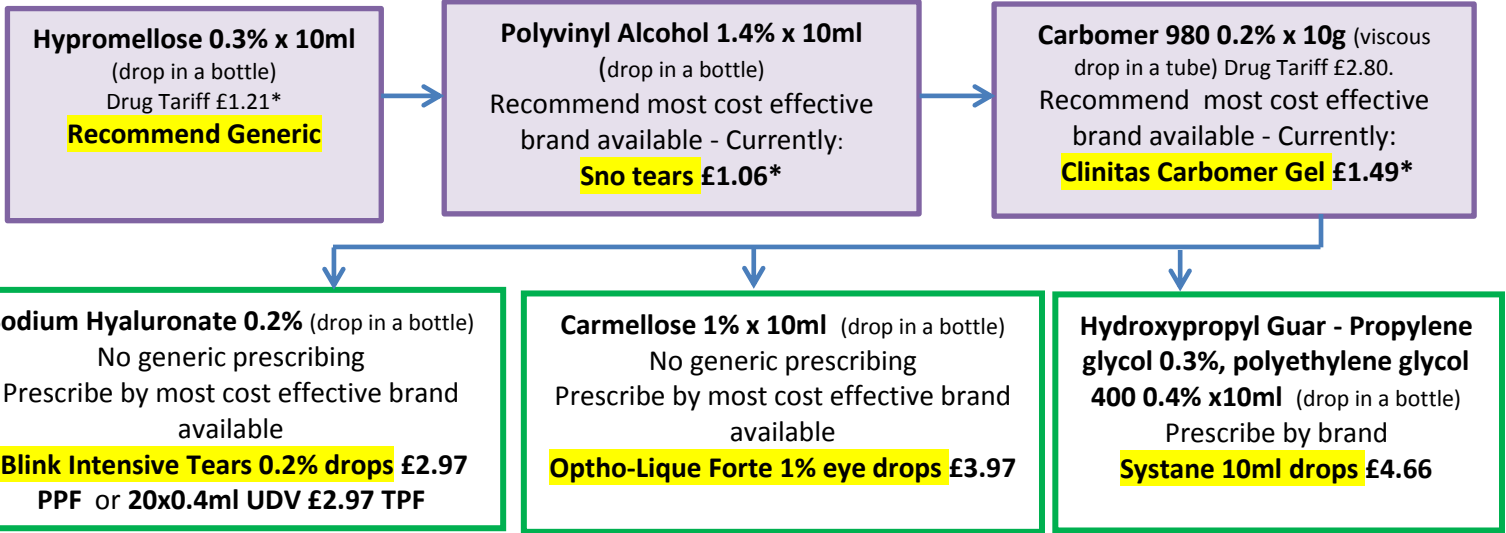


**Prescribing Guidelines for Ocular Lubricants in Primary Care**

\*All prices are NHS Indicative prices (not retail price) and are correct according to Jan 2019 Drug Tariff

**For all Patients:** Review preventative factors and ensure patient aware. Ensure appropriate patients are referred in to secondary care. Recommend regular use of a safe, effective, hot compress and lid hygiene for appropriate cases - especially where there is any Meibomian Gland Dysfunction.

**Patient with NO known Preservative Allergy:**

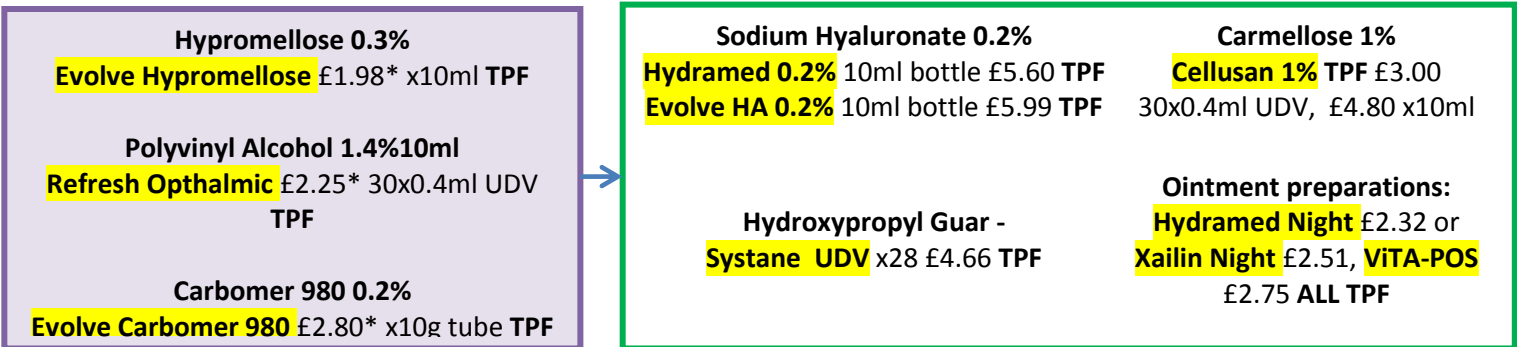


If dry eye symptoms at night then consider adding an ointment preparation such as **Hydramed Night** £2.32 or **Xailin Night** £2.51 or **VITA-POS** £2.75

If patient develops preservative allergy revert to options below

**Patients who need Preservative Free treatment:**

**For patients with:** True preservative allergy, evidence of epithelial toxicity from preservatives, soft contact lens wearers (advise to wear glasses when possible) and long term topical treatment using drops more than 4-6 times daily  
**PPF = Pseudo preservative free, TPF = True Preservative free, UDV = Unit Dose Vials**



Refer to secondary care ophthalmologist if symptoms persist or do not respond 3 different drops for 4-6 weeks each



Options shaded in purple are recommended for mild dry eye and should be considered self-care under the NHSE Guidance



Options in green should be considered first line choices for prescribing in moderate dry eye

# **Guidelines for Dry Eye Management**

## **Background**

The external surface of the eye, the tear secreting (lacrimal) glands, Meibomian glands and eyelids function as an integrated unit to secrete and clear tears. Abnormalities in any component of this functional unit can result in an unstable and unrefreshed tear film and any of a set of symptoms called dry eye syndrome. Dry eye syndrome is generally classified as mild, moderate and severe based on both symptoms and signs. Due to the nature of dry eye disease the classification is imprecise because characteristics at each level overlap. Dry eye syndrome is also loosely categorised as either aqueous tear deficiency or evaporative tear deficiency (secondary to Meibomian Gland Dysfunction), these conditions may coexist.

## **Prevalence**

- 15-33% in patients aged 65 or older
- Prevalence increases with age
- More common in those with connective tissue disorders, thyroid disorders, in blepharitis and contact lens wearers
- 50% more common in females

## **Common Symptoms** (including but not limited to):

### **Mild**

Irritation, itching, soreness, ocular discomfort, burning, may have intermittent blurred vision which improves with blinking.

Symptoms worsen through the day.

May get "tired eye" when reading or watching TV.

May get watering of eyes, especially when exposed to wind.

Sensitivity to light (not photophobia).

The diagnosis of dry eye in its mild form is difficult to make because of the inconsistent correlation between reported symptoms and clinical signs as well as the poor specificity+/- sensitivity of clinical tests. It is important to be able to identify other causes of symptoms from dry eyes e.g. lid abnormalities. Most dry eye conditions have a chronic course, repeated observation and reporting of symptoms will allow clinical diagnosis of dry eye in most cases.

### **Moderate**

Increased discomfort and frequency of symptoms and the negative effects on visual function may become more consistent.

### **Severe**

Increasing frequency of visual symptoms, that may become constant, as well as potentially disabling.

## **Signs**

- Redness of the eyes
- Punctate fluorescein staining, fluorescein break up
- May be associated with blepharitis

**Assessment** - Examination is difficult in General Practice without a slit lamp and fluorescein, but rule out:

- Bacterial conjunctivitis (sticky discharge, consider an eye swab for MC+S and viral / PCR)
- Seasonal /allergic conjunctivitis (watery discharge, itching)
- Remember that certain drugs exacerbate dry eyes (e.g. antihistamines, beta blockers, anti-spasmodics, anti-depressants and anti-psychotics)

## Refer to secondary care

- if known or suspected to have an underlying systemic condition such as Sjogrens ( dry eyes and dry mouth) or a connective tissue disorder and thyroid disorders
- has persistent symptoms that do not respond ( 3 different drops each for 4-6/52)
- abnormal lid anatomy or function e.g. trichiasis, lid malposition, poor blink
- have a low threshold for referral of younger people with dry eye symptoms
- refer children with blepharokeratitis

## MANAGEMENT

### Preventative

By taking suitable precautions patient can lessen the symptoms of dry eye syndrome and in mild cases this may be sufficient to avoid the need for treatment.

Precautions include:

- Limiting contact lenses to shorter periods
- Smoking adversely affects the lipid layer of the tear film and tear proteins.
- Alcohol consumption may increase the risk of dry eye syndrome (pooled results from 10 studies)
- If using a computer for long periods, placing the monitor at or below eye level, avoid staring at the screen, take frequent breaks
- Avoiding make up
- Maintaining good lid hygiene (warm compresses and lid massage)
- Using a humidifier to moisten ambient air and avoid prolonged periods in air conditioned environments
- Many medications (such as antihistamines, anti-depressants and diuretics) have drying effects on the mucous membranes of the eyes.
- Healthy diet. Definitive studies lacking but there are studies showing a beneficial effect from omega-3-acid. The use of systemic omega 3 fatty acids in patients on anticoagulation therapy should be undertaken with caution.

Tear replacements treatments are used if lifestyle changes do not relieve symptoms. Tear replacement is frequently unsuccessful when used as a sole treatment if additional causative factors are not concomitantly addressed.

Patient education is an important aspect of successful management of this condition. Educate patient about chronic nature of dry eye and set realistic expectations for therapeutic goals.

Tear replacements help ocular surfaces regain their normal homeostatic states. They remove debris, replenish tear volume, stabilise the tear film, dilute hyperosmolar tear film and reduce levels of pro-inflammatory mediators

There are many preparations available commercially and their compositions vary in electrolyte concentration, preservative concentration, osmolarity and viscosity. There is a lack of high quality comparative evidence on efficacy of individual products.

### Self-Care

 Products within the purple shaded areas on the flow chart are considered suitable for self-care under the NHSE guidance <https://www.england.nhs.uk/wp-content/uploads/2018/03/otc-guidance-for-ccgs.pdf>

The guidance states:

Patients should be encouraged to manage both dry eyes and sore eyes by implementing some self-care measures such as good eyelid hygiene and avoidance of environmental factors alongside treatment. Mild to moderate cases of dry eye syndrome or sore tired eyes can usually be treated using lubricant eye treatments that consist of a range of drops, gels and ointments that can be easily be purchased over the counter.

**PLEASE NOTE: Exemption from Prescription Charges does not automatically exclude a patient from the NHSE guidance:**

The guidance states: Individual patients where the clinician considers that their ability to self-manage is compromised as a consequence of medical, mental health or significant social vulnerability to the extent that their health and/or wellbeing could be adversely affected if reliant on self-care. To note that being exempt from paying a prescription charge does not automatically warrant an exception to the guidance.

**Preservative toxicity**

Benzalkonium chloride (BAC) is the most frequently used preservative in topical ophthalmic preparations, as well as in topical lubricants. The adverse effects associated with BAC is related to its concentration, frequency of use, the level or amount of tear secretion, and the severity of the ocular surface disease.

For patients with moderate to severe dry eye disease, the absence of preservatives is of more critical importance than the particular agent used in ocular lubricants. If patients have more than one eye condition for which they are using eye drops, their potential exposure to preservatives is increased.

Preservative-free formulations are necessary for patients with severe dry eye with ocular surface disease and impairment of lacrimal gland secretion, or for patients on multiple, preserved topical medications for chronic eye disease. In a patient with mild dry eye, preserved drops are often well tolerated when used 4-6 times a day or less.

**Sodium Hyaluronate products**

It has been noted that there is some anecdotal evidence around differences between Sodium Hyaluronate products. This may be to do with the molecular weight of the hyaluronic acid chain within the products. Robust evidence is lacking in this area, Calderdale CCG would recommend trying one of the cost effective products listed in patients who are new to Sodium Hyaluronate.

Unless there is documented advice from an ophthalmologist to maintain a specific patient on a non-formulary brand in patients who are already being treated with Sodium Hyaluronate, a switch is appropriate to see if either of the most cost effective equivalent products are suitable. If one is not suitable please try another before reverting back to the patient's original brand,

**Reference:**

Clinical Knowledge Summaries NICE guidance <https://cks.nice.org.uk/dry-eye-syndrome#!scenario>