What is erectile dysfunction?

Erectile dysfunction (ED), also known as impotence, is the inability to achieve or to sustain an erection.

How does an erection occur?

A man cannot have an erection simply because he wants one. Brain messages, nerve impulses, muscle reactions, hormone levels and blood flow all play a part. The penis becomes firm when messages from the brain cause blood to fill the two spongy-tissue chambers in the shaft of the penis. During an erection these chambers are filled with seven times the normal flow of blood.

What causes erectile dysfunction?

ED can be a result of physical or psychological causes or from side effects of medication.

<table>
<thead>
<tr>
<th>Physical</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blockage in the arteries to the penis</td>
<td>Stress and anxiety from work/home</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Depression</td>
</tr>
<tr>
<td>Neurological disorders e.g. Spinal Cord Injury (SCI)</td>
<td>Marital discord</td>
</tr>
<tr>
<td>Side effects of medications</td>
<td>Worry about poor sexual performance</td>
</tr>
<tr>
<td>Chronic disease i.e. kidney/liver failure</td>
<td></td>
</tr>
<tr>
<td>Alcoholism and drug abuse</td>
<td></td>
</tr>
<tr>
<td>Heavy smoking</td>
<td></td>
</tr>
<tr>
<td>Disease of the erectile tissue of the penis</td>
<td></td>
</tr>
<tr>
<td>Pelvic surgery and/or pelvic injury</td>
<td></td>
</tr>
<tr>
<td>Hormonal abnormalities</td>
<td></td>
</tr>
</tbody>
</table>

What can I expect following Spinal Cord Injury?

Normal erectile function requires both psychogenic and reflex pathways to be intact to enable a man to obtain and sustain an erection.

Psychogenic erections are related to thoughts or seeing/hearing something.
Erectile dysfunction - Following Spinal Cord Injury (SCI) (2 of 2)

that is sexually arousing.

**Reflex** erections are related to physical contact, either with the penis or other parts of the body. Following Spinal Cord Injury and depending on your level of injury, these pathways may be compromised and affect the quality of the erection.

For men with a SCI lesion **above the level T12**, the reflex pathway is generally present, however the erection may not be strong enough to engage in penetrative sex.

For SCI lesions **below T12**, the reflex pathway is not usually present.

The extent of the damage to the spinal nerves i.e. incomplete or complete lesions, can also impact on the processes associated with achieving and sustaining an erection.

Erectile dysfunction can be treated in most cases of SCI.

**How is ED treated?**

For patients with Spinal Cord Injury there are various methods that can be used to obtain or sustain an erection.

These methods include:

- oral medication
- an injection into the penis
- a vacuum pump
- constriction rings, or
- a combination of these methods.

**Remember - what may work for one man may not work for you.**

It is important that any concerns you may have regarding erectile dysfunction, as well as all other aspects of sexual function e.g. Fertility issues, ejaculation etc should be discussed with your consultant here at the Spinal Centre.

Information is available in different media formats e.g. videos/DVDs/literature.

We recommend the following websites:

- The Duke of Cornwall Spinal Treatment Centre: [www.spinalinjurycentre.org.uk](http://www.spinalinjurycentre.org.uk)
- The Spinal Injuries Association: [www.spinal.co.uk](http://www.spinal.co.uk)
- The Sexual Advice Association: [www.sda.uk.net](http://www.sda.uk.net)

Equipment loans are available from the Pressure Clinic after referral from your spinal consultant.