

Pharmacotherapy of erectile dysfunction

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Basic methods of ED treatment are based on principles of evidence-based medicine. Numerous researches and achievements in andrology, in particular in the field of studying ED demand from the doctor of continuous perfection of the knowledge, for qualitative treatment of patients. To achieve this aim the basic stages of the patient are required: the sexual anamnesis, definition of a degree weights ED (questioning), revealing of the accompanying diseases promoting ED (a diabetes, a hypertension, hypogonadism, hyperlipidemia, etc.), revealing patients to whom the special treatment is needed (surgery, endocrine correction, treatment together with the psychiatrist).

The goal-directed approach is now used to choose the optimal ED therapy. Patient's choice is so that every patient wants to start the treatment with PDE-5 inhibitors (1st line of therapy). If it is not effective the other drugs or drugs combinations can be used, you can stop treatment, use the special investigation or apply invasive treatment: intracavernous, intraurethral therapy, implantation of penile prostheses.

There are three lines of ED treatment. The first line is PDE-5 inhibitors, drugs of central action (such as apomorphine), vacuum-devices, psychosexual therapy. The second line is intraurethral and intracavernous therapy. The third line is implantation of penile prostheses. The contraindications to those drugs and methods are widely known.

There are different approaches to classify the drugs for ED treatment. By the level of action there are drugs of the central action and drugs of peripheral action. By the mechanism of action there are agonists of dopamine receptors, agonists of serotonin receptors, donors of NO, prostaglandines, neurotransmitters, hormones and others. There are initiators of erection and modulators of erection. And also there are drugs and drug helpers.

There many drugs which efficiency must be proved in randomized controlled trials. We know a few about some active substances. Influence of testosterone to erection is the regulation of night spontaneous erections.

We can use the combined therapy of ED. That is using of more than 1 drugs different in pharmacokinetics and pharmacodynamics but the same in a clinical effect. This approach has a great future. The other variant is the application of several standard, but essentially various methods of ED treatment for potentiation of clinical effect of a preparation and/or elimination of its side effect.

Gene therapy can be the next revolution in this area, but its applying is not widespread.

Clinical comparative estimation of effectiveness of PDE-5 inhibitors and other drugs is impossible because of low number of randomized trials.

Since the PDE-5 inhibitors made a revolution in the ED treatment this problem was partly solved. But the following aspects are important and require the ditail study. Not only high specialized doctors treat ED (andrologists, urologists, endocrinologists), but also doctors of the general practice. The doctor engaged in ED treatment should remember that the true purpose of treatment ED is not only improvement of penile rigidity, but also quality of patient`s sexual life. Availability and efficiency of PDE-5 inhibitors can lead to that we can not diagnose and cure a disease which symptom is ED. The anti-ED drugs are frequently used by men with normal sexual function for increase of their sexual opportunities. And it requires to correct our aims in applying the pharmacotherapy of ED treatment.