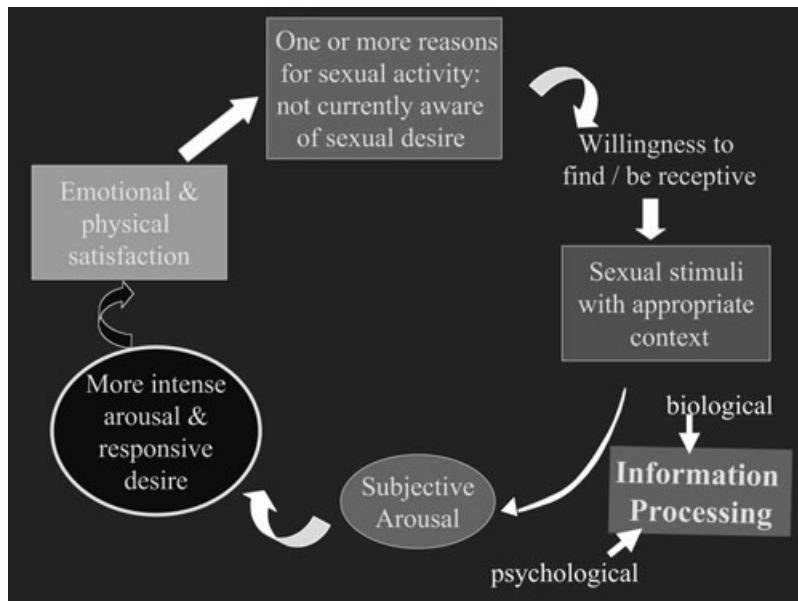


Figure 3 Alternative model of woman's sexual response.

sexual experiences frequently begin for reasons other than sexual desire. Desire is consequently experienced *after* arousal such that continued arousal and a responsive type of desire coexist and reinforce each other in keeping with the conceptualization of women's sexual response as shown in Figure 3.

Apparently innate or "spontaneous" desire, present before stimulation begins, may sometimes also be present (Figure 4), but its absence does not equate to dysfunction.

The following revised definition of sexual/desire/interest disorder is recommended.

Sexual Desire/Interest Disorder

There are absent or diminished feelings of sexual interest or desire, absent sexual thoughts or fantasies and a lack of responsive desire. Motivations (here defined as reasons/incentives) for attempting to become sexually aroused are scarce or absent. The lack of interest is considered to be beyond the normative lessening with life-cycle and relationship duration.

Arousal Disorders

It is recommended that the data confirming women diagnosed with arousal disorder usually show physiologically healthy vasocongestive responses in the genitalia in response to erotic sexual stimulation be acknowledged. Thus it is their lack of subjective arousal that is key to their distress, rather than failure of genital congestion.

It is recommended that the following subtypes of sexual arousal disorder be recognized.

Subjective Sexual Arousal Disorder

There is absence of or markedly diminished feelings of sexual arousal (sexual excitement and sexual pleasure) from any type of sexual stimulation. Vaginal lubrication or other signs of physical response still occur.

Given the range of awareness of genital congestion among women, recognition of a "subjective arousal disorder" is advocated.

Genital Sexual Arousal Disorder

There are complaints of impaired genital sexual arousal. Self-report may include minimal vulvar swelling or vaginal lubrication from any type of sexual stimulation and reduced sexual sensations from caressing genitalia. Subjective sexual excitement still occurs from non-genital sexual stimuli.

A woman diagnosed with the genital subtype of arousal disorder indicates that she can still be subjectively aroused by, for instance, viewing an erotic film, or pleasuring her partner, being kissed or receiving breast stimulation. She complains of the marked loss of intensity of any genital response including orgasm. Awareness of throbbing/swelling/lubrication is absent or markedly diminished.

Of note, it is the woman's self-report of absent or impaired genital congestion and lubrication that is the basis of the definition. There may or

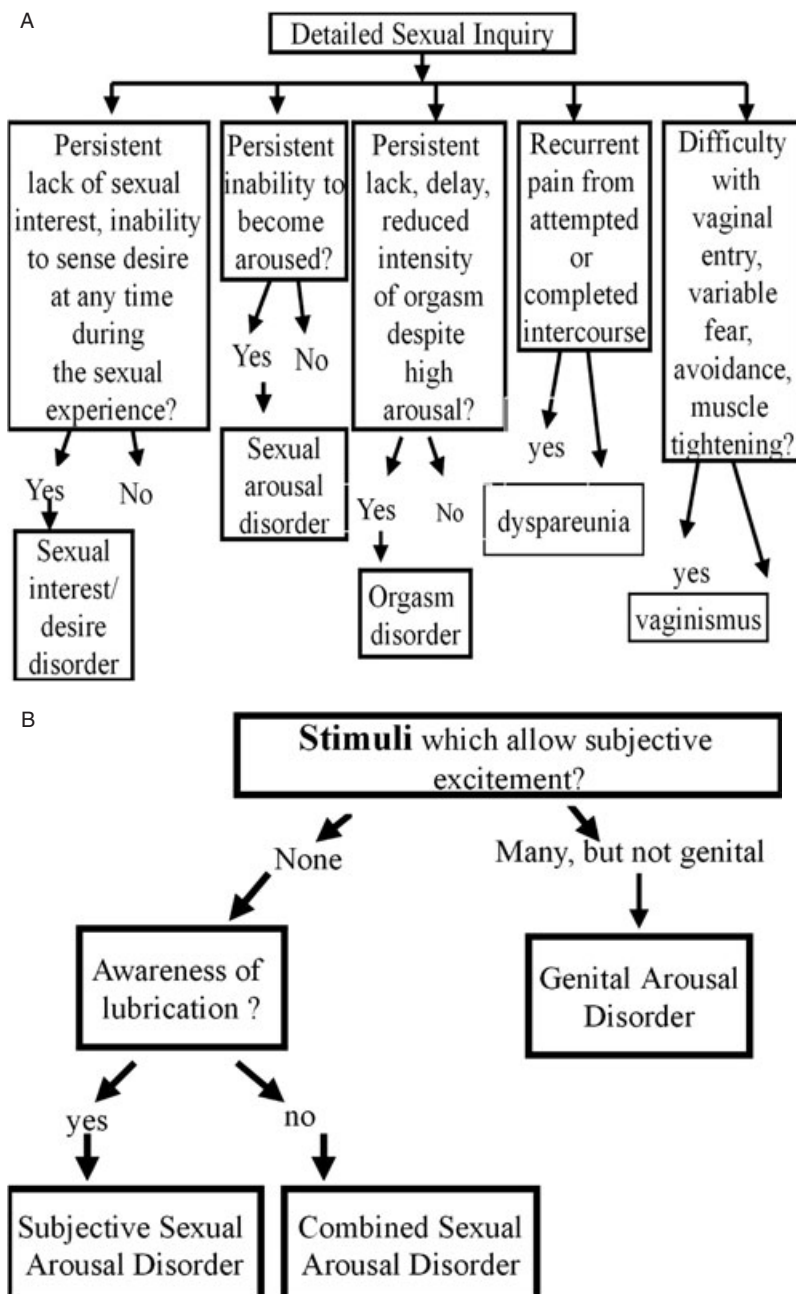


Figure 4 Blended sex response cycle showing many motivations to be sexual, spontaneous desire and responsive desire accessed en route. (A) Detailed sexual inquiry. (B) Further assessment of arousal disorder.

may not be demonstrable physical pathophysiology if such testing were available. Moreover, loss of sexual quality of sensations despite apparently adequate engorgement can occur and is little understood.

Combined Genital and Subjective Arousal Disorder

There are absent or markedly diminished feelings of sexual arousal (sexual excitement and sexual pleasure), from any type of sexual stimulation as

well as complaints of absent or impaired genital sexual arousal (vulval swelling, lubrication).

It is the lack of the subjective excitement from any type of sexual stimulation that distinguishes these women from those with genital arousal disorder.

Persistent Genital Arousal Disorder

The definition of persistent sexual arousal disorder is provisional, as the disorder is poorly under-

stood but becoming a more frequently recognized syndrome. The definition is recommended to facilitate investigation of prevalence and etiology.

Spontaneous, intrusive and unwanted genital arousal, e.g., tingling, throbbing, pulsating, in the absence of sexual interest and desire. Any awareness of subjective arousal is typically but not invariably unpleasant. The arousal is unrelieved by one or more orgasms and the feelings of arousal persist for hours or days.

Women's Orgasmic Disorder

Despite the self-report of high sexual arousal/excitement, there is either lack of orgasm, markedly diminished intensity of orgasmic sensations or marked delay of orgasm from any kind of stimulation.

In the past the criterion of high or "adequate" arousal excitement was often ignored. It is hoped that by changing the sentence structure misuse of the definition will lessen.

Dyspareunia

It is recommended the experience of women who cannot tolerate full penile entry and the movements of intercourse because of the pain be included in the definition of dyspareunia. Clearly, it depends on the woman's pain tolerance and her partner's hesitancy or insistence.

Persistent or recurrent pain with attempted or complete vaginal entry and/or penile vaginal intercourse.

Vaginismus

The following definition of vaginismus is recommended as the presence of a "vaginal spasm" has never been documented despite its inclusion in earlier definitions. Reflexive involuntary contraction of the pelvic muscles as well as thigh adduction, contraction of the abdominal muscles, muscles in the back and limbs, associated with varying degrees of fear of pain, typically but not invariably precludes full entry of a penis, tampon, speculum or finger.

The persistent or recurrent difficulties of the woman to allow vaginal entry of a penis, a finger, and or any object, despite the woman's expressed wish to do so. There is often (phobic) avoidance, involuntary pelvic muscle contraction and anticipation/fear/experience of pain. Structural or other physical abnormalities must be ruled out/addressed.

Sexual Aversion Disorder

Many clinicians feel the syndrome of extreme anxiety/panic associated with activation of the

autonomic nervous system is a form of phobic reaction. However, it is felt that the sexual context and sexual repercussions warrant its inclusion as a sexual dysfunction.

Extreme anxiety and/or disgust at the anticipation of or attempt to have any sexual activity.

Algorithm to Aid Diagnosis

The detailed sexual enquiry allows diagnosis of the various sexual dysfunctions to be made (Figure 4). It is recommended that the clinician is aware of the usual need to make more than one diagnosis, for example sexual interest disorder and combined arousal disorder. Figure 4B depicts further assessment of arousal disorder.

Descriptors

Descriptors are integral components of the diagnosis(es). It is recommended to clarify the dysfunction as lifelong or acquired. Lifelong dysfunction necessitates more detailed psychosexual enquiry regarding childhood, adolescence and past relationships. Acquired dysfunction necessitates careful enquiry into the context (psychological and medical) surrounding the onset of the dysfunction.

It is also recommended to clarify if the dysfunction is situational or generalized. Situational problems suggest an absence of organic disruption of the sexual response. Situational problems may be adaptive/logical to the problematic context and this has obvious therapeutic relevance.

It is recommended, as well, to clarify the degree of distress: none, mild, moderate, or marked. In the absence of distress, a disruption of sexual response or lack of interest still has epidemiological but rather little clinical importance.

Another recommendation is to clarify contextual factors. Past factors include negative upbringing/losses/traumas (physical, sexual, emotional), past interpersonal relationships, or cultural/religious restrictions. Current interpersonal difficulties include partner sexual dysfunction, inadequate stimulation and unsatisfactory sexual emotional contexts. Other contextual factors are medical conditions, psychiatric conditions, medications or substance abuse.

Given that women's sexuality is contextual, there is some difficulty with the concept of diagnosing a woman as having a sexual dysfunction when the primary problem appears to be the "sexual context" in which the sexual exchange occurs. However, she is reporting that dysfunction

is present even though factors other than her own sexuality need to be highlighted. It is therefore strongly recommended to include contextual descriptors within each diagnosis.

Ongoing studies of the usefulness and validity of these recommended revisions of definitions of sexual dysfunction are strongly recommended.

Management of Women's Sexual Dysfunction

In general, interpersonal problems within the relationship should be addressed prior to specific recommendations to sexual dysfunction. A number of investigational pharmacological agents are being used to treat specific sexual disorders. The lack of long-term safety data should always be openly discussed. Collaboration between different disciplines is recommended. Research is needed to identify efficacious combined/integrated treatments for sexual dysfunction. Even when sexual function has been healthy prior to medical insult, there are psychological and interpersonal repercussions plus sexual adaptations that may or may not be useful. Medical management alone may be insufficient.

Management of Low Sexual Interest and Co-morbid Arousal Disorders (Combined and Subjective)

Psychological management of low sexual interest and arousal disorders (Combined and Subjective) includes cognitive-behavioral techniques (CBT), traditional sex therapy and psychodynamic treatment. Although widely used, there is limited evidence of benefits of CBT in terms of controlled trials. Nevertheless, the treatment is benign and there are no safety issues. There is some empirical support for traditional sex therapy with sensate focus. Psychodynamic treatment is currently recommended but again there are no randomized studies.

There are no approved non-hormonal pharmacologic therapies for management of low sexual interest and arousal disorders (combined and subjective). The use of tibolone for postmenopausal women is promising but the two randomized clinical trials (RCTs) of 3 and 12 months' duration were not of women with sexual dysfunction. The use of bupropion hydrochloride is of interest but needs further study before this can be recommended. The use of phosphodiesterase inhibitors is not recommended.

Estrogen therapy (ET) may improve low interest and/or arousal disorders (combined and sub-

jective) as low estrogen levels may lead to poor sleep, dislike of sensual touching, and lack of well-being, all of which may impair sexual motivation. However, clinicians are recommended to prescribe the lowest dose of systemic estrogen for the shortest duration consistent with treatment goals, benefits, and risks for the individual woman, taking into account quality of life issues. Although clinical trials are lacking, all types of systemic estrogen and modes of administration may provide relief. It is highly recommended clinicians are fully aware of recognized risks.

Because of the increased risk of endometrial hyperplasia and adenocarcinoma with systemic ET, all women with an intact uterus should also be prescribed progestogen to oppose estrogen's adverse effects. Oral estrogen increases the risk of venothrombotic events (VTE) in the initial years of use. Parenteral therapy appears to have less risk for VTE. A set regime of oral CEE + MPA is associated with an increase in breast cancer risk beyond 5 years use. There is some evidence that oral estrogen alone, other estrogen—progestin regimens (including lower doses, non-oral estrogen +/- progesterone therapy or tibolone) also convey this order of risk. There is increasing use of estrogen +/- progestogen therapy after breast cancer. However, there is some evidence that hormone therapy increases recurrence from breast cancer. This therapy should be limited to moderate to severely symptomatic women, requires informed patient consent, and management of the patient should be in partnership with the physicians monitoring the woman's cancer. Oral CEE + MPA is associated with an increase in cardiovascular events in the first year of use and this risk wanes over 4 years. The use of other estrogen regimens and modes of administration and other steroids (tibolone) do not necessarily convey the same risk but data are lacking.

Thus careful attention to cardiovascular, thrombotic and breast cancer risks and thorough examination should be undertaken before any treatment is prescribed. No firm recommendation can be given regarding the long-term benefit vs. risks of systemic ET given the lack of RCTs of women who are symptomatic of estrogen deficiency and begin ET during the peri-menopause or immediately with menopause. Risks outweigh benefit when ET is commenced some years post menopause in women who are not identified as being symptomatic from estrogen deficiency.

Investigational androgen therapy (AT) may be considered for sexual interest/desire disorder and arousal disorders. Long-term data for safety and benefit of testosterone therapy in women are lacking but required before long-term use of testosterone can be recommended. Safety data for the use of testosterone in non-estrogen replaced postmenopausal women are lacking and no recommendation for its use can be made currently. Any enduring benefits after short-term testosterone treatment are unproven. Theoretically, supplementing testosterone on a temporary basis only could have adverse effects on the couple when it is withdrawn if an improvement associated with AT is no longer apparent.

If despite the concerns above AT is contemplated, careful assessment must establish absence of ongoing psychological (interpersonal, intrapersonal, contextual, societal) and/or physical factors negatively affecting sexuality. There are significant potential complications and contraindications to androgen therapy. Regular follow-up for efficacy and safety is essential, including: inspection of skin and hair for seborrhea, acne, hirsutism and alopecia, lab monitoring of free/bioavailable testosterone and SHBG—keeping these values within the normal range for pre-menopausal women—possibly a target level for older women should be even lower but this remains unclear. Accurate assays must be used and lipid profile and glucose tolerance must be monitored. Based on available data, no specific testosterone therapy or dose can yet be recommended. In the future, any formulation of testosterone must have pharmacokinetic data indicating that it produces blood levels within the normal pre-menopausal range. Achieving physiological free testosterone levels by transdermal delivery appears to be the best approach for minimizing the adverse effects of androgens.

Contraindications to testosterone therapy include androgenic alopecia, seborrhea or acne, hirsutism as well as a history of polycystic ovary syndrome and estrogen depletion. Oral methyl testosterone therapy is contraindicated in women with hyperlipidemia or liver dysfunction. Testosterone administration should be discontinued in the event of failure of response after up to 6 months of treatment, secondary treatment failure, appearance of one or more androgen induced skin or hair changes, bearing in mind that these conditions are progressive and unpredictable, and after 12 months unless new data confirm safety of more prolonged treatment.

Management of Genital Arousal Disorder

The use of local estrogen therapy is highly recommended for sexual symptoms resulting from vulvovaginal atrophy. These include not only genital arousal disorder with its lack of pleasure from direct genital stimulation, vaginal dryness and dyspareunia, but also frequent urinary tract infections lowering sexual interest and arousability and increasing the chance of orgasmic disorder. The use of long-term systemic ET for the sexual consequences of vulvovaginal atrophy cannot be recommended at this time due to lack of safety vs. benefit data in women who are symptomatic and begin ET at the time of menopause. Risks outweigh benefit when ET is commenced some years post menopause in women who are not identified as being symptomatic from estrogen deficiency.

The investigational use of phosphodiesterase inhibitors is cautiously recommended for genital arousal disorder unresponsive to local (or if indicated, systemic) ET. This is based on two small short-term studies that support investigational use of sildenafil. The optimal means of identifying which women with symptoms of genital arousal disorder will benefit is unclear.

The use of tibolone is of interest but cannot be recommended currently for postmenopausal women with genital arousal disorder. Note: The women in the relevant studies were not identified as having sexual dysfunction.

Management of Orgasmic Disorder

A directed masturbation program is recommended for management of lifelong generalized orgasmic disorder. For situational orgasmic disorder (orgasms with masturbation but not with her partner), the focus of therapy is on the relationship especially the trust and safety present for the woman to be sufficiently vulnerable. The partner may need information regarding women's sexual function and the woman support for the need to guide her partner. Anxiety reduction techniques are best suited for anorgasmic women only when sexual anxiety is coexistent. No pharmacological agents can be recommended.

Management of Dyspareunia and Vaginismus

There is a paucity of controlled trials in the area of dyspareunia and vaginismus. Ideally, a multidimensional multidisciplinary approach for sexual pain is recommended with attention to the following areas: the experience of pain, the emo-

tional/psychological profile, any context of past genital mutilation or sexual abuse, the genital mucous membrane, the pelvic floor, sex and partner therapy. The evidence is that the syndromes of vaginismus and vulvar vestibulitis syndrome (VVS) overlap, as do the syndromes of vaginismus and dyspareunia not due to VVS. Treatment should be individualized for each woman and/or partner, whenever possible with their input. Psychological issues as well as interpersonal issues should be first addressed early on with psychotherapy.

Given the lack of understanding of etiology and the progression of VVS, the overall safety and overall risks of any intervention must be kept in mind. The following interventions have been used individually and in combination with reported clinical benefit but without scientific evidence. There are, however, minimal safety concerns. The various therapeutic options for the treatment of VVS include vaginal muscle EMG biofeedback, pelvic floor physical therapy with cognitive behavioral therapy, hygiene measures including avoidance of soap, perfumes, pantyliners, medical treatments of topical estrogen, cromolyn or xylocaine to sites of allodynia and fluconazole for associated recurrent candidiasis. The other recommendation for management of VVS is use of medications for chronic pain.

On the not yet proven assumption that neuropathic pain is at least in part responsible for the pain of VVS, the use of tricyclic antidepressants, venlafaxine, or anti-convulsants such as gabapentin or carbamazepine or topiramax is cautiously recommended. Surgical treatment is vestibulectomy/vestibuloplasmy/perinoplasty. Although controversial, one study suggests vestibulectomy to be superior to behavioral and physiotherapy modalities although all modalities of therapy were beneficial. Poor surgical prognosis is associated with lifelong as opposed to acquired symptoms, associated features of vaginismus, vulvodynia in addition to the introital dyspareunia, larger areas of allodynia, involvement of the openings of the peri-urethral ducts and declining of the offer of sex therapy.

Conventional treatment of vaginismus involves psycho-education, CBT, sex therapy and the use of vaginal inserts, and is recommended. However, there is a marked lack of scientific outcome evidence. Given the preliminary information suggesting benefit from pelvic floor physiotherapy and EMG biofeedback for VVS, it is possible this will prove true for vaginismus.

Again, there is a notable lack of outcome data. Although many clinicians define vaginal penetration as the goal of therapy, in the future outcome measures should be broader to include sexual pleasure.

Management of Sexual Dysfunction for the Woman with Previous Child Sexual Abuse

The need for treatment for sexual trauma must be considered. If considered necessary, it should predate any treatment for sexual dysfunction. Therapy should help women understand any possible connections between past and current sexual functioning, particularly in regard to trust and being sexually vulnerable. Important aspects of therapy include:

- encouragement that women can be in control of their sexual encounters.
- their learning to be able to mentally and physically relax prior to receiving sexual stimulation.
- women's recognition that they need only engage in encounters with which they are fully comfortable.
- helping women to develop verbal and non-verbal communication with their partners to limit further sexual stimulation when they feel overwhelmed, "numb" or fearful.
- assisting women's development of relationships where there is a healthy balance of power to minimize feelings of victimization and maximize feelings of control.

Management of Sexual Dysfunction for the Woman with Previous Genital Mutilation

While not all women report sexual problems as a result of female genital excision, it is important to offer such women an opportunity to discuss such feelings and learn skills to increase self-esteem and sexual satisfaction. Women with previous genital excision should be encouraged to seek out support groups. Offer, when indicated, vaginal repair for aiding the woman's enjoyment of/possibility of having intercourse. Offer, when indicated, other vulvar surgery, e.g., to free partially obstructed urine flow associated with recurrent infections. Encourage decision making within the partnership/within the family in many instances. Provide information about health consequences of decisions they may make regarding "re-stitching after childbirth." Clarify the legal and ethical responsibility of the physician who must decline to

perform requested re-stitching after childbirth. Offer psychotherapy for addressing the emotional traumatic sequelae from previous genital excision. Provide specific management of sexual dysfunction as needed.

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