

**SUMMARY OF PRODUCT CHARACTERISTICS****1. NAME OF THE MEDICINAL PRODUCT**

Oxybutynin Hydrochloride Tablets 2.5mg

**2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Oxybutynin hydrochloride 2.5mg

For excipients, see 6.1

**3. PHARMACEUTICAL FORM**

Tablet

Blue, biconvex, uncoated capsule-shaped tablets, marked OB scoreline 2.5 on one side and plain on the reverse

**4. CLINICAL PARTICULARS****4.1 Therapeutic indications**

Adults: Urinary incontinence, urgency and frequency in unstable bladder conditions due to idiopathic detrusor instability (motor urge incontinence) or neurogenic bladder disorders (detrusor hyperreflexia) in conditions such as multiple sclerosis and spina bifida.

Paediatric population

Oxybutynin hydrochloride is indicated in children over 5 years of age for:

- Urinary incontinence, urgency and frequency in unstable bladder conditions due to idiopathic overactive bladder or neurogenic bladder disorders (detrusor overactivity)
- Nocturnal enuresis associated with detrusor overactivity, in conjunction with non-drug therapy, when other treatment has failed

**4.2 Posology and method of administration**

*Adults*

The usual initial dose is 5mg two or three times a day. This dose may be increased to a maximum dose of 5mg four times a day to obtain a clinical response provided that the side effects are well-tolerated.

*Elderly (including frail elderly)*

A lower dose is recommended because the elimination half-life is increased in the elderly. A dose of 2.5mg twice a day is likely to be adequate, particularly if the patient is frail. This dose may be increased if necessary to 5mg twice a day provided that the side effects are well tolerated.

*Children (under 5 years of age)*

Not recommended

*Children (over 5 years of age)*

**Neurogenic bladder instability:** The usual dose is 2.5mg twice a day. This dose may be increased, if necessary, to 5mg two or three times daily provided that the side effects are well-tolerated.

**Nocturnal enuresis:** The usual dose is 2.5mg twice a day. This dose may be increased, if necessary, to 5mg two or three times daily provided that the side effects are well-tolerated. The last dose should be given before bedtime.

#### 4.3 Contraindications

Oxybutynin hydrochloride tablets are contraindicated in patients with:

Hypersensitivity to oxybutynin or any of the excipients.

Myasthenia Gravis

Narrow-angle glaucoma or shallow anterior chamber.

Gastrointestinal obstruction including paralytic ileus and intestinal atony.

Toxic megacolon, severe ulcerative colitis.

Patients with bladder flow obstruction where urinary retention may be precipitated.

Porphyria

#### 4.4 Special warnings and precautions for use

Oxybutynin hydrochloride tablets should be used with caution in the frail elderly and children who may be more sensitive to the effects of the product and in patients with autonomic neuropathy (such as those with Parkinson's disease), severe gastrointestinal motility disorders, hepatic or renal impairment.

Anticholinergics should be used with caution in elderly patients due to the risk of cognitive impairment.

Gastrointestinal disorders: Anticholinergic medicinal products may decrease gastrointestinal motility and should be used with caution in patients with gastrointestinal obstructive disorders, intestinal atony and ulcerative colitis.

Oxybutynin may aggravate tachycardia (and thus be cautious in case of hyperthyroidism, congestive heart failure, cardiac arrhythmia, coronary heart disease, hypertension), cognitive disorders and symptoms of prostatic hypertrophy.

Anticholinergic CNS effects (e.g. hallucinations, agitation, confusion, somnolence) have been reported; monitoring recommended especially in first few months after initiating therapy or increasing the dose; consider discontinuing therapy or reducing the dose if anticholinergic CNS effects develop.

Since oxybutynin can cause narrow-angle glaucoma, patients should be advised to contact a physician immediately if they are aware of a sudden loss of visual acuity or ocular pain.

Oxybutynin may reduce salivary secretions which could result in dental caries, parodontosis or oral candidiasis.

Anticholinergic medicinal products should be used with caution in patients who have hiatus hernia/gastro-oesophageal reflux and/or who are concurrently taking medicinal products (such as bisphosphonates) that can cause or exacerbate oesophagitis.

When oxybutynin is used in high environmental temperatures, this can cause heat prostration due to decreased sweating.

Patients with rare hereditary problems of galactose intolerance, the LAPP lactase deficiency or glucose-galactose malabsorption should not take this medicine.

Paediatric population:

The use of oxybutynin in children under 5 years of age is not recommended; it has not been established whether oxybutynin can be safely used in this age group.

There is limited evidence supporting the use of Oxybutynin in children with monosymptomatic nocturnal enuresis (not related to detrusor overactivity).

In children over 5 years of age, Oxybutynin hydrochloride should be used with caution as they may be more sensitive to the effects of the product, particularly the CNS and psychiatric adverse reactions.

#### **4.5 Interaction with other medicinal products and other forms of interaction**

Care should be taken if other anticholinergic agents are administered together with oxybutynin, as potentiation of anticholinergic effects may occur.

The anticholinergic activity of oxybutynin is increased by concurrent use of other anticholinergics or medicinal products with anticholinergic activity, such as amantadine and other anticholinergic antiparkinsonian medicinal products (e.g. biperiden, levodopa), antihistamines, antipsychotics (e.g. phenothiazines, butyrophenones, clozapine), quinidine, digitalis, tricyclic antidepressants, atropine and related compounds like atropinic antispasmodics and dipyridamole.

By reducing gastric motility, oxybutynin may affect the absorption of other drugs. Oxybutynin is metabolised by cytochrome P 450 isoenzyme CYP 3A4. Concomitant administration with a CYP3A4 inhibitor can inhibit oxybutynin metabolism and increase oxybutynin exposure. Oxybutynin may antagonise prokinetic therapies.

Concomitant use with cholinesterase inhibitors may result in reduced cholinesterase inhibitor efficacy.

Patients should be informed that alcohol may enhance the drowsiness caused by anticholinergic agents such as oxybutynin (see section 4.7).

#### **4.6 Pregnancy and lactation**

##### **Pregnancy:**

There are no adequate data from the use of oxybutynin pregnant women.

Studies in animals have shown reproductive toxicity (see section 5.3).

The potential risk for humans is unknown. Oxybutynin should not be used in pregnancy unless clearly necessary.

##### **Lactation:**

Oxybutynin is excreted in breast milk.

Oxybutynin should not be used during breast-feeding.

#### **4.7 Effects on ability to drive and use machines**

Oxybutynin hydrochloride tablets can cause drowsiness or blurred vision and patients should be cautioned as to potential effects on the ability to drive, operate machinery or perform hazardous work.

#### 4.8 Undesirable effects

	<b>Very Common</b> ≥ 1/10	<b>Common</b> ≥ 1/100 to <1/10	<b>Uncommon</b> ≥ 1/1,000 to <1/100	<b>Rare</b> ≥ 1/10,000 to <1/1000	<b>Not Known*</b>
<b>Infections and infestations</b>					urinary tract infection
<b>Immune System Disorders</b>					hypersensitivity
<b>Psychiatric disorders</b>		confusional state			anxiety, hallucinations, nightmares, paranoia, agitation, cognitive disorders in elderly, symptoms of depression, Dependence to oxybutynin (in patients with history of drug or substance abuse)
<b>Nervous System Disorders</b>	somnolence, headache, dizziness,				Cognitive disorders, convulsions, drowsiness, disorientation
<b>Eye disorders</b>	vision blurred	dry eyes			Angle closure glaucoma, mydriasis, ocular hypertension
<b>Cardiac disorders</b>					arrhythmia tachycardia
<b>Vascular</b>		flushing which may be more			

<b>disorders</b>		marked in children			
<b>Gastrointestinal Disorders</b>	dry mouth, nausea, constipation	Diarrhea, vomiting	anorexia, dysphagia, abdominal discomfort, decreased appetite		gastroesophageal reflux disease, Pseudo-obstruction in patients at risk (elderly or patients with constipation and treated with other drugs that decrease intestinal motility)
<b>Skin and subcutaneous tissue disorders</b>	dry skin				Angioedema, rash, urticaria, hypohidrosis, photosensitivity
<b>Renal and urinary disorders</b>		urinary retention,			difficulty in micturition
<b>Injury, poisoning and procedural complications</b>					Heat stroke
*Cannot be estimated from the available clinical data.					

### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via Yellow Card Scheme at: [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard).

### 4.9 Overdose

The symptoms of overdosage with oxybutynin progress from an intensification of the usual side effects of CNS disturbances (from restlessness and excitement to psychotic behaviour), circulatory changes (flushing, fall in blood pressure, circulatory failure etc), respiratory failure, paralysis and coma.

Measures to be taken are:

1. Immediate gastric lavage
2. Physostigmine by slow intravenous injection

Adults: 0.5 to 2.0 mg of physostigmine by slow intravenous administration. Repeat after 5 minutes, if necessary up to a maximum total dose of 5mg

Children: 30 micrograms/kg of physostigmine by slow intravenous administration. Repeat after 5 minutes, if necessary up to a maximum total dose of 2mg.

Fever should be treated symptomatically with tepid sponging or ice packs.

In pronounced restlessness or excitation, diazepam 10mg may be given by intravenous injection, tachycardia may be treated by intravenous injection of propranolol and urinary retention can be managed by bladder catheterisation.

In the event of progression of the curare- like effect to the paralysis of the respiratory muscles, mechanical ventilation will be required.

## **5. PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

Urinary antispasmodics G04B D04

Oxybutynin has a direct antispasmodic effect on the smooth muscle of the bladder detrusor.

Oxybutynin also inhibits the effects of acetylcholine on smooth muscle by blocking muscarinic receptors. Pharmacological models have established differences in affinity for subtypes of muscarinic receptors.

The pharmacodynamic properties of oxybutynin result in relaxation of the bladder detrusor muscle. Patients with unstable bladder experience increased bladder volume and a decreased incidence of spontaneous contractions of the detrusor muscle.

### **5.2 Pharmacokinetic properties**

Following oral administration, oxybutynin is rapidly absorbed from the gastrointestinal tract ( $t_{max}$  0.5-1.4hours).

Studies have established a  $c_{max}$  after a 5-10mg dose in young healthy patients of 8-12ng/ml. Larger inter-individual variations in plasma concentrations are seen.

Oxybutynin is subject to extensive first pass metabolism, resulting in an absolute systemic availability of 6.2%.

The major metabolite produced is desethyloxybutynin. Several other metabolites are produced, including phenylcyclohexylglycolic acid.

Urinary excretion has been established as less than 0.02% of an administered dose.

Oxybutynin is 83-85% plasma albumin bound.

Oxybutynin is eliminated biexponentially. Mean elimination half life is 2 hours. Repeated administration results in little accumulation.

### **5.3 Preclinical safety data**

Oxybutynin hydrochloride has been shown to have low acute toxicity when administered orally to either mice, rats or dogs. In a repeat dosing experiment of 6 months duration in rats, daily oral doses of 63mg/kg or more were associated with decreases in food consumption and body weight gain and with minor pathological changes in the liver and kidneys. At daily oral

doses of 6mg/kg administered for 6 months, dogs exhibited transient anorexia, tremors and nervousness but these effects were not associated with microscopic signs of tissue damage.

There is no evidence from preclinical studies to suggest either mutagenic or carcinogenic activity for oxybutynin.

Reproduction tests indicate no adverse effects on fertility or reproductive performance in rats given daily oral doses of 15mg/kg. Oxybutynin hydrochloride was not teratogenic in rats and rabbits at oral dose levels (20mg/kg/day in rats and 48mg/kg/day in rabbits) which did not cause significant maternal toxicity. At maternally toxic doses of oxybutynin (100mg/kg/day), increased incidence of extra thoracolumbar ribs in rat foetuses, as well as mortality of neonates, was observed. At oral daily dose levels up to 20mg/kg in rats, oxybutynin hydrochloride had no adverse effects on gestation or on the birth and development of offspring up to weaning.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Lactose monohydrate  
Microcrystalline cellulose  
Calcium stearate  
Indigo carmine (aluminium lake) E132

### **6.2 Incompatibilities**

None known

### **6.3 Shelf life**

3 years

### **6.4 Special precautions for storage**

Store below 25°C in a dry place. Protect from light.

### **6.5 Nature and contents of container**

Polypropylene tablet container with tamper-evident polyethylene cap  
Pack sizes: 20, 30, 50, 60, 84, 90, 100, 250, 500

PVC (250µm ± 5µm)/aluminium foil (20µm) blister packs  
Pack sizes: 20, 30, 50, 56, 60, 84, 90, 100

Not all pack sizes may be marketed

### **6.6 Special precautions for disposal**

No specific instructions for use/handling

## **7. MARKETING AUTHORISATION HOLDER**

Strides Shasun (UK) Ltd  
Unit 4 Metro Centre  
Tolpits Lane  
Watford

Hertfordshire  
WD18 9SS  
Trading as: Co-pharma

**8. MARKETING AUTHORISATION NUMBER(S)**

PL 13606/0070

**9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

3 June 1998 / 21 March 2006

**10. DATE OF REVISION OF THE TEXT**

23.09.2016