Erectile Dysfunction & Neurological Disorders

**Martin Steggall**
PhD, MSc, BSc (Hons), RN (Adult), FHEA
Associate Dean, Director of Undergraduate Studies; Clinical Nurse Specialist (Erectile Dysfunction/Premature Ejaculation)
Barts Health NHS Trust

**Colm Treacy**
MSc, RMN, RGN, RNT, FHEA
Lecturer; Clinical Nurse Specialist (Erectile Dysfunction) Barts Health NHS Trust
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 1st 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>
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<tbody>
<tr>
<td><strong>Over the past six months:</strong></td>
<td></td>
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<tr>
<td>How do you rate your confidence that you could get and keep an erection?</td>
<td></td>
</tr>
<tr>
<td>1 Very low</td>
<td>2 Low</td>
</tr>
<tr>
<td>3 Moderate</td>
<td>4 High</td>
</tr>
<tr>
<td>5 Very high</td>
<td></td>
</tr>
<tr>
<td>When you had erections with sexual stimulation, how often were your erections hard enough for penetration?</td>
<td></td>
</tr>
<tr>
<td>1 Almost never or never</td>
<td>2 Much less than half the time</td>
</tr>
<tr>
<td>3 About half the time</td>
<td>4 Much more than half the time</td>
</tr>
<tr>
<td>5 Almost always or always</td>
<td></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></td>
</tr>
<tr>
<td>1 Almost never or never</td>
<td>2 Much less than half the time</td>
</tr>
<tr>
<td>3 About half the time</td>
<td>4 Much more than half the time</td>
</tr>
<tr>
<td>5 Almost always or always</td>
<td></td>
</tr>
<tr>
<td>During sexual intercourse how difficult was it to maintain your erection to the completion of intercourse?</td>
<td></td>
</tr>
<tr>
<td>1 Extremely difficult</td>
<td>2 Very difficult</td>
</tr>
<tr>
<td>3 Difficult</td>
<td>4 Slightly difficult</td>
</tr>
<tr>
<td>5 Not difficult</td>
<td></td>
</tr>
<tr>
<td>When you attempted sexual intercourse, how often was it satisfactory for you?</td>
<td></td>
</tr>
<tr>
<td>1 Almost never or never</td>
<td>2 Much less than half the time</td>
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The IIEF-5 score is the sum of questions 1 to 5. The lowest score is 5 and the highest score 25.
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
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