

Erectile Dysfunction

Sexual and medical history

- Problems with arousal or premature ejaculation
- Previous erection quality
- Onset and duration of problems
- Assessment of psychological ED
- Screen for chest pain
- Diabetes mellitus & hypertension
- Prescription and OTC medications
- Tobacco, alcohol and illicit drug use including cannabis
- Prior surgical procedures i.e. bladder, prostate and colorectal
- Depression, anxiety and stress
- Reduced energy, loss of libido, loss of body hair-may indicate hypogonadism
- Lower urinary tract symptoms may indicate prostatic disease

Clinical presentation

- Inability to maintain an erection sufficient for penetrative sexual intercourse
- Premature loss of erection without ejaculation

Sexual History / Medical History

Consider validated ED questionnaire
e.g. the International Index for Erectile Function

Consider substituting medications known to cause Erectile Dysfunction

- Diuretics
- Beta-blockers
- Calcium Channel Blockers
- Antidepressants
- Benzodiazepines
- Antihistamines
- H2 receptor antagonists eg.
- Anti Parkinson's drugs
- Prostate cancer medications

Examination

- BP
- BMI
- HR
- Examine:
- Genitalia
- Gynaecomastia
- Prostate (if symptomatic)

Investigations

- HbA1C
- Lipid profile
- Testosterone ,FSH, LH, Prolactin
- FBC
- TFTs
- PSA

Offer life style advice

Assess and treat CVD risk
QRISK2 risk calculator

PDE5 contraindications

- Nitrates
- Hypotension
- MI, HF, dysrhythmia (unstable)
- History of non-arteritic anterior ischaemic optic neuropathy
- Hepatic impairment
- Retinitis pigmentosa
- End-stage renal disease requiring dialysis

Consider medical management

PDE5 inhibitor:

- Sildenafil
- Tadalafil

Side effects of PDE5:

- Ischemic optic neuropathy
- Priapism

PDE5 inhibitors as an NHS prescription

- Sildenafil on NHS for all men-recommended issue one per week.

PDE5 inhibitors
contraindications

No response OR Side effects to
PDE5 inhibitors

Refer to Urologist

if cause is psychological

Refer to
specialist

Consider
psychosexual
counselling

Consider serious organic causes

Refer to Urology

- Prostate feels malignant
- PSA level is above the age-specific range
- Non-painful enlargement of the testis

Refer to
Endocrinology

- Suspected hypogonadism

PDE5 Inhibitors

There are some differences between agents in how they are taken and licensed indications. Tadalafil has a longer serum half-life than the other agents and thus has a longer duration of effectiveness (up to 36 hours) compared with 4-5 hours for Sildenafil. This may be of benefit for some, but not all patients.

	Sildenafil	Tadalafil
Maximum frequency	Once daily	Once daily
Time taken before sexual activity	1 hour	At least 30 minutes
T-max	30- 120 mins (median 60 mins) (fasted state)	0.5-6 hours (median 2 hours)
Time to erection	25 mins (range 12-37 mins)	30-45 mins (range from 16 mins)
Time still able to produce erection post doe	4-5 hours	Up to 36 hours

Tadalafil is licensed for daily dosing, however this is very expensive and in many areas is considered non-formulary. Dept of Health guidance recommends one treatment per week at NHS expense for the majority of patients.

In the original guidance on the 'treatment of impotence' (HSC 1999/148)⁷ the Dept Health (DH) advised doctors that one treatment a week will be appropriate for most patients treated for erectile dysfunction. If the GP in exercising clinical judgement considers that more than one treatment a week is appropriate they should prescribe that amount on the NHS. This was based on evidence which showed that the average frequency of sexual intercourse in the 40-60 age range is once a week. The DH also cautioned that PDE5 inhibitors may have a "street value" for men who consider that these treatments will enhance their sexual performance and that excessive prescribing could therefore lead to unlicensed, unauthorised and possibly dangerous use of these treatments.