

Dry Eye Syndromes

- Dry eye disease (DED) is a common disorder where an inadequate tear film results in ocular surface irritation.
- The spectrum of DED varies from a mild, self-limiting, irritation to severe, **sight-threatening** disease. The quality-of-life impact of moderate DED compares to that of life on haemodialysis or with mild angina.¹
- For information regarding the assessment of a patient presenting with DED symptoms see <https://cks.nice.org.uk/topics/dry-eye-disease/>.

Summary of Management of DED by Severity

| Type | Extent of Symptoms | Vision Impact | Typical Treatment |
|----------|----------------------------------|---------------------------------|--|
| Mild | Soreness, irritation, discomfort | Negligible impact on the vision | Temporary treatment 1-2 x day with OTC drops, lid hygiene |
| Moderate | Increased discomfort | Transient blurring of vision | Long-term use of PF drops 4 or more times per day, lid hygiene |
| Severe | Marked discomfort or pain | Reduction in vision | Specialist management |

Referral to a corneal specialist should be considered if the patient has continuing clinical signs or symptoms, despite using regular topical lubricants, or if there are other features that might suggest a systemic cause, such as *oral dryness* or enlarged salivary glands.

Lid Hygiene

The majority of patients with DED have evaporative dry eye because of **blepharitis** or **meibomian gland dysfunction**.² Therefore it is recommended that all patients with DED undertake a four-to-six-week trial of lid hygiene consisting of daily use of a USB hot compress for 10 minutes followed by lid massage. Occasional use of **lid wipes** or **cleaning solution** (e.g., Optase®, Blephaclean®, Blephasol®) is also advised. For more information see <https://cks.nice.org.uk/topics/blepharitis/management/management-of-blepharitis/>.

Topical Treatment

There is significant variety in the quality and value of Dry Eye Disease treatments available OTC. More expensive *preservative-free* (PF) treatments may afford better value for a patient as the bottle will last longer with a shelf-life up to 6 months rather than the usual 28 days for a preserved bottle. Patients requiring drops more than 3-4 times per day should use preservative-free treatment as preservatives cause damage to the ocular surface.

- Thinner/less viscous drops (e.g., hypromellose or polyvinyl alcohol) will provide more temporary relief albeit with less blurring.
- Thicker/more viscous drops (e.g., carboxymethyl cellulose, hyaluronic acid) will cause longer term relief, but may cause blurring of vision.

¹ Utility assessment to measure the impact of dry eye disease. Ocul Surf. 2006 Jul;4(3):155-61

² TFOS DEWS II Epidemiology Report Ocul Surf. 2017 Jul;15(3):334-365.

- Ointments (e.g., Hylo Night, Xailin Night) can be recommended for night-time use if the patient complains of symptoms at night-time or on waking. If the patient prefers (or has a lanolin allergy) a gel can be used.

Advice for patients on administering eye drops: www.myeyedrops.info; ointment <https://patient.info/news-and-features/how-to-use-eye-ointment>

Prescribing advice

NHS England Guidance³ states:

- “Self-care with OTC medication should be encouraged for conditions that are ‘**self-limiting**’ or are a ‘**minor issue**’.” This includes patients with mild DED.
- For patients with mild DED whom the prescriber feels has compromised ability to self-care because 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 we suggest prescribing Eyeaze Carmellose 1% eye drops PF (10ml - £1.81).
- “Patients ***should continue to have treatments prescribed*** if the condition is ‘long-term’, more complex, ‘not minor’, ‘complex’, POM, not responded to OTC or patients who are not capable of self-care.” - this applies to patients with moderate or severe DED.

Prescribing Summary

| | | |
|--|---|--|
| <p>Lid hygiene for all patients with DED</p> <ul style="list-style-type: none"> • Daily use of USB heated eye mask (self-purchase) for 10 minutes daily, following by lid massage. • Occasional use of lid wipes or cleaning solution (e.g., Optase, Blephaclean, Blephasol lotion OTC) <p>https://cks.nice.org.uk/topics/blepharitis/management-of-blepharitis/</p> <p>https://www.youtube.com/watch?v=AbQlvJ5FOYA</p> | <p>First Line (mild DED)</p> <p>Patient to purchase drops OTC and use 2-3 x daily</p> | <p>Nocturnal or early morning symptoms Use at night:</p> <ul style="list-style-type: none"> • Evolve Carbomer 980 0.2% eye gel PF (10g £) • HydraMed Night (5g £) • Thealoz Duo Gel (30 x 0.4g £££) <p>* If supply issues, alternatives include:</p> <ul style="list-style-type: none"> • Xailin Night (5g, £) • Hylo-Night (5g, £) |
| | <p>2nd Line (moderate DED)</p> <p>Sodium hyaluronate PF drops QDS + PRN:</p> <ul style="list-style-type: none"> • Xailin Plus HA 0.2% PF (10ml ££) • Hy-Opti 0.2% PF (12ml ££) <ul style="list-style-type: none"> ○ Good for those who struggle with squeezing bottle. • Eyeaze 0.4% PF (10ml ££) <ul style="list-style-type: none"> ○ Thicker, longer lasting, but more blurring. | |
| | <p>3rd Line (severe DED)</p> <p>Drops QDS + PRN</p> <ul style="list-style-type: none"> • Thealoz Duo QDS + PRN (10ml £££) • Viscotears Tri action (10ml £££) • Cationorm (10ml £££) +/- 2nd line SH PF drops | |

Cost indicator £=
<£3, ££=£3-£6,
£££=>£6
££££= >£10

Anti-Inflammatory Treatments: Only for patients under secondary (specialist) care with persistent clinical signs despite intensive lubricant treatment:
Softacort (hydrocortisone 0.3% PF, 30 Unit dose, ££££)- specialist initiation only
Prednisolone 0.5% Minims (20 unit doses, ££££)- specialist use only
Ikervis (ciclosporin 0.1%; 30 unit doses, ££££)- specialist initiation only, see [shared care guideline](#)

³ <https://www.england.nhs.uk/publication/conditions-for-which-over-the-counter-items-should-not-routinely-be-prescribed-in-primary-care-guidance-for-ccqs/>