Sexual Health and Chronic Illness

Michael L. Krychman
Southern California Center for Sexual Health and Survivorship Medicine Inc
Newport Beach, CA
Associate Clinical Attending
University of California Irvine
Irvine CA

Sexuality and Chronic Medical Illness

- Cardiovascular disease
  - CAD
  - CVA
  - Hypertension
  - Post MI syndrome
- Endocrinopathies
  - Hypothyroidism
  - Hyperthyroidism
  - Adrenal Diseases
  - Hepatic Cirrhosis
  - Diabetes
  - Prolactin Disorders/ Galactorhea
- Neuromuscular dysfunction
  - Epilepsy
  - Parkinson’s Disease
  - Multiple Sclerosis
  - Peripheral Neuropathy
  - Dermatological
    - Skin disorders
  - Cancer and its associated treatments
  - Disability
  - Psychiatric Illnesses
    - Depression
    - Anxiety
  - Spinal cord lesions
  - Infectious Diseases
    - HIV
    - Autoimmune Disorders
      - Lupus
      - RA
      - Sjogren’s Syndrome

Objectives

- Identify prevalence and pathophysiology of sexual dysfunction associated with chronic diseases and cancer, and its treatment
- Identify accepted and emerging treatments of sexual dysfunction
- Address potential prevention of sexual dysfunction
Women and Disease

- Women with MS: 0.21 million
- Women on OCP: 1.7 million
- Women with Cancer: 6.0 million
- Women with Diabetes: 8.1 million
- Women on SSRI: 10.0 million
- Women on Statins: 13.7 million

Evaluation & Management of Sexual Dysfunction in Chronic Medical Illness

Multi-faceted effects

<table>
<thead>
<tr>
<th>Direct</th>
<th>Indirect</th>
<th>Iatrogenic</th>
<th>Contextual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vascular</td>
<td>Changes - perception, sensory, motor</td>
<td>Medication Radiation Surgery</td>
<td>Social &amp; situational factors</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>Incontinence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurological</td>
<td>Tremor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hormonal</td>
<td>Fatigue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomical</td>
<td>Pain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stevenson and Elliott. 2007

Recommendations for Breast Cancer

- Thorough assessment of sexual function is recommended given the multifactorial etiology and premorbid risk factors including past sexual problems, response to extremes, depression, relationship conflict as well as early chemical or surgical menopause (C)

- Tamoxifen users experience a variety of sexual problems but overall the medication is likely to have neutral effects when it pertains to sexual function (C)

- Aromatase inhibitors impact on vulvar vaginal health and coital comfort, and these sexual issues (C)

- The short and long-term safety considerations of minimally absorbed local vaginal estrogen for the treatment of genital syndrome of menopause remains in question; their use is officially contraindicated by the Food and Drug Administration in the USA
Recommendations for Breast Cancer (cont'd)

- Local intravaginal DHEA, and intravaginal testosterone to treat genit al syndrome of menopause holds promise and research in this population is needed (C).
- Ospemifene, selectively targets the genitopelvic epithelium, remains an unapproved medication in the breast cancer population. Further efficacy and safety studies are warranted before it can be recommended for this cancer population subgroup (C).
- Non-hormonal water-based lubricants and moisturizers remain a safe and are considered front line treatment for vaginal dryness and dyspareunia (B).
- There is insufficient evidence to advocate use of lasers for the treatment of GSM in breast cancer populations (C/D).

Recommendations for Gynecological Cancer

- The highly prevalent but commonly ignored sexual side effects of gynecological cancer treatment should be routinely addressed in every oncological consultation, possibly at the moment of diagnosis, during and after treatment (C).
- Nerve-sparing during radical hysterectomy, radical trachelectomy and clinical preservation when oncologically appropriate during vulvar cancer surgery may allow neurovascular preservation which may lead to improve sexual function (C).
- Vaginal dilators may be helpful in maintaining vaginal patency after damage to the vaginal tissue and better results may be obtained with a parallel administration of at least topical estrogens. The potential synergy between the two treatments deserves controlled prospective studies (C).
- Local vaginal estrogens (estradiol, estriol, promestrien, CE) are recommended, for GC survivors (except for adenocarcinomas) and for dyspareunia from estrogen deficiency; the clinical implication of minimal absorption needs to be further elucidated (C).
- Ospemifene role deserves to be evaluated (C).
- Mindfulness training and other psychoeducational programs may be useful adjuncts for sexual health rehabilitation (C).

Cardiovascular Disease in Women

- FSD may precede angina and maybe a marker for CVD as it is in men.
- Decreased sexual intimacy in women with unstable angina, acute coronary syndromes and post-MI.
- FSD is related to risk factors:
  - Smoking, HTN, Hyperlipidemia, endothelial damage.
- Women with CAD have fewer episodes of sexual intimacy than controls.
- Cardiac Rehabilitation that includes discussions and teaching regarding sexuality are associated with improved sexual function scores and increased QOL.
Cardiovascular Disease

- Up to 63% of women with CVD experience sexual dysfunction
  - decreased libido
  - vaginal dryness
  - painful intercourse
  - decreased genital sensation
  - decreased ability to achieve orgasm.
- Mechanism is multi factorial
  - Arterial
  - Neurogenic
  - Hormonal
  - Pharmacological
  - Lifestyle
  - Psychogenic factors

Women of partners who have had MI have avoidant sexual behavior
- Black Widow Syndrome

- Less than 1% of all acute MI are caused by sexual activity
- 5% of MI are attributed to nonsexual exertion
- 3% of MI are caused by anger.
- There is only a slightly increased risk of MI within the first 2 hrs after sex but not beyond that time

Metabolic Syndrome and FSD

- Syndrome components are associated with FSD
- FSD risk is proportional to number of components
  - Diabetes
  - Hypertension
  - Dyslipidemia
  - Obesity (Higher BMI linked with impaired Sexual QOL)
- Obesity is associated with lower FSDI scores
  - Lower arousal, lower lubrication, lower orgasm and lower overall sexual satisfaction
- Mediterranean style diet may improve sexual functioning (Esposito et al 2007)
  - Focus on whole grains, fruit vegetables, legumes, walnut and olive oil
Diabetes and Sexual Complaints

- Type I DM
  - Women: 24-34% decreased lubrication and impaired desire
    - Tyrer et al
- Type II DM
  - Women: 29% inadequate lubrication, 32% orgasmic disorder and low desire
    (Schreiner-Engo)
  - Effect of older age and co-morbidities
- More recent data suggests decreased lubrication linked to FSD
- Effect of controlling blood sugars on sexual function has not been studied
- Sexual pain linked to chronic candidal infections and poor glycemic control

Diabetes and Sexual Dysfunction

Macrovascular Complications
- Ischemic heart disease
- Peripheral vascular disease
- Cerebrovascular disease

Microvascular Complications
- Neuropathy
- Retinopathy
- Nephropathy

Sexual Dysfunction

Psychological factors
- Depression
- Body image issues
- Dealing with a chronic illness

Medications

Infections

Diabetes and Genital Arousal

- Women with DM showed
  - Impaired vaginal capillary engorgement in response to erotic stimuli
    (Wincze 1993)
  - measured by vaginal photoplethysmography
  - No impact on subjective arousal
- Women with DM
  - higher vibration perception threshold (less sensitivity) (Erol 2003)
    measured by a Biotheiometer
  - No impact on subjective arousal

Orgasmic Response

Delayed or reduced orgasm can be due to:
- Insufficient clitoral engagement
- Neuropathy
- Psychological factors associated with her/his partners reactions to the diabetes
Medications and Sexuality

- Andreneeric function
- CNS depression
- Anticholinergics
- Antihistamines
- Antihypertensives
- Oral contraceptives
- Antipsychotics
- Barbiturates
- Histamine H2-receptor blockers
- Promotility agents
- Barbiturates
- Benzodiazepines
- Selective serotonin reuptake inhibitors
- Lithium
- Tricyclic antidepressants
- Indomethacin (Indocin)
- Ketoconazole (Nizoral)
- Phenytoin sodium (Dilantin

Fibromyalgia and Sexual Dysfunction

- Widespread pain
- Fatigue
- Sleep disturbances
- Cognitive problems
- Depression & anxiety
- Sexual problems especially desire and interest

Treatment

- Often are on poly-pharmacy for symptom control
- Antidepressants- slow start and up titrate
  - Amtriptyline (Elavil®)
  - Cyclobenzaprine (Flexeril®)
  - Venlafaxine (Effexor®)
  - Bupropion (Wellbutrin® SR 100mg)
  - Gabapentin (Neurontin®)
  - Carisoprodol (Soma®)
  - Zolpidem (Ambien®)
  - Buspirone (Buspar®)
Rheumatoid Diseases
Sexual Dysfunction

- Difficulty with sexual performance
- Diminished sexual desire and satisfaction
- Chronic pain and fatigue can cause depression and decrease libido
- Joint range limitations can decrease sexual function
- Joint deformity can affect body image


Recommendations

- The association between RDs, comorbid disorders, and sexual dysfunction should be better elucidated (C)
- The contributing role of neuroinflammation, depression, fatigue, and anxiety in sexual dysfunction should be more clearly demonstrated (C)
- Joints inflammation, pain, deformity, and stiffness should be better appreciated in their impact on body image, body feelings, self-esteem, sexual confidence, and assertiveness (C)
- The issue of sexual function after the onset of RDs should be addressed with patients and their partners (B)
- Health care providers should be trained to competently address first-line conversations on sexual issues with their RDs patients and partners (B)

Overactive Bladder and Sexual Dysfunction

Some women with OAB avoid dating and sexual intimacy because of symptoms and fear of leaking urine

- Urge to urinate frequently
- Nocturia
- Embarrassment of leaking or smelling of urine

Some women with OAB avoid dating and sexual intimacy because of symptoms and fear of leaking urine
Recommendations

• There are no preventive strategies recommended for patients with LUTS to help with FSD (C)
• LUTS associated FSD is not an uncommon problem and should be assessed in women presenting for evaluation of LUTS (C)
• Treatment of female LUTS may benefit patient with sexual dysfunction and surgical management may improve female sexual function (C)

As Nature Made Him

• 1965 twin boys Bruce and Brian Reimer
• Circumcision gone terribly wrong
• John Money- psychologist
• Castration of Bruce--- Now Brenda
• Sexual reassignment- Raised as a girl
• Poor school interactions
• Age 15 - disclosure- returned to be David and male identity
• Married father of 3 adopted children
• Committed suicide age 38 in 2004

Transgender

Refers to a person who is born with the genetic traits of one gender but has the internalized identity of another gender

The goal of treatment:
Transgender people is to improve their quality of life facilitating their transition to a physical state that more closely represents their sense of themselves,

"Biological Congruity."

Primary Care for Transgender Patients

To provide safe and effective pathways to achieving lasting personal comfort with their gendered selves.

In order to maximize their overall health.

Promote psychological well-being and self-fulfillment.

World Professional Association of Transgender Health

Cleaver statement that psychotherapy is NOT an absolute requirement to access medical interventions, but assessment and referral by a specialized health professional is.

Does explain the important role mental health professionals

negative effects of stigma,

helping gender expression facilitate gender role changes coming out.
Initial Visits

- Review history of gender experience
- Document prior hormone use
- Obtain sexual history
- Review patient goals
- Address safety concerns
- Assess social support system
- Assess readiness for gender transition
- Review risks and benefits of hormone therapy
- Obtain informed consent
- Order screening laboratory studies
- Provide referrals

Follow Up Care Female to Male

- Assess patient comfort with transition
- Assess social impact of transition
- Assess masculinization
- Discuss family issues
- Monitor mood cycles
- Counsel regarding sexual activity
- Review medication use
- Discuss legal issues / name change
- Review surgical options / plans
- Continue Health Care Maintenance
- PAP smears
- CBE
- Mammograms
- STD screening

Surgery for Female to Male

- Mastectomy

  Continue CBE/SBE on residual tissue

- Hysterectomy/oophorectomy

  Consider adding low dose estrogen or estrogen vaginal cream

- Genital reconstruction
  - Phalloplasty
  - Metoidioplasty

- Consider adding low dose estrogen or estrogen vaginal cream
Effects and Expected Time Courses of Masculinizing Hormones

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximal Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin oiliness/eno</td>
<td>1-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Facial/body hair growth</td>
<td>3-6 months</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Scalp hair loss</td>
<td>&gt; 12 months</td>
<td>Variable</td>
</tr>
<tr>
<td>Increased muscle mass/weight</td>
<td>6-12 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Cessation of menses</td>
<td>2-6 months</td>
<td>n/a</td>
</tr>
<tr>
<td>Clitoral enlargement</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
</tbody>
</table>

Endocrine society 2009

Follow Up Care of Male to Female

- Assess feminization
- Review medication use
  - No hormones, Estrogens, Anti Androgen
- Monitor mood cycles and adjust medication as indicated
- Discuss social impact of transition
- Counsel regarding sexual activity
- Review surgical options/ Cosmetic Surgery
- Complete forms for name change
- Review CAD risk factors
  - Clinical breast exam
  - Self breast exam and care
- Screening
  - Mammography, Prostate screening, STI screening

Estrogen Treatment

May lead to:
- Breast Development
- Redistribution of body fat
- Softening of skin
- Loss of erections
- Testicular atrophy
- Decreased upper body strength
- Slowing or cessation of scalp hair loss

Risks Include:
- Venous thrombosis/ thromboembolism
- Weight gain
- Decreased libido
- Hypertriglyceridemia
- Drug interactions
- Elevated blood pressure
- Decreased glucose tolerance
- Gallbladder disease
- Benign pituitary prolactinoma
- Breast cancer
- Infertility
Rare Cancer Incidence - Case Reports

Male to Female patients on estrogen
- 2 cases of breast carcinoma
- 3 cases of prostate cancer

Female to Male patients on testosterone
- 1 case of ovarian cancer
- Ovarian changes similar to polycystic ovaries

Challenges for Law Enforcement

- Safety
- Staff education/cultural competence
- Provision of care
- Adherence to treatment
- Consistent delivery of care
- Referral system for social support and follow up care after parole

Agency-Related Issues to Provide Services

- Understand the terminology
- Train all staff—receptionists, security guards, director
- Make user friendly intake forms that do not alienate trans friendly, i.e., include a chosen name not just legal name, include more than M/F
- Don’t make assumptions about sexuality
- Respect confidentiality, choices and fluidity
- Honor presenting gender
- Acknowledge limitations refer if appropriate
- Challenge homo/trans phobia—in staff and community
- Have consequences for repeated anti-trans behavior
- Have Unisex bathrooms!
Focus on Rehabilitation... not treatment

The latter implies the possibility of complete "recovery" which may not be possible with many debilitating conditions

The New Normal

Specific Sexual Wellness Treatment Recommendations

- High clinical suspicion
- Consider thyroid panel, CBC, Chemistry, ESR
- Evaluate Medications
- R/O other medical causes or psychological causes
- R/O underlying physiological causes for dyspareunia
- Refer to disease specialist

Practical Suggestions Sexual Wellness

- Sleep Hygiene
- Exercise
- Physical Therapy
- Cognitive behavior therapy
  - Mindfulness, imagery relaxation techniques
- Planned spontaneity
- Pain medications
- Lubricants, Moisturizers
- Sexual positioning, Liberal Use of pillows
Key Points for Practice

- Always look for sexual dysfunction in patients with chronic conditions
- HCP can/should initiate discussion
- Manage chronic illness medications affecting sexual function
- Maximize treatment of chronic illness to remission if possible to reduce negative effects of disease-state on sexual function
- Be prepared with suggestions – resources, treatments, referrals