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Erectile Dysfunction & Neurological Disorders

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Aims

• Review normal erectile function
• Identify how neurological conditions affect erections
• Review accessing to help
• Role of nursing
What is Erectile Dysfunction?

• ‘persistent inability to achieve and/or maintain an erection sufficient for satisfactory sexual activity’

• Erectile dysfunction is the inability of a man to get an erection of sufficient quality for sexual activity
Sexual dysfunctions in patients with neurological disorders can be divided into primary, secondary and tertiary SD. **Primary SD** is directly due to neurologic deficits affecting the sexual response;

- Altered genital sensation
- Decreased libido
- Ejaculation and orgasmic dysfunction
- Most commonly ED
Sexual and neurological function?

• **Sexual Arousal (after Singer, 1984)**
  – Aesthetic/Emotional – Visual
  – Approach – movement towards the object
  – Genital – physical changes

• Engagement in sexual behaviours for different reasons
• Any interference with sexual cycle can lead to sexual dysfunctions
Prevalence (literature)

• How many of your patients have ED?

• 52% of men have ED (40-70 years of age)
• 8% of 40 year old men; 40% of 60 year old men

• And…

• ED can be the first presentation of cardiovascular disease. The average time between onset of ED and 1\textsuperscript{st} cardiac event is 3 ½ years. Screen all?
What does this mean for practice?

- Incidence of ED is >1:10
- Generally, it takes 3.5 - 6.6 years for patients to seek advice
- On average, relationships change within 6 months of a sexual dysfunction
- Patients do not know the words to use to ask for help
- Evident silence in discussing sexual problems
- Little or no advertising of Men’s health - is it an agenda item?
- Patients are devastated by ED (or the implications of ED)
Assessing ED
What to assess?

- Is it erection trouble or premature ejaculation?
- How long has there been a problem
- What precipitated it? (if known)
- Do you get erections in the morning/night-time
- Are you still intimate with your partner
- Can you penetrate?
- What treatment have you tried?
- Correct treatment/dosing?
<table>
<thead>
<tr>
<th>IIEF</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the past six months:</td>
<td>1</td>
</tr>
<tr>
<td>How do you rate your confidence that you could get and keep an erection?</td>
<td>Very low</td>
</tr>
<tr>
<td>When you had erections with sexual stimulation, how often were your erections hard enough for penetration?</td>
<td>Almost never or never</td>
</tr>
<tr>
<td>During sexual intercourse, how often were you able to maintain your erection after you had penetrated (entered) your partner?</td>
<td>Almost never or never</td>
</tr>
<tr>
<td>During sexual intercourse how difficult was it to maintain your erection to the completion of intercourse?</td>
<td>Extremely difficult</td>
</tr>
<tr>
<td>When you attempted sexual intercourse, how often was it satisfactory for you?</td>
<td>Almost never or never</td>
</tr>
</tbody>
</table>

The IIEF-5 score is the sum of questions 1 to 5. The lowest score is 5 and the highest score 25.

17/12/2013
Investigations

- Blood pressure, fasting lipids and fasting glucose
- LH, FSH, Testosterone, Prolactin and Sex Hormone Binding Globulin
- Hormone levels between 9-11 am
- Vitamin D
Treatment options
Treatment options

• Talk to your partner
• Psychosexual counselling
• Phosphodiesterase Type 5 (PDE5Is) inhibitors
• Medicated Urethral System for Erections (Alprostadil pellets)
• Intracavernosal injections
• Vacuum devices
• Surgery
Phosphodiesterase Type 5 Inhibitors*  

Sildenafil Citrate (Viagra) 25, 50-100mg prn (Sildenafil generic)  
25, 50 or 100mg  
– Takes an hour to work (best on an empty stomach), lasts in bloodstream for 4 hours  

Tadalafil (Cialis) 2.5 – 5.0mg o/d or 10-20mg prn  
– Takes 30 minutes to 2 hours to work (not affected by food/alcohol in moderation, lasts in bloodstream for 36 hours)  

Vardenafil (Levitra) 10-20mg  
– Takes 25 minutes to work, can have food/alcohol, lasts in bloodstream for 5 hours
Other options (specialist clinics)

- MUSE
- Intracavernosal Injections
- Vacuum Devices
- Combination therapy (PDE5I plus MUSE or ICI or Vacuum)
- Prostheses
- Psychosexual Counselling
MUSE

Diagram of MUSE:

- Button
- Body
- Collar
- Stem
- Medicated Pellet
- Cover
Connections between the corpora cavernosa

Avoid midline

Avoid corpus spongiosum
Combination approaches

- Vacuum devices plus phosphodiesterase type 5 inhibitors (prn or od)
- MUSE and PDE5I
- L-arginine and PDE5I
Summary

• Erectile dysfunction is treatable in most men
• It affects both the man and his partner
• It is more difficult to treat the long the problem goes undetected
• Patients are not too embarrassed to talk about ED; they don’t know that they can talk to you/they do not know how to broach the subject
• You don’t need to treat it but do need to know where to refer to