Iatrogenic Sexual Problems

Y. Reisman MD, PhD, FECSM
Dutch Center of Sexual Medicine
Amsterdam
The Netherlands
Iatrogenic

- caused by the physician/treatment and damage sexuality/intimacy

  - surgery
  - medication
  - chemotherapy
  - radiotherapy
  - admission
  - wrong information
  - lack of proper information / attention
Responsibility

- To:
  - Inform about possibility of SD
  - Inform about possible solutions for SD
  - Treat the consequences

- To discuss beforehand the consequences
- Shared decision with the patient / couple about the approach
“Hold on, I’m gonna call Tech Support.”
A change in approach and a change in consequences!

Disease

Proactive responsibility

Disease

Sexual dysfunction

Sexual dysfunction

sexual function

sexual identity

sexual relationship
Interventions can cause damage to:

- Sexual function
- Sexual identity
- Sexual relationship

Don’t forget the partner!
Drug-related Sexual Problems
A common problem?

- Some studies have suggested that drugs are a causal factor in up to 25% of men with ED
- Other studies have suggested that drugs are only very rarely a causal factor in ED
- Who should we believe?

To define as iatrogenic a sexual dysfunction we should take in consideration the gap of time between the beginning of therapy and its onset
What sort of problems might be drug-related?

- Sexual interest effects (libido, sex drive)
- Sexual arousal effects (erectile function, vaginal lubrication/swelling response)
- Orgasm (and ejaculation in men) effects
Is it the drug or the disease?

• Hypertension or antihypertensive?
• Depression or antidepressants?
• Psychosis or neuroleptics?
• Anxiety or anxiolytics?
Hypertension or antihypertensives?

- The prevalence of ED in treated hypertension is 25%.
- The prevalence of ED in untreated hypertension is 17%.
  - Bulpitt CJ, et al, Br Heart J 1976
- 50% of treated hypertensive women over 60 experience sexual dysfunction (30% excess).
  - 25% delayed or absent orgasm
  - 23% lubrication problems
  - 15% reduced libido
Possible mechanisms

- Hypertension and its therapy may cause sexual dysfunction by...
  - the effects of untreated hypertension
  - haemodynamic effects
  - neurotransmitter effects
  - hormonal effects
  - side-effects (fatigue, dry mouth, etc., etc.)
  - psychological effects
• Sexual side effects of antihypertensive medication are more common over 50 years of age

• Risk of developing sexual dysfunction whilst on antihypertensive medication increased by
  • smoking
  • diabetes
Thiazides

• Conflicting evidence as to prevalence of effects
  • Reported incidence 0% to 31%
• Primarily associated with ED
• Less frequent reports of loss of libido
Beta-blockers

- Sexual side-effects most common in non-selective agents, such as propranolol
- Erectile dysfunction most commonly reported effect
- Occasional reports of loss of libido
- Occasional reports of ejaculatory dysfunction with propranolol and labetolol
- Rosen et al described a reduction in testosterone and FSH level in patients treated with atenolol, metoprolol, pindolol and propranolol with resulting decreased sexual desire and intercourses. (Beta-2 blocking of Leydig cells)
Other drugs for HTN

Alpha₁-blockers (prazosin, doxazosin, etc)
- reports of both enhancing and suppressing erection
- associated with ejaculatory dysfunction
- rare reports of priapism

ACE inhibitors (captopril, etc)
- occasional reports of both enhancing and suppressing erection
- Contraction of smooth muscle in corpora
- Improving endothelial function
AT1 receptor antagonists (ARB, “sartans”)  
• some reports of pro-erectile effects  
• few reports of suppressing erection  

Calcium channel blockers  
• occasional reports of both enhancing and suppressing erection  
• relaxation of the smooth muscle cells  
• should not be indicated as a possible risk for the new-onset of ED
Effect of the ARB valsartan on sexual function in hypertensive men are comparable to those seen with PDE5i

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<th>IIEF Domain</th>
<th>Baseline</th>
<th>6 months</th>
<th>P value</th>
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Dusing et al Blood Pressure 12 Dec 2003 29-34
Valsartan in women

82 post menopausal women newly diagnosed with hypertension

16 week study

Randomised to Valsartan 80-160mg or Atenolol 50-100mg

Both drugs equally effective in lowering BP

Sexual Desire, attraction, fantasies, frequency of activity increased with valsartan (p>0.05) and desire and fantasies decreased with atenolol

Fogari et al – Am J hypertension 2003
In practice...

Hypertension kills people

Control of hypertension should be the overriding concern

• Modern guidelines favour tailored therapy
• Multi-drug regimes may make sexual problems worse

Consider changing if the history suggests the dysfunction is drug-induced
Psychotropic drugs

Psychotropic drugs may cause sexual dysfunction by a variety of mechanisms

• non-specific CNS effects - sedation & loss of interest
• specific CNS effects - modulating various receptor sites - dopamine, noradrenaline, serotonin, acetylcholine and possibly others
• peripheral NS effects - such as alpha-adrenergic blockade
• hormonal effects - such as stimulation of prolactin production and increase SHBG
Depression or antidepressants?

Depression may cause sexual dysfunction

• reduction in sexual drive
• erectile dysfunction
• relationship and partner effects

All classes of antidepressant drug have been associated with sexual dysfunction

Treating sexual dysfunction may help depression

The onset of SD in treated depressed patients is estimated to be around 30% in both men and women who begin therapy with a selective serotonin reuptake inhibitor (SSRI) or a serotonin norepinephrine reuptake inhibitor (SNRI)
In practice...

Depression kills people
Effective treatment of depression should be the overriding concern
Loss of sexual drive is a common feature of untreated depression
Sexual dysfunction may be an important problem to the depressed patient
Consider treating ED and depression concurrently
In case of difficulty, liaise with a psychiatrist
Neuroleptics

All neuroleptics have been reported as causing sexual side effects

• most likely due to dopamine receptor blockade
• Increase in SHBG
• may also cause hyperprolactinaemia, leading to loss of libido, gynaecomastia and menstrual disturbance
• occasional reports of priapism (accounting for 20% of reports of drug-induced priapism)
Management strategies

If sexual side effects are a problem, discuss with psychiatrist and consider

• measuring prolactin and SHBG levels
• wait for possible accommodation to the side effect
• decreasing the dose of neuroleptic
• switch to a different drug
Anxiolytics

Benzodiazepines
• a few case reports of loss of libido, ED and anorgasmia
• mechanism unknown - may be non-specific CNS effect of sedation

Azapirones
• Buspirone seems to have a very low rate of sexual side effects
Management strategies

If sexual side effects are a problem, consider

- decreasing the dose of anxiolytic
- switch to another agent, probably buspirone

*Gitlin MJ, J Clin Psychiatry 1994*
A major element in Parkinson disease is the low level of dopamine - may results is low sexual desire. Treatment is by dopamine or dopamine agonists.

The patient gets better.
The ‘side effect’ is a positive sexual side effect. In a small part of the patients (6-13%) the desire becomes too much.

DDS = Dopamine Dysregulation Syndrome.
Medication in rheumatic diseases en pain

**Opioids**  Long term high dose interfering with the gonadal hormones: diminishing sexual desire

**Tramadol**  Serotonergic effect: delayed ejaculation

**Corticosteroid**  Can negatively influence the gonadal hormones: decreasing sexual desire
   Can cause behavior (hyperactive) changes

**Immunosuppressants**
   Can negatively influence the gonadal hormones
      → decreasing sexual desire
   Can cause vaginal itching and candidiasis
      → impairing vaginal desire / contact
**Medication for prostate enlargement**

*5-alpha-reductase inhibitors* decrease the prostatic volume
By preventing T to be converted in DHT
  ➔ diminish desire
erection and ejaculation disorders.

*Alpha-blockers* relax the smooth muscles of prostata and urethra
  ➔ they can cause ejaculation problems
## Side-Effects of Androgen Deprivation Therapy

<table>
<thead>
<tr>
<th>“Big Three”</th>
<th>What you see</th>
<th>What you don’t see</th>
<th>What you feel</th>
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<td>Loss of libido</td>
<td>Weight gain</td>
<td>Loss of BMD</td>
<td>Fatigue, lack of energy, lack of initiative</td>
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<td>Erectile dysfunction</td>
<td>Gynecomastia</td>
<td>Anemia</td>
<td>Depression</td>
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<td>Hot flashes</td>
<td>Loss muscle mass, strength</td>
<td>Onset of lipids, HTN, CVD, diabetes</td>
<td>Emotional lability</td>
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<td>Decr size penis, test changes</td>
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<td>Cognitive function</td>
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15-18% are still sexually active !!!!!
Other drugs

• Metaclopramide may cause hyperprolactinaemia
• Spironolactone is a competitive androgen receptor blocker
• Statines for dislipidemia: Contraversial
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<th>Drug</th>
<th>Erectile dysfunction</th>
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A pragmatic approach

If there is a strong temporal relationship between starting a drug and development of a sexual side effect, it is more likely that there is a causal relationship.

If the patient has been on the drug for years and the problem has only recently begun, this is less likely.

Patients may well conceal recreational drug use.

Remember that the underlying condition you are treating may be contributing to the sexual concern, not just the drug.

Don’t compromise the treatment of other important conditions.
Chemotherapy

- Direct effects → nausea
- Fatigue
- Irritation of all mucous membranes
- Loss of hair
- Return of genital viral infections (herpes / warts)
- Hypogonadism
- Start of menopause
- Erection temporarily disturbed
- Peripheral nerve damage a.o.
  - sexual /sensual touch problems
Couples commonly avoid this topic, because the partner may feel selfish or demanding if he or she expresses a need for physical contact.

Gentle questioning from the health care professional can help the woman/man and her partner discuss sexual intimacy and normalise the subject.

• It can also help highlight suggestions for alternative expression.
Overview

- Pelvic surgery and RT are important and underreported causes of SD
- Pathophysiology: vascular or neurogenic factors (alone or a combination)

Pelvic Surgery
- Prostate ca
- Bladder ca
- Low anterior or abdominoperitoneal resections for rectal cancer
- Lymphadenectomy

RT
- PCa
- RCA

Endosurgery
- TURP

Loss of libido, ED, failure to ejaculate, absence of orgasm and retrograde ejaculation
Common patterns of erectile function in prostate cancer treatment

- **Late effects**

  - **RT**
  - **Nerve sparing radical prostatectomy**
  - **Non-nerve sparing radical prostatectomy**
Cancer & Sexuality

Patient is alone

the reaction of the Sexology professional:

Scared of cancer!

the reaction of the Oncology professional:

Scared to talk about sex!
Patients’ Sexual Health

- Sexual health may initially be a **low priority** for newly diagnosed patients with cancer.
- As treatments are completed and patients survive their disease, sexual health again becomes important.
- Although many cancer survivors may return to a normal state of sexual functioning, **others do not**.

- What had defined each woman as an individual was changed by chemotherapy or surgery.
- It became challenging for the women to find new ways to redefine their sexuality and, ultimately, who they were.
Sexual dysfunction in cancer patients

Patients often reluctant to seek professional help for mental and physical health problems, including sexual problems.

Maintaining sexual intimacy is an essential part of their recovery process.

Communication is the key factor

Sexual dysfunction in cancer patients may result from a variety of factors

• **Biological** (anatomic alterations, physiological changes, and the secondary effect of medical intervention),

• **Psychological** (Negative emotional states such as anxiety, depression, and anger), and

• **Social**

Dobkin PL. J Psy Oncology 1991
Cancer and sexual function
Importance of sexuality in cancer

- Sex can relax emotionally and physically
- Sex can reduce pain and give comfort
- Sex as a way to cope with anger and confusion
- Sex as a way to stick to life
Hospital Admission

- Especially in long stay Rehabilitation
- Obstetrics
- Post stroke

Be aware of the disturbance of relationship and family.
Conclusion

• Our interventions can cause a lot of sexual collateral damage.

• In relation to medication
  Negative sexual side effect can cause poor compliance

• It is our responsibility to deal with the problems

• It is our responsibility to inquire / ask.
  (patients are scared to bring it up themselves)

• Be creative - we have solutions for many sexual disturbances!