Flowzak®

Capsules

(Tamsulosin Hydrochloride)

DESCRIPTION:

Tamsulosin hydrochloride is an antagonist of alpha$_{1A}$ adrenoceptors in the prostate.
Tamsulosin HCl is (-)-(*R*)-5-[2-[[2-(*o*-Ethoxyphenoxy) ethyl]amino]propyl]-2-methoxybenzenesulfonamide, monohydrochloride.
The empirical formula of Tamsulosin HCl is $C_{20}H_{28}N_2O_5S.HCl$.

FLOWZAK CAPSULES ARE AVAILABLE FOR ORAL ADMINISTRATION AS:

FLOWZAK Capsule
Each Capsule Contains Sustained Release Pellets of Tamsulosin HCl equivalent to Tamsulosin HCl U.S.P ……0.4 mg.

CLINICAL PHARMACOLOGY:

Mechanism of Action:
Tamsulosin is a selective antagonist at alpha-1-receptors. Alpha-1-receptors are involved in contraction of smooth muscle and are abundant in the prostate, prostatic capsule, prostatic urethra, and bladder neck. Blockade of these adrenoceptors cause smooth muscles in the bladder neck and prostate to relax, resulting in an improvement in urine flow rate and a reduction in symptoms of benign prostatic hyperplasia (BPH).

Pharmacokinetics:

Absorption
Absorption of Tamsulosin HCl is essentially complete (>90%) following oral administration under fasting conditions. The time to maximum concentration (Tmax) is reached by four to five hours under fasting conditions and by six to seven hours when Flowzak capsules are administered with food. Taking Flowzak capsules under fasted conditions results in a 30% increase in bioavailability (AUC) and 40% to 70% increase in peak concentrations (Cmax) compared to fed conditions.

Distribution
Tamsulosin HCl is extensively bound to human plasma proteins (94% to 99%), primarily alpha-1 acid glycoprotein (AAG), with linear binding over a wide concentration range.

Metabolism
Tamsulosin HCl is extensively metabolized by cytochrome P450 enzymes in the liver. Tamsulosin is metabolized by CYP2D6 and CYP3A4.

Excretion
Less than 10% of a dose being present in the form of unchanged medicine. The elimination half-life of Tamsulosin in normal volunteers is 14.9 ± 3.9 hours.

INDICATIONS:

Flowzak (Tamsulosin HCl) capsules are indicated for the treatment of the signs and symptoms of benign prostatic hyperplasia (BPH). Tamsulosin is not indicated for the treatment of hypertension.

FOR BENIGN PROSTATIC HYPERPLASIA:

Oral dosage

Adult (males)
The recommended dosage is 0.4 mg per oral once daily, 30 minutes following a meal and given at approximately the same time each day. In patients who fail to respond to this dose after 2 to 4 weeks of therapy, the dose can be increased to 0.8 mg per oral once daily. If therapy is interrupted for several days at either the 0.4 mg or 0.8 mg dose, therapy should resume at the 0.4 mg/day dosage.

FOR MEDICAL EXPULSIVE TREATMENT (MET) AS AN ADJUNCT TO CONSERVATIVE MANAGEMENT OF DISTAL URETAL NEPHROLITHIASIS.

Oral dosage

Adults (males/females)
For adults with radiopaque lower ureteral stones of 10 mm or smaller, dose is 0.4 mg Tamsulosin per oral at bed time for 28 days or until definite stone passage (i.e., evidence of stone on urine straining) in addition to standard analgesia (e.g., NSAID, etc.). Data suggest that patients receiving Tamsulosin for medical expulsive therapy (MET) with stones of 5 to 10mm pass the stones earlier and with less pain than if no Tamsulosin is received; thus, medical expulsive therapy MET may be considered in these patients. Tamsulosin may offer little benefit over placebo for patients with stones of less than 5 mm.

Children and Adolescents
The recommended dose for patients with radiopaque lower ureteral stones of 10 or 12 mm or smaller is Tamsulosin 0.4 mg per oral at bed time, for children older than 4 years. For children 4 years or younger 0.2 mg per oral at bed time, given for 28 days or until definite stone passage (i.e., evidence of stone on urine straining). Tamsulosin is given in addition to standard analgesia (e.g., ibuprofen). Most patients receiving Tamsulosin pass stones earlier and with less pain than if no Tamsulosin is received. Mild somnolence is common. In children, if pain is controlled with oral analgesia, clear liquids are tolerated, and there is no evidence of infection, they are closely monitored for spontaneous passage for 3 to 4 weeks prior to definitive therapy, since most data demonstrate safe lower ureteral stone expulsion in the first 10 days of conservative medical management.

MAXIMUM DOSAGE:

Adults: 0.8 mg/day per oral.
Elderly: 0.8 mg/day per oral.

DOSING CONSIDERATIONS:

Hepatic Impairment
Mild to moderate hepatic impairment (Child Pugh Class A or B): No dosage adjustment is needed. Severe hepatic impairment (Child Pugh Class C): No dosage recommendations are available. Tamsulosin has not been studied in patients with severe hepatic impairment.

Renal Impairment and Intermittent hemodialysis
No dosage adjustment is needed. Patients with renal impairment should be monitored carefully for exaggerated hypotensive effects (e.g., first dose effect). Patients with end-stage renal disease (CrCl less than 10 mL/minute/1.73 m^2) have not been specifically studied.

ADMINISTRATION:

Oral Administration
Administer approximately 30 minutes after the same meal each day.
The capsules should be swallowed whole and not crushed, chewed, or opened as per the package label. However, trials with pediatric patients have reported that the capsules were opened if the patient had difficulty swallowing or if the prescribed dosage required. The contents of a capsule (i.e., granules) were mixed with cool, soft food (e.g., yogurt or pudding) or with juice. If Tamsulosin is administered via this method, instruct the patient not to chew, crush, or dissolve the granules as these actions may result in rapid drug release and serious side effects.
The administration of Tamsulosin through nasogastric, gastric, or jejunostomy tubes has not been formally evaluated by the manufacturer; reports suggest that the granules may adhere to the sides of the tube, which complicates administration and increases the risk of tube blockage.

ADVERSE REACTIONS:

The following adverse reactions have been reported & may occur during the use of Flowzak **(Tamsulosin HCl):**
Body as whole: Headache, infection, asthma, back pain, chest pain.
Nervous system: Dizziness, somnolence, insomnia, decreased libido.
Respiratory System: Rhinitis, pharyngitis, increased cough, sinusitis.
Digestive system: Diarrhea, nausea, tooth disorder.
Urinogenital System: Abnormal ejaculation.
Special Senses: Blurred vision.

CONTRAINDICATIONS:

Flowzak capsules are contraindicated in patients:
Known to be hypersensitive to Tamsulosin hydrochloride or any component of Flowzak capsules.
Reactions have included; skin rash, urticaria, pruritus, angioedema and respiratory symptoms

PREGNANCY AND LACTATION:

Tamsulosin is only approved by the FDA to treat benign prostatic hyperplasia in men. Tamsulosin is not indicated for use in women and there are no adequate data on the developmental risks associated with the use of Tamsulosin during human pregnancy.

There is no data on the use of Tamsulosin in breast-feeding women. There is no data regarding the presence or absence of Tamsulosin in human milk, the effects of Tamsulosin on the breastfed infant, or the effects on milk production.

WARNINGS AND PRECAUTIONS:

Orthostasis
The signs and symptoms of orthostasis (postural hypotension, dizziness and vertigo) were detected more frequently in Flowzak capsule-treated patients than in placebo recipients. As with other alpha adrenergic blocking agents there is a potential risk of syncope.

Priapism
Rarely (probably less than 1 in 50,000 patients), Tamsulosin, like other alpha$_1$ antagonists, has been associated with priapism (persistent painful penile erection unrelated to sexual activity). Because this condition can lead to permanent impotence if not properly treated, patients must be advised about the seriousness of the condition.

Screening for Prostate Cancer
Prostate cancer and BPH frequently co-exist; therefore, patients should be screened for the presence of prostate cancer prior to treatment with Flowzak capsules and at regular intervals afterwards.

Intraoperative Floppy Iris Syndrome
Intraoperative Floppy Iris Syndrome (IFIS) has been observed during cataract surgery in some patients treated with alpha$_1$ blockers; including Flowzak capsules. Most reports were in patients taking the alpha$_1$ blocker when IFIS occurred, but in some cases, the alpha$_1$ blocker had been stopped prior to surgery.

DRUG INTERACTIONS:

Cytochrome P450 Inhibition: Concomitant treatment with ketoconazole (a strong inhibitor of CYP3A4) resulted in an increase in the Cmax and AUC of Tamsulosin by a factor of 2.2 and 2.8, respectively.
Cimetidine: Treatment with cimetidine resulted in a significant decrease (26%) in the clearance of Tamsulosin hydrochloride, which resulted in a moderate increase in Tamsulosin hydrochloride AUC (44%).
Other Alpha Adrenergic Blocking Agents: Interactions between Flowzak capsules and other alpha adrenergic blocking agents may be expected.
PDE5 Inhibitors: Concomitant use of these two drug classes can potentially cause symptomatic hypotension.
Warfarin: Caution should be exercised with concomitant administration of warfarin and Flowzak capsules

OVERDOSAGE:

In case of Tamsulosin HCl overdose support of the cardiovascular system is of first importance. Restoration of blood pressure and normalization of heart rate may be accomplished by keeping the patient in the supine position. If this measure is inadequate, then administration of intravenous fluids should be considered. If necessary, vasopressors should then be used and renal function should be monitored and supported as needed. Laboratory data indicate that Tamsulosin hydrochloride is 94% to 99% protein bound; therefore, dialysis is unlikely to be of benefit.

STORAGE:

Do not store above 25°C; excursions permitted to 15°– 30°C
Protect from heat, sunlight & moisture.

PACKAGING:

Flowzak (Tamsulosin HCl 0.4mg) capsules are available in Pack of 10's Alu-Alu Blisters.
Keep out of the reach of children.
To be sold on the prescription of a registered medical practitioner only.

فلوزیک® ۰.۴ ملی گرام کیپسولز

ٹیمسولوسن ہائیڈروکلورائیڈ

خوراک:۔ یہ دوا ڈاکٹر کی ہدایات کے مطابق استعمال کریں۔

ہدایات:۔ کیپسول کو کھولے یا چبائے بغیر پانی سے نگل لیں
دوا کو ۲۵ ڈگری سینٹی گریڈ سے زیادہ حرارت پر نہ رکھیں۔
تمام دوائیں بچوں کی پہنچ سے دور رکھیں۔
دوا کو دھوپ اور گرمی سے محفوظ خشک جگہ پر رکھیں۔

پیشکش:۔ **فلوزیک®** ٹیمسولوسن ہائیڈروکلورائیڈ ۰.۴ ملی گرام (۱۰) کیپسولز ایلو ایلو بلسٹر پیک میں دستیاب ہیں۔

Manufactured by:

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