NHS
Kernow
Clinical Commissioning Group

Factsheet on treatments for erectile dysfunction and penile rehabilitation following radical prostatectomy

Erectile dysfunction

Treatments for erectile dysfunction (ED) will be funded taking into account:

- the first line pharmacological treatment is the oral phosphodiesterase-5 inhibitors (PDE5I)
- generic sildenafil or a PDE5I inhibitor of the lowest acquisition cost is preferred

Selected list scheme (SLS) restrictions (see page 3) have been removed for generic sildenafil.

The quantity prescribed for erectile dysfunction should be limited to 4 doses per month.

Primary care prescribers should not initiate once daily PDE5Is in new patients and should be supported in stopping once daily prescriptions in existing patients and ensure relevant services facilitate this change.

Funding for treatment with prostaglandin E1(alprostadil) intracavernosal injections (Caverject or Viridal Duo Starter Pack) and alprostadil intraurethral instillations (MUSE urethral stick) are only recommended for patients who meet the SLS criteria and only if oral PDE5Is are contraindicated or ineffective. Invicorp (aviptadil with phentolamine) intracavernosal injection may be used when patients are unable to tolerate alprostadil intracavernosal injection.

Treatment with alprostadil cream is not normally funded in view of limited evidence for clinical and cost effectiveness.

The use of vacuum erection devices in those who are eligible is supported following specialist assessment and appropriate counselling and training on use. Vacuum devices should therefore be initiated by specialists. Once found to be an acceptable option to the patient, the device could therefore be continued in primary care.

Psychosexual counselling may be of benefit as part of an integrated strategy. Brook do offer a psychosexual service. Patients can ring 0300 303 0714 and self-refer or clinicians can refer via the email: cornwallreferrals@brook.org.uk.

The use of penile implants is under the remit of NHS England specialised commissioning and therefore outside the remit of the Cornwall area prescribing committee.

Penile rehabilitation

ED is a common complication following a prostatectomy due to cavernosal nerve damage, which can occur even after nerve-sparing, minimally invasive and/or robot assisted surgery.

The goal of penile rehabilitation is to moderate the destructive processes that occur after prostatectomy in order to preserve erectile function, either through spontaneous or assisted means. Interventions, including PDE5Is, alprostadil products and vacuum erection devices are used for penile rehabilitation.

All PDE5Is (for example, sildenafil, tadalafil, vardenafil) have been used as supportive therapy to rehabilitate erectile function (EF) successfully post-radical prostatectomy, with success following nerve sparing radical prostatectomy (NSRP). There are no comparative data and indirect comparisons do not enable the determination of which of the PDE5Is offer the best treatment outcomes.

Prescribing advice in the British National Formulary (BNF) states that a PDE5I is the first-line drug treatment for ED, regardless of the cause. PDE5Is are licensed for ED in general though not specifically as supportive therapy to rehabilitate EF after NSRP.

Guidelines and studies suggest that supportive therapy with PDE5I's to rehabilitate EF should, ideally, be started as soon as possible following surgery and be continued for 24 months to allow full recovery of EF. In the studies, regular PDE5I dosing was started up to 6 weeks after surgery and continued for up to 12 months. On-demand dosing was used with initiation ranging from the day after surgery to over 24 months later.

Both regular (daily or 3 times a week) and on-demand (prior to sexual activity) doses were effective but the studies are not designed well enough to draw firm conclusions which regimens offer the best treatment outcomes. There are no specific recommendations within the guidelines on which regimen(s) to choose.

NICE guideline NG131 prostate cancer: diagnosis and management, does not make recommendations on treatments specific to penile rehabilitation.

Commissioning policy for penile rehabilitation

NHS funding for the early on-demand use of ED treatments, such as PDE5Is, alprostadil products and vacuum erection devices, for the purpose of penile rehabilitation in patients with prostate cancer after radical prostatectomy, is supported.

The first line oral PDE5I is generic sildenafil (for example, sildenafil 50mg on demand) or a PDE5I inhibitor of the lowest acquisition cost is preferred (for example, tadalafil 20mg on-demand, or vardenafil 5 to20mg on-demand). Patients must be carefully counselled in finding the most appropriate and optimal rehabilitation

treatment. On-demand doses of sildenafil, tadalafil and vardenafil are taken no more than once a day.

NHS funding for early regular use of any form of erectile dysfunction treatment for penile rehabilitation, including daily PDE5Is, is not normally funded, due to inadequate evidence of clinical effectiveness and lack of evidence of cost effectiveness.

Selected list scheme
Only the following groups of patients are eligible to receive treatments (alprostadil, avanafil, tadalafil, vardenafil, Viagra, vacuum pumps and constrictor rings) on the NHS, as defined by the SLS:

- men who have diabetes, multiple sclerosis, Parkinson's disease, poliomyelitis
- men who have renal failure treated by transplant or dialysis
- men who have had radical pelvic surgery; prostatectomy and/or have been treated for prostate cancer (surgery and other treatment)
- men who have had severe pelvic injury, single-gene neurological disease, spinal cord injury, spina bifida

The prescription must be endorsed with "SLS". Note that avanafil is not on the Cornwall Joint Formulary.

References

What rationale, guidance and evidence is there for the use of phosphodiesterase-5 inhibitors as supportive therapy to rehabilitate Erectile Function after nerve sparing radical prostatectomy? Medicines Q&A. UKMI. May 2019

Approved by the Cornwall area prescribing committee in February 2022. Date due for review: February 2025.