

# **Derbyshire Medicines Management, Prescribing and Guidelines DERBYSHIRE PRIMARY CARE FORMULARY**

Chapter 11: Eye

**Updated: September 2023** 

#### The following prescribing guideline is relevant to the eye chapter and can be found here

Dry eye prescribing

• Guideline for the medical treatment of glaucoma and ocular hypertension

# 11.0 Prescribing Note

## Preservative-free (PF) formulations

PF preparations are usually more expensive than equivalent preservative containing alternatives. Only consider PF preparations when a patient shows signs of preservative hypersensitivity (preservative intolerance should be diagnosed by an ophthalmologist.); or signs of preservative toxicity (sometimes seen with multiple daily administrations); or when a patient wears soft contact lenses or daily disposable contact lenses and wearing glasses instead is not a viable option (see also 11.9), such as for long courses.

If PF formulation is warranted, proprietary preservative-free formulations (available as unit dose preparations or specifically designed containers) should be prescribed if at all possible (see also glaucoma guideline). Manufactured "specials" are unlicensed and almost invariably cost significantly more.

# ADMINISTRATION OF DRUGS TO THE EYE

Refer to BNF https://bnf.nice.org.uk/treatment-summaries/eve/

#### 11.2 CONTROL OF MICROBIAL CONTAMINATION

Refer to BNF https://bnf.nice.org.uk/treatment-summaries/eye/

#### 11.3 **ANTI-INFECTIVE EYE PREPARATIONS**

## 11.3.1 ANTIBACTERIALS

For treatments of minor self-limiting conditions patients are encouraged to self-care. Infective conjunctivitis is usually self-limiting and settles without treatment within 1-2 weeks.

#### Self-care advice:

- Remove contact lenses until all symptoms and signs of infection have completely resolved, and any treatment has been completed for 24 hours
- Lubricant eye drops may reduce eye discomfort; these are available over-the-counter (OTC)
- Clean away infected secretions from eyelids and lashes with cotton wool soaked in boiled and cooled water. Avoid cross contamination.
- Wash hands regularly, particularly after touching infected secretions, and avoid sharing pillows and towels.

**Chloramphenicol** Eye drops 0.5% 10ml 1st line drug, available OTC Eye ointment 1% 4g Do not confuse with ear drops 10.5% 10ml

Do not confuse with ear drops (5% and 10%)

- 1. Chloramphenicol eye drops are available OTC from community pharmacies for adults and children aged 2 and over. If symptoms resolve within the first 5 days of treatment, continue chloramphenicol for 48 hours after resolution. If OTC treatment not appropriate, consider delayed prescription of topical antibiotics. People should re-consult if their symptoms persist for longer than 2 weeks.
- 2. Following a review of the available toxicological data and a calculation of daily exposure to boron from a typical dosing regimen, the MHRA have concluded that the balance between the benefits and risks of chloramphenicol eye drops containing borax or boric acid remains positive for children aged 0 to 2 years. Chloramphenicol eye drops can be safely administered to children aged 0 to 2 years where antibiotic eye drop treatment is indicated. MHRA, July 2021

- 3. There are no particular signs or symptoms that will allow differentiation between a bacterial and a viral infection. An infective cause of conjunctivitis is more likely when:
  - There is a history of close contact with another affected person
  - Symptoms of upper respiratory tract infection are present
  - The eyes are glued together by discharge after sleep, or mucopurulent discharge is seen on examination
  - Conjunctivitis starts in one eye then spreads to the other
  - An enlarged lymph node in front of the ear is identified
- 4. It is not necessary to exclude a child from school or childcare if they have infective conjunctivitis, unless there is an outbreak of infective conjunctivitis. In the event of an outbreak, advice should be sought from the local PHE centre by the school or childcare centre – see PHE guidance on <u>Health protection</u> in education and childcare settings.
- 5. Alternative treatment options to chloramphenicol include
  - fusidic acid 1% eye drops- significantly more expensive than chloramphenicol eye drops.
     Recommended by NICE/PHE as alternative to chloramphenicol eye drops. Suitable for use in pregnancy.
  - azithromycin 1.5% eye drops- suitable for use in pregnancy
  - gentamicin 0.3% eye drops- significantly more expensive than chloramphenicol eye drops.

#### 11.3.2 ANTIFUNGALS

Refer to specialist for further advice

#### 11.3.3 ANTIVIRALS

Urgently refer all patients with suspected herpes simplex to the hospital eye department. Only prescribe an antiviral eye preparation after specialist advice when same day secondary care appointment is not available.

Ganciclovir eye gel 0.15%

**GREEN** specialist recommendation

1. Aciclovir eye ointment is classified as **GREY** specialist recommendation, for use when ganciclovir is not suitable.

#### 11.4.1 CORTICOSTEROIDS

Topical steroids should normally only be used on recommendation by an ophthalmologist for a defined length of time and should not normally be on repeat prescription. Steroid eye drops should not be prescribed for undiagnosed red eye.

1. Hydrocortisone sodium phosphate 3.35mg/ml PF eye drops (Softacort) is **GREY** consultant/ specialist initiation. For non-infectious allergic or inflammatory conjunctival disease, where a preservative-free eye drop is required beyond initial acute treatment. Specialist to communicate instructions for tapering and treatment length. Treatment over 14 days is off-licence.

# 11.4.2 OTHER ANTI-INFLAMMATORY PREPARATIONS

For treatments of self-limiting conditions such as allergic conjunctivitis patients are encouraged to <u>self-care</u>. Sodium cromoglycate and Otrivine-Antistin can be purchased over the counter.

**Otrivine-Antistin** (antazoline sulphate 0.5% + xylometazoline hydrochloride 0.05%) eye drops 10ml **Olopatadine** 1mg/ml eye drops 5ml

- 1. Sodium cromoglycate (Murine hayfever relief) is used prophaylactically before the onset of predictable seasonal allergies such as hayfever and vernal kerato-conjunctivitis and can be purchased over the counter.
- 2. Otrivine-Antistin is used to relieve acute ocular symptoms of allergy and can be purchased over the counter. Where the condition is systemic (e.g. in hayfever), oral antihistamines are often preferred.
- 3. Ciclosporin 0.1% eye drops (Ikervis) **GREY** after consultant/specialist initiation: as per NICE TA369 for the treatment of severe keratitis. Response to treatment should be reassessed at least every 6 months by the specialist.

#### 11.5 MYDRIATICS AND CYCLOPLEGICS

**Cyclopentolate** hydrochloride eye drops 0.5%, 1% **Tropicamide** eye drops 0.5%, 1%

- 1. Cyclopentolate reaches its maximal effect in 30-60 minutes. This lasts for about 40 minutes; complete recovery may take up to 24 hours.
- 2. Tropicamide produces rapid-onset mydriasis of short duration, reaching its maximal effect at 40-60 minutes. Recovery may take up to 6 hours.

#### 11.6 TREATMENT OF GLAUCOMA

See glaucoma treatment guideline.

This section is updated in line with the glaucoma guideline.

#### 1<sup>st</sup> line treatment

**Latanoprost** eye drops 50mcg/ml 1<sup>st</sup> line prostaglandin analogue (PGA)

**Betaxolol** eye drops 0.25%, 0.5% 5ml 1<sup>st</sup> line beta-blocker (BB)

2<sup>nd</sup> line treatment (if IOP target not achieved)

**Dorzolamide** eye drops 2% 5ml 1<sup>st</sup> line carbonic anhydrase inhibitor (CAI)

**Brimonidine** eye drops 0.2% 5ml 1<sup>st</sup> line alpha2 agonist

# Combination eye preparation

**Latanoprost/timolol** eye drops 0.5% 2.5ml *PGA+BB* **Dorzolamide/timolol** eye drops 2%/0.5% 5ml *CAI+BB* 

**Brinzolamide/brimonidine** eye drops 2%/0.2% 5ml *CAI+alpha2 Prescribe as Simbrinza* **Brimonidine/timolol** eye drops 0.2%/0.5% 5ml *Alpha2+BB Prescribe as Combigan* 

- 1. Combination preparations should only be considered if IOP not controlled on monotherapy.
- 2. If the patient is intolerant to preservatives the 1<sup>st</sup> line option is PF latanoprost.
- 3. Most glaucoma eye drops are now prescribed generically, with exception of some combination preparations. Where generic prescribing of eye drops is recommended due to cost-effectiveness, both primary and secondary care clinicians should follow this advice.

#### 11.7 LOCAL ANAESTHETICS

No drug is recommended for this section.

#### 11.8.1 TEAR DEFICIENCY, OCULAR LUBRICANTS, AND ASTRINGENTS

For treatments of minor conditions such as dry eyes/ sore tired eyes, patients are encouraged to self-care by measures such as good eyelid hygiene and avoidance of environmental factors. Lubricant eye treatments that consist of a range of drops, gels and ointments can be easily purchased over-the-counter.

DDICB recommends Simple dry eye can be managed by directing the patient to self-care and to purchase dry eye lubricants over—the-counter.

See dry eye prescribing position statement.

This section is updated in line with the dry eye position statement.

# Hypromellose (AaproMel 0.3%) alternative cost-effective brands include TearDew 0.3% Polyvinyl alcohol (Sno-Tears) Carbomer 0.2% (Aacomer)

NatPSA Potential contamination of some carbomer-containing lubricating eye products. NatPSA Certain batches of the following eye gels are subject to recall at present (see FSN for details): AACARB, AACOMER 0.2%, PUROPTICS. As a precautionary measure, while further testing is conducted, avoid use of all carbomer-containing lubricating eye products for patients in the following groups:-

- individuals with cystic fibrosis;
- patients being cared for in critical care settings (e.g., adult, paediatric and neonatal ICU);
- severely immunocompromised;
- patients awaiting lung transplantation.

Where an alternative non carbomer-containing product is not available or not suitable, apply clinical risk assessment as appropriate.

# 11.8.2 OCULAR DIAGNOSTIC AND PERI-OPERATIVE PREPARATIONS AND PHOTODYNAMIC TREATMENT Specialist use only

# 11.9 CONTACT LENSES

See advice in BNF

Some drugs and preservatives in eye preparations can accumulate in hydrogel lenses and may induce toxic reactions. Therefore, unless medically indicated, the lenses should be removed before instillation of the eye preparation and not worn during the period of treatment. Alternatively, unpreserved drops can be used. Eye drops may, however, be instilled while patients are wearing rigid corneal contact lenses. Ointment preparations should never be used in conjunction with contact lens wear; oily eye drops should also be avoided.