Guideline for the management of Erectile Dysfunction in adults >18 years

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This guideline is intended for use in primary care

This guideline does not cover the management of erectile dysfunction following prostatectomy (typically treated with daily or twice weekly tadalafil on the advice of the CHS Urology Dept)
Step 1
Lifestyle modifications can greatly improve erectile dysfunction and should be tried prior to, or alongside pharmacotherapy. Weight loss (important), smoking cessation, reduced alcohol consumption and increased exercise should be encouraged where appropriate.

Step 2
Treatment with PDE5 inhibitor (generic sildenafil) at the minimum effective dose is recommended for any man presenting with erectile dysfunction.

The frequency of dosing should be limited to four times per month.

Generic sildenafil is no longer subject to the Government Selected List Scheme (SLS) restrictions. It is therefore available to be prescribed through the NHS by primary care clinicians for all men with erectile dysfunction.

This does not apply to prescribing of any other phosphodiesterase type-5 (PDE5) inhibitors.

NHS funded prescribing of the remaining treatment pathway is restricted to patients who fulfil the Government Selected List Scheme (SLS) criteria as described in Appendix 1.

Step 3
Other PDE5 inhibitors (tadalafil and avanafil) are recommended as options in men who fulfil SLS criteria and in whom generic sildenafil is ineffective or not tolerated.

The differences in the side-effect profiles of the PDE5 inhibitors are described in the ‘Side-effect Prevalence of Phosphodiesterase type-5 inhibitors’ section below.

The frequency of dosing of tadalafil and avanafil should be limited to four times per month.

Step 4
If phosphodiesterase type-5 inhibitors are ineffective, not tolerated, or contraindicated, a referral to the Urology Department should be made.

As part of the referral please provide the patient’s cardiovascular QRISK score. See also ‘Erectile Dysfunction and CVD’ below for further information.

If appropriate, the urologist might recommend that the GP prescribes alprostadil cream (Vitaros®). A trial of eight doses is usually sufficient to assess efficacy. This treatment is not routine and should be prescribed only under specialist recommendation.

Step 5
If appropriate, the urologist might recommend that the GP prescribes prostaglandin E1 intracavernosal injections (Caverject® or Viridal®).

An initial dose will be given to the patient in specialist erectile dysfunction clinic along with instructions on how to self-administer.

Step 6
Treatment with penile implants is commissioned by NHS England for patients with end-stage ED. NHS England will fund the implantation of penile prosthesis in patients fulfilling the criteria set out in their policy via local commissioners.
Review:
If treatment is effective, continue to prescribe and review routinely at 12 month intervals.

Vacuum Erection Devices
Vacuum erection devices (VED) are mechanical devices for producing an erection that is sustained with the placement of a constricting ring across the base of the penis. Caution in patients with bleeding disorders or on anticoagulant therapy.

VED can be used as a standalone treatment for erectile dysfunction in patients with infrequent sexual intercourse or, in some cases VED can be used alongside the above treatment pathway if deemed appropriate by the specialist.

The VED and replacement constrictor rings should be prescribed by the GP on specialist recommendation for patients who fulfil the Government Selected List Scheme (SLS) criteria as described in Appendix 1.

Side-effect Prevalence of Phosphodiesterase type-5 inhibitors
Note: Vardenafil is not available on Sunderland CCG formulary

<table>
<thead>
<tr>
<th>Side-effect</th>
<th>Sildenafil</th>
<th>Tadalafil</th>
<th>Vardenafil</th>
<th>Avanafil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>12.8%</td>
<td>14.5%</td>
<td>16%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Flushing</td>
<td>10.4%</td>
<td>4.1%</td>
<td>12%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Indigestion</td>
<td>4.6%</td>
<td>12.3%</td>
<td>4%</td>
<td>&lt;10%*</td>
</tr>
<tr>
<td>Nasal congestion</td>
<td>1.1%</td>
<td>4.3%</td>
<td>10%</td>
<td>&lt;10%*</td>
</tr>
<tr>
<td>Dizziness</td>
<td>1.2%</td>
<td>2.3%</td>
<td>2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Abnormal vision</td>
<td>1.9%</td>
<td>-</td>
<td>&lt;2%</td>
<td>&lt;1%*</td>
</tr>
<tr>
<td>Back pain</td>
<td>-</td>
<td>6.55%</td>
<td>-</td>
<td>&lt;10%*</td>
</tr>
<tr>
<td>Muscle aching</td>
<td>-</td>
<td>5.7%</td>
<td>-</td>
<td>&lt;1%*</td>
</tr>
</tbody>
</table>

*complete long-term figures are not yet available for avanafil

Taken from the British Association of Urological Surgeons (2017)

Erectile Dysfunction and Cardiovascular Disease
Before initiating any treatment for erectile dysfunction, clinicians should consider the cardiovascular status of their patients due to the degree of cardiac risk associated with sexual activity.

Sexual activity may be unsafe for men who have severe/unstable CVD. NICE provides further advice about cardiac risk assessment when treating ED in CKS: Erectile Dysfunction (Dec 2017).

Psychogenic Erectile Dysfunction
Psychosexual counselling should be considered for men with a psychogenic underlying cause of erectile dysfunction. Counselling can form part, or all, of the treatment plan.
Appendix 1:

Government Selected List Scheme (SLS) criteria

a) a man with erectile dysfunction who on 14 September 1998 was receiving a course of treatment under the Act, the National Health Service (Scotland) Act 1978(a) or the Health and Personal Social Services (Northern Ireland) Order 1972(b) for this condition with any of the following drugs:
   - Alprostadil (Caverject), (MUSE), (Viridal)
   - Apomorphine Hydrochloride (Uprima)
   - Moxisylyte Hydrochloride (Erecnos)
   - Sildenafil (Viagra)
   - Tadalafil (Cialis)
   - Thymoxamine Hydrochloride (Erecnos)

b) a man who is a national of an EEA State who is entitled to treatment by virtue of Article 7(2) of Council Regulation 1612/68(c) as extended by the EEA Agreement or by virtue of any other enforceable Community right who has erectile dysfunction and was on 14 September 1998 receiving a course of treatment under a national health insurance system of an EEA State for this condition with any of the drugs listed in sub-paragraph (a); or

c) a man who is not a national of an EEA State but who is the member of the family of such a national who has an enforceable Community right to be treated no less favourably than the national in the provision of medical treatment and has erectile dysfunction and was being treated for that condition on 14 September 1998 with any of the drugs listed in sub-paragraph (a); or

d) a man who is suffering from any of the following:
   - diabetes
   - multiple sclerosis
   - Parkinson's disease
   - poliomyelitis
   - prostate cancer
   - severe pelvic injury
   - single gene neurological disease
   - spina bifida
   - spinal cord injury; or

e) a man who is receiving treatment for renal failure by dialysis; or

f) a man who has had the following surgery:
   - prostatectomy
   - radical pelvic surgery
   - renal failure treated by transplant

NHS Drug Tariff: Part XVIII B - Drugs, Medicines and Other Substances that may be ordered only in certain circumstances