

Oral Drugs for Erectile Dysfunction

M Foad, MSc, M Sweed, MSc* and M Osama MSc**

Registrars, Department of Obstetrics and Gynecology, Ain Shams University

Causes of Erectile Dysfunction

- Psychogenic causes
- Vascular causes
- Neurogenic causes
- Endocrine abnormalities

There are many drugs used in treatment of erectile dysfunction with different routes of introduction including oral, subcutaneous injection, topical application, intracavernosal and urethral application. The golden rule for management of erectile dysfunction is proper diagnosis of the cause with proper examination and history taking. Drugs used in erectile dysfunction should be used with caution and under complete medical supervision especially in cases of penile malformations in penile angulation, cavernosal malformation and peyronie's disease

General Cautions to be Considered during Therapy

- Priapism: patients should be instructed to report any erection lasting 4 hours or longer.
- Painful erection is more likely to occur especially in cases of penile malformation or angulation.
- Careful follow up for signs of penile fibrosis.
- Not to use more than one agent at same time.
- Predisposition to prolonged erection as in sickle cell anaemia, multiple myeloma and leukemia.

General Side Effect of Drugs Use in Erectile Dysfunction

- Priapism
- Painful erection.
- Fainting, hypotension or hypertension, tachycardia, chest pain, supraventricular extrasystoles , peripheral vascular disorders and headache

General Contraindication of Drugs Used in Erectile Dysfunction

- Predisposition to prolonged erection as in sickle cell anaemia, multiple myeloma and leukemia.
- Patients with penile implants.
- When sexual activity is medically contraindicated

General Common Drug Interaction

- Nicorandil: most drugs used significantly enhance its hypotensive effect.
- Nitrates: most drugs used enhance its hypotensive effect.
- Grape fruit juice: it possibly increases the plasma level of most drugs used.
- Most drugs used enhance its hypotensive effect.
- Antivirals, antifungals and antibacterials may increase the level of some drugs used in erectile dysfunction.

Drugs

Phosphodiesterase Type-5 Inhibitors

Sildenafil

Dose

Initially 50mg 1 hour before sexual activity, Subsequent doses adjusted according to response with max 100 mg/24hr.

Special Side Effects

- Dyspepsia.
- Headache.
- Vomiting.
- Flushing.
- Visual disturbance.
- Hypersensitivity reactions.

Special caution

- Patients using nitrate therapy.
- Recent stroke.
- Unstable angina and myocardial infarction.

Market names and prices

- Viagra 100mg (30 Pounds/ Tablet).
- Viagra 50mg (27.5 Pounds/ Tablet).
- Vega 100mg (20 Pounds / Tablet).
- Vega 50mg (15 Pounds / Tablet).

Tadalafil

Dose

Initially 10mg 1/2-12 hour before sexual activity, Subsequent doses adjusted according to response with max. 20mg/24hr.

Special Side Effects

As Sildenafil +

- Back pain
- Myalgia

Special Caution

- Hepatic impairment.
- Renal impairment
- Uncontrolled arrythmias.
- Uncontrolled hypertension

Market names and prices

- Cialis 20mg 60 Pounds/ Tablet.

Vardenafil

Dose

Initially 10mg 25-60minutes before sexual activity, Subsequent doses adjusted according to response with max. 20mg/24hr

Special Side Effects

As Sildenafil +

- Photosensitivity reaction.
- Syncope-hypotension.
- Rarely hypertonia

Special Caution

- Hepatic impairment.
- Renal impairment.
- Bleeding disorder.
- Active peptic ulceration.

Market names and prices

- Levitra 10mg (50 Pounds/ Tablet).
- Levitra 20mg (50 Pounds/ Tablet).

Dopamine agonist

Apomorphine

Dose

- By sublingual administration
- Initially 2mg 20 minutes before sexual activity.
- Subsequent doses adjusted according to response with max. 3mg/8hr.

Special Side Effects

- Dizziness.
- Yawning.
- Rhinitis.
- Pharyngitis.
- Hypersensitivity reaction including angioedema.

Special Caution

- Hepatic impairment.
- Renal impairment.
- Uncontrolled hypertension.
- Hypotension.

Market names and prices

- Uprima.
- Not available in Egyptian market.

Other Available Oral Preparations of Phosphodiesterase Type-5 Inhibitors

- Silagra 100mg (8.25 Pounds/ Tablet).
- Kamagra 100 mg (7 Pounds/ Tablet).

Other Available routes of Phosphodiesterase Type-5 Inhibitors

- Kamgra Spray 30 pounds.
- Kamgra Lozenge 50mg (4 lozenges for 30 pounds).