

- **PRESCRIBING AND DISPENSING INFORMATION** The need for continuing therapy for urinary incontinence should be reviewed every 4–6 weeks until symptoms stabilise, and then every 6–12 months.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: oral solution

Tablet

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- ▶ **Tropium chloride (Non-proprietary)**
Tropium chloride 20 mg Tropium chloride 20mg tablets | 60 tablet [PoM] £7.42 DT = £5.54
- ▶ **Flotros** (Galen Ltd)
Tropium chloride 20 mg Flotros 20mg tablets | 60 tablet [PoM] £18.20 DT = £5.54
- ▶ **Regurin** (Mylan)
Tropium chloride 20 mg Regurin 20mg tablets | 60 tablet [PoM] £26.00 DT = £5.54
- ▶ **Uraplex** (Contura Ltd)
Tropium chloride 20 mg Uraplex 20mg tablets | 60 tablet [PoM] £26.00 DT = £5.54

1.2 Urinary retention

31-May-2017

Urinary retention

Description of condition

Urinary retention is the inability to voluntarily urinate. Causes in children can include severe voiding dysfunction, urethral blockage, drug treatment (such as opioids and antimuscarinic drugs), conditions that reduce detrusor contractions or interfere with relaxation of the urethra, and neurogenic causes.

Acute urinary retention is a medical emergency characterised by the abrupt (over a period of hours) development of the inability to pass urine, associated with increasing pain and the presence of a distended bladder, which can be palpated on examination.

Chronic urinary retention is the gradual (over months or years) development of the inability to empty the bladder completely, characterised by difficulties with initiating and maintaining urinary stream, urinary overflow, no sensation for needing to void and a post-void residual.

Treatment

[EvGr] Treatment of urinary retention depends on the underlying condition. Catheterisation is used as an effective initial management strategy, which should be followed by diagnostic evaluation and appropriate treatment of the underlying cause. Clean intermittent catheterisation on a long-term basis is effective for children with idiopathic or neurogenic bladder dysfunction.

The selective alpha-adrenoceptor blockers, doxazosin below and tamsulosin hydrochloride p. 530, have been shown to be of use in primary bladder neck dysfunction and dysfunctional voiding; they reduce urethral sphincteric pressure, thereby improving bladder emptying in children. Treatment should be under specialist advice only. ⚠

ALPHA-ADRENOCEPTOR BLOCKERS

Doxazosin

09-Feb-2020

● INDICATIONS AND DOSE**Hypertension**

- ▶ BY MOUTH USING IMMEDIATE-RELEASE MEDICINES
- ▶ Child 6–11 years: Initially 500 micrograms once daily, then increased to 2–4 mg once daily, dose should be increased at intervals of 1 week

- ▶ Child 12–17 years: Initially 1 mg once daily for 1–2 weeks, then increased to 2 mg once daily, then increased if necessary to 4 mg once daily, rarely doses of up to 16 mg daily may be required

Dysfunctional voiding (initiated under specialist supervision)

- ▶ BY MOUTH USING IMMEDIATE-RELEASE MEDICINES
- ▶ Child 4–11 years: Initially 0.5 mg daily, adjusted according to response, dose should be increased at monthly intervals; maximum 2 mg per day
- ▶ Child 12–17 years: Initially 1 mg daily, adjusted according to response, dose may be doubled at intervals of 1 month; usual maintenance 2–4 mg daily; maximum 8 mg per day

DOSE EQUIVALENCE AND CONVERSION

- ▶ Patients stabilised on immediate-release doxazosin can be transferred to the equivalent dose of modified-release doxazosin.

- **UNLICENSED USE** Not licensed for use in children.
- **CONTRA-INDICATIONS** History of postural hypotension
- **CAUTIONS** Care with initial dose (postural hypotension) · cataract surgery (risk of intra-operative floppy iris syndrome) · heart failure · pulmonary oedema due to aortic or mitral stenosis
- **INTERACTIONS** → Appendix 1: alpha blockers
- **SIDE-EFFECTS**
 - ▶ **Common or very common** Arrhythmias · asthenia · chest pain · cough · cystitis · dizziness · drowsiness · dry mouth · dyspnoea · gastrointestinal discomfort · headache · hypotension · increased risk of infection · influenza like illness · muscle complaints · nausea · oedema · pain · palpitations · skin reactions · urinary disorders · vertigo
 - ▶ **Uncommon** Angina pectoris · anxiety · appetite abnormal · arthralgia · constipation · depression · diarrhoea · gastrointestinal disorders · gout · haemorrhage · insomnia · myocardial infarction · sensation abnormal · sexual dysfunction · stroke · syncope · tinnitus · tremor · vomiting · weight increased
 - ▶ **Rare or very rare** Alopecia · bronchospasm · flushing · gynaecomastia · hepatic disorders · leucopenia · malaise · muscle weakness · thrombocytopenia · vision blurred
 - ▶ **Frequency not known** Floppy iris syndrome
- **PREGNANCY** No evidence of teratogenicity; manufacturers advise use only when potential benefit outweighs risk.
- **BREAST FEEDING** Accumulates in milk in *animal studies*—manufacturer advises avoid.
- **HEPATIC IMPAIRMENT** Manufacturer advises caution in mild to moderate impairment (limited information available); avoid in severe impairment (no information available).
- **PATIENT AND CARER ADVICE** Patient counselling is advised for doxazosin tablets (initial dose).
Driving and skilled tasks May affect performance of skilled tasks e.g. driving.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: capsule, oral suspension, oral solution

Modified-release tablet

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- ▶ **Cardura XL** (Upjohn UK Ltd)
Doxazosin (as Doxazosin mesilate) 4 mg Cardura XL 4mg tablets | 28 tablet [PoM] £5.00 DT = £5.00
- ▶ **Doxazosin (as Doxazosin mesilate) 8 mg** Cardura XL 8mg tablets | 28 tablet [PoM] £9.98 DT = £9.98
- ▶ **Doxadura XL** (Dexcel-Pharma Ltd)
Doxazosin (as Doxazosin mesilate) 4 mg Doadadura XL 4mg tablets | 28 tablet [PoM] £4.75 DT = £5.00