Female Sexual Arousal Disorder (FSAD)

Background
1. Definition:
   - DSM-IV (1994) criteria:
     - "Persistent or recurrent inability to attain, or to maintain until completion of sexual activity, adequate lubrication-swelling response of sexual excitement
     - Disturbance causes marked distress or interpersonal difficulty
     - Sexual dysfunction
       - Is not better accounted for by another Axis I disorder (except another sexual dysfunction) and
       - Is not due exclusively to the direct physiological effects of a substance (drug of abuse, medication) or a general medical."
     (SOR:C)
2. General info
   - Desire and arousal disorders are the most common female sexual disorders

Pathophysiology
1. Pathology of disease
   - Not fully understood
   - Psychological factors
     - Anxiety, depression, fatigue, relationship discord, and hx of sexual abuse or assault
   - Physical factors
     - May be related to estradiol: low levels cause vaginal dryness, dyspareunia, and decreased libido
     - Ante / peripartum
     - Lactation
     - Perimenopausal / menopausal
     - Androgen insufficiency
       - Addison's dz, hypopituitarism, corticosteroid tx, ovarian failure or oophorectomy, oral estrogen replacement, OCPs and idiopathic
     - Poor correlation between serum androgen / testosterone levels and sexual function
     - Hypothalamic / pituitary disorders
     - Thyroid disease
     - Cardiovascular disease (CVD) causes atherosclerosis of blood vessels of vagina and clitoris
     - Neuropathies from diabetes, multiple sclerosis, etc. cause diminished sensation of the clitoris and vagina
2. Prevalence
   - 33% of women 18-59 yo
3. Risk factors
   - Advanced age
   - Menopause, hysterectomy, uterine prolapse, endometriosis, fibroids, pelvic trauma
   - Depression, stress, relationship issues
- Fatigue, history of sexual abuse
- CVD, neurological disease, type I diabetes, multiple sclerosis, hypothalamic/pituitary disorders, thyroid dysfunction
- Smoking, medication (SSRIs)

4. Morbidity / mortality
- Psychosocial / relationship stress

**Diagnostics**
1. Diagnosis based on history & physical exam (SOR:C)
2. History:
   - Review sexual history
   - Medical, surgical, obstetric (episiotomy/laceration), gynecologic, psychiatric, sexual and social information
3. Physical exam:
   - Vulvar dystrophies or vaginitis
   - Vaginal atrophy from estrogen deficiency
   - Clitoral adhesions
   - Vestibular gland abnormality
   - Pelvic floor musculature dysfunction
   - Bimanual exam to assess for intra-abdominal pathology
   - Galactorrhea
4. Diagnostic testing
   - Lab evaluation (usually not helpful) (SOR:C)
     - Consider TSH and prolactin levels
     - If perimenopausal, check FSH, estradiol, LH
     - Some authors recommend checking androgen and sex-hormone binding globulin (SHBG), total and free testosterone if androgen deficiency suspected
     - Lipid profile, CBC and liver enzymes if considering medication

**Differential Diagnosis**
1. Other sexual dysfunction
   - Hypoactive sexual desire disorder, sexual aversion disorder, sexual pain disorders
2. Fatigue, anxiety, depression
3. Relationship discord
4. Hx of sexual abuse or assault
5. Androgen insufficiency
6. Thyroid disorder
7. Prolactinoma
8. Pregnancy
9. Neuropathy
10. Atherosclerosis
11. Medication side effect
12. Pelvic trauma
13. Postsurgical and/or radiation trauma
Therapeutics
1. Counseling
   o Cognitive behavioral therapy
   o Intensive sex therapy
   o Marital therapy
2. Encourage erotic massage, foreplay, and videos
3. Eros Therapy (clitoral vacuum)
   o First FDA-approved nonpharmacologic device
4. Encourage smoking cessation (SOR:C)
5. Pharmacologic therapy:
   o No approved drugs
   o Off-label use
   o Sildenafil
     - Conflicting data
     - Not recommended
     - May be helpful in premenopausal women but not in postmenopausal women (SOR:B)4,7
   o Artificial lubricants
   o Estrogen replacement
     - For vulvar / vaginal atrophy (SOR:C)
   o Androgen replacement with testosterone
     - Not helpful (SOR:B)

Follow-Up
1. Return to office
   o Time frame for return visit not defined
2. Refer to specialist
   o Refer to GYN if suspect intrapelvic abnormality
   o Refer to psychiatry if underlying psychiatric disorder
3. Admit to hospital
   o None

Prognosis
1. Not well documented

Prevention
1. Not well documented

Patient Education
   http://www.aafp.org/afp/20000701/141ph.html
2. The Guide to Getting It On! (Paperback) by Paul Joannides
References
4. BMJ Fillers POEM. 2004;328. Available at: http://www.bmj.com/cgi/content/full/328/7438/0-f

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