Urology CHEAT SHEETS

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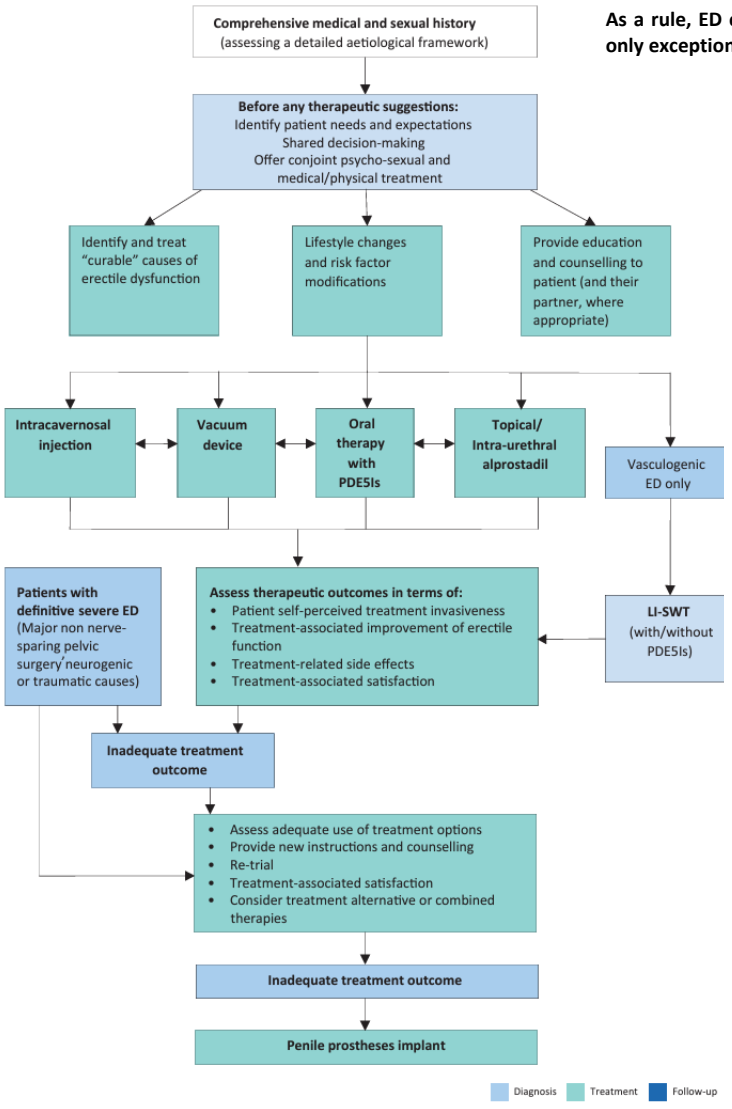
EAU Guidelines on Sexual and Reproductive Health

Erectile Dysfunction II

TREATMENT OF ERECTILE DYSFUNCTION:

Management algorithm for erectile dysfunction



Erectile dysfunction may be associated with modifiable or reversible risk factors, including lifestyle or drug related factors These factors may be modified either before, or at the same time as, specific therapies are used.

As a rule, ED can be treated successfully with current treatment options, but it cannot be cured. The only exceptions are psychogenic ED, post-traumatic arteriogenic ED, and hormonal causes.

Patient education - consultation and referrals

Educational intervention is often the first approach to sexual complaints, and consists of informing patients about the psychological and physiological processes involved in the individual's sexual response, in ways the patient can understand. This first level approach has been shown to favour sexual satisfaction in men with erectile dysfunction (ED).

Oral pharmacotherapy

Four potent selective phosphodiesterase type 5 inhibitors (PDE5Is) have been approved by the European Medicines Agency (EMA) for treatment of ED: Sildenafil, Tadalafil, Vardenafil, Avanafil. Choice of drug depends on frequency of intercourse and the patient's personal experience.

An absolute contraindication to PDE5Is is use of any form of organic nitrate or NO donors.

Tadalafil 5 mg is currently the only licensed drug for the treatment of both ED and LUTS with level 1 evidence

Topical/Intraurethral alprostadil

Clinical data are still limited. Significant improvement compared to placebo was recorded for IIEF-EF domain score, SEP2 and SEP3 in a broad range of patients with mild-to-severe ED.

Hormonal treatment

Hypogonadism is either a result of primary testicular failure or secondary to pituitary/hypothalamic causes. When clinically indicated, testosterone therapy can be considered for men with low or low-normal testosterone levels.

Vacuum erection devices

Provide passive engorgement of the corpus cavernosum, together with a constrictor ring placed at the base of the penis to retain blood within the corpus. Published data report that efficacy, in terms of erections satisfactory for intercourse, is as high as 90%, and satisfaction rates range between 27% and 94%.

Intracavernous injections therapy

Efficacy rates for intracavernous alprostadil of > 70% have been found in the general ED population, as well as in patient subgroups, with reported satisfaction rates of 87-93.5% in patients and 86-90.3% in partners after the injections .

Low Intensity Shockwave therapy (LI-SWT)

Several single-arm trials have shown a beneficial effect of LI-SWT, but data from prospective randomised trials are conflicting, and many questions remain to be answered especially because of the heterogeneity among shockwave generators and treatment protocols. They may be offered to patients with vasculogenic ED, although they should be fully counselled before treatment.

Platelet-Rich Plasma (PRP)

Intracavernous injection of has been recently investigated in several prospective and retrospective trials and although the results appear promising, should be used only in a clinical trial setting.

Botulinum Neurotoxin

At present, no recommendations can be provided, since larger trials are needed to confirm these findings and define its efficacy and safety for ED.

Penile prostheses

Penile implants are an effective solution, usually for patients who do not respond to more conservative therapies. There is sufficient evidence to recommend this approach in patients not responding to less-invasive treatments due to its high efficacy, safety and satisfaction rate. There are also currently no head to head studies comparing the different manufacturers' implants, demonstrating superiority of one implant type over another.

Recommendations	Strength rating
Fully inform patients of the mechanism of action and how phosphodiesterase type 5 inhibitors (PDE5Is) should be taken, as incorrect use/inadequate information is the main causes of a lack of response to PDE5Is.	Strong
Direct the patient to Cognitive Behaviour Therapy as a psychological approach (include the partner), when indicated, combined with medical treatment to maximise treatment outcomes.	Strong
Discuss with patients undergoing active treatment for prostate cancer (PCa) about the risk of sexual changes other than erectile dysfunction (ED), including sexual desire reduction, changes in orgasm, anejaculation, Peyronie like disease and penile size changes.	Strong
Initiate lifestyle changes and risk factor modification prior to, or at the same time as, initiating ED treatments.	Strong
Use PDE5Is as first-line therapy for the treatment of ED.	Strong
Use intracavernous injections as an alternative first-line therapy in well-informed patients or as second-line therapy.	Strong
Use topical/intra-urethral alprostadil as an alternative first-line therapy in well-informed patients who: • do not wish to have or are not suitable for oral vasoactive therapy; • do not wish to have intracavernous injections; • in patients who prefer a less-invasive therapy.	Weak
Use low-intensity shockwave treatment (Li-SWT) with/without PDE5Is in patients • with mild vasculogenic ED; • as an alternative therapy in well-informed patients who do not wish to have or are not suitable for oral vasoactive therapy; • who are vasculogenic ED patients who are poor responders to PDE5Is	Weak
Use vacuum erection devices in well-informed patients requesting non-invasive, drug-free management of ED.	Weak
Implant a penile prosthesis if other treatments fail or depending upon patient preference. Patients should be fully informed of the benefits and harms associated with the procedure.	Strong
Start pro-erectile treatments at the earliest opportunity after radical prostatectomy/pelvic surgery and other curative treatments for PCa.	Weak