DRYEYE ASSOCIATION UK

June 2025

ISSUE 4

Welcome to the May edition of the newsletter.

In January we braved the cold to travel to Aston University in Birmingham for our second patient education day, summary in community news. We also report an interesting research study looking at dry eye in young adults and a summary of the research on HRT and dry eye for those of us a little more mature in years!

A save the date: we'll be back at Aston on Saturday 8th November for our 3rd education day and the charity AGM.

Enjoy this newsletter!

Charity team x

In this newsletter you can expect:

COMMUNITY NEWS

A big thanks to everyone who came to the Education Day in January, kindly sponsored by Scope Ophthalmics and Thea Pharmaceuticals. Despite the chill, 100 members attended with talks from eyecare professionals. The highlight was Professor Jennifer Craig from Auckland talking about the imminent release of DEWS 3. This report will summarise up to date evidence regarding the treatment of dry eye and it's expected out over the summer – we will report back in the next edition of the newsletter.

In the afternoon we hosted patient discussion groups. The results were as follows (more detailed list on the Dry Eye Association website):

- When it came to the advice people wish they knew when first diagnosed, blinking exercises, hot compresses and avoiding baby shampoo and non-eye friendly cosmetics were highlighted as well as a recognition that there is a high degree of individual variation in management.
- In terms of suggested areas for research, an assessment of diagnostic pathways and eye professionals awareness of evidence-based guidelines were popular suggestions as was an assessment of natural remedies and omega supplements.
- Attendees requested that the DEAUK look at developing a best practice guide for patients covering sterile hygiene routine, blinking exercises, heat therapy and eye lid massage and correct drop usage – noted!

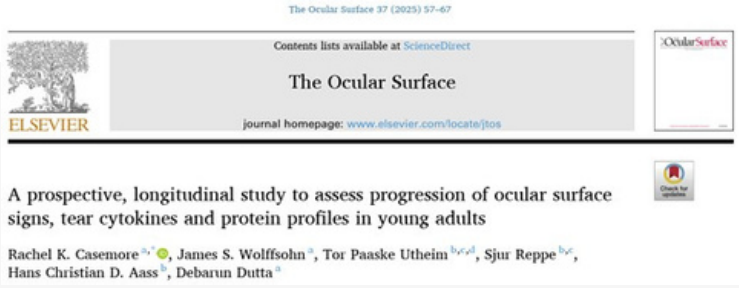
These responses will inform the development of the DEA over the next few years. Thank you to all who took part and our generous sponsors.

In early June, Dal, Aysar and Aga were on the main stage of the British Contact Lens Association conference in Birmingham talking about their experiences of developing and living with dry eye disease which was really impactful. The Dry Eye Association also had a stand kindly staffed by Aga and Jane.

COMMUNITY NEWS CONT'D

Join the Dry Eye Foundation's first ever patient symposium! Our expert panelists (doctors and patients) bring a wealth of clinical and real-life experience to our packed curriculum at this full-day event. Sessions range from examining disease impact and problem-solving discussions (including mental health) to disease, diagnosis and treatment topics, a deep dive into "What works?" from both scientific and real-world perspectives, strategies for bridging communication gaps in the patient-doctor relationship, and what the future of DED holds.
The programme and registration information can be found at: https://www.dryeyefoundation.org/symposium

RESEARCH ROUND UP



Study Highlights Need for Early Advice to Young Adults Amid Rising Dry Eye Disease Cases

Researchers at Aston University, in collaboration with Oslo University Hospital and Sørlandet Hospital Trust in Norway, have called for more preventive advice to be given to young adults regarding dry eye disease. This follows a study that found 90% of participants exhibited at least one sign of the condition in their eyes.

Study Design and Findings

The study followed 50 young adults aged 18 to 25 over time. Led by Dr. Rachel Casemore at the Aston University School of Optometry, this research is the first of its kind. The researchers assessed dry eye disease symptoms, lifestyle factors, and followed up after one year to observe any disease progression.

The findings, published in The Ocular Surface journal, showed:

- 56% of participants had dry eye disease at baseline
- 90% had at least one symptom of dry eye
- Approximately 50% of participants had lost at least 25% of their meibomian glands

The meibomian glands are crucial as they produce the outer lipid layer of the tear film, preventing tear evaporation and maintaining eye moisture.

After one year, researchers observed significant progression of dry eye disease in the participants.

Correlation with Screen Use

The study found a strong correlation between screen time and signs of dryness on the eye surface. Participants averaged eight hours of screen use daily. Prolonged screen time was associated with greater evidence of dry eye disease symptoms and progression.

Importance of Early Detection and Prevention

Researchers concluded that early detection of potential signs of dry eye disease is critical. Identifying at-risk individuals allows for early intervention and advice to manage the condition before significant progression.

Dr. Casemore emphasized that slowing the progression of dry eye disease can be achieved through:

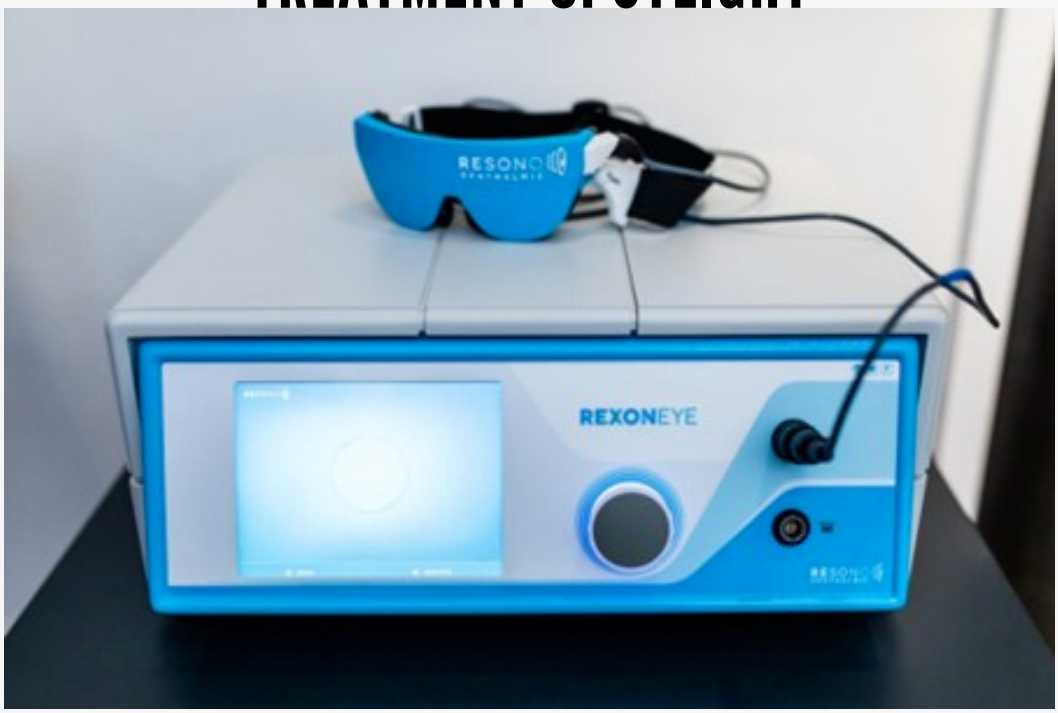
- Taking regular screen breaks
- Performing blink exercises to promote meibomian gland function
- Maintaining good hydration
- Following a balanced diet rich in omega-3 fatty acids (e.g., oily fish)
- Keeping regular sleep patterns

Individuals with irregular sleep due to disorders or anxiety are encouraged to seek professional advice. For contact lens wearers, regular eye check-ups are vital, along with adhering to replacement schedules, wearing time limits, and cleaning regimens, and avoiding sleeping, showering, or swimming while wearing lenses.

To find out more click here.

Rachel K. Casemore et al, A prospective, longitudinal study to assess progression of ocular surface signs, tear cytokines and protein profiles in young adults, The Ocular Surface (2025). DOI: 10.1016/j.jtos.2025.02.011

TREATMENT SPOTLIGHT



QMR (Quantum Molecular Resonance)

QMR (Quantum Molecular Resonance) delivers a weak alternate electrical current with a specific frequency range (4-64 MHz) to stimulate cell metabolism and regeneration, potentially improving dry eye symptoms. Studies have shown that QMR treatment can improve symptoms and signs in various types of dry eye, including aqueous-deficient, evaporative, and mixed dry eye. The technology is available at several sites across the UK.

- Technology:

QMR technology uses a specific range of frequencies (4-64 MHz) in a weak electrical current to stimulate cell regeneration and reduce inflammation. The electrical current via an electrode mask worn over the closed eyelids.

- Mechanism of Action:

The QMR treatment is thought to work by:

a. Stimulating metabolism and natural regeneration of cells, including those in the lacrimal and Meibomian glands.
b. Reducing inflammation by shifting M1 macrophages to M2 macrophages (anti-inflammatory).
c. Altering the transmembrane potential of stem cells, which can induce their replication and regeneration of damaged tissues.

- Benefits:

Studies suggest that QMR treatment can improve symptoms and signs of dry eye, such as tear break-up time, tear meniscus height, and corneal staining.

- Efficacy and Safety:

Some studies have shown that QMR treatment is effective and safe for dry eye, with no reported adverse effects.

- Further Research:

While promising, more research is needed to fully understand the mechanisms of QMR treatment and to confirm its effectiveness in different populations and severities of dry eye.

PATIENT INSIGHTS

Dry eye symptoms affect approximately two-thirds of women during menopause. This occurs because fluctuations in oestrogen and testosterone levels alter the function of both lacrimal and meibomian glands. Women who already have dry eye disease often experience worsening symptoms during the menopause transition.

Hormone replacement therapy (HRT) is frequently prescribed to alleviate menopause symptoms—particularly hot flashes, mood changes, and sleep disturbances. Given this, one might expect HRT to improve dry eye symptoms as well. However, the evidence has been mixed, with some studies showing benefits while others indicate worsening symptoms.
Research comparison is challenging due to the variety of measurement methods used across studies, including the OSDI (Ocular Surface Disease Index) questionnaire, tear break-up time, and Schirmer score.

Recent Research
Two recent meta-analyses have examined this relationship:

- Liu and colleagues (2018)
- Dang and colleagues (2020)

Meta-analyses combine data from multiple small trials to generate more statistically powerful results and are considered among the strongest forms of scientific evidence.

PATIENT INSIGHTS CONT'D

Both studies found that women using HRT experienced some improvement in dry eye symptoms. However, in Dang's study, this improvement did not reach statistical significance. Liu's study showed only the increase in Schirmer score (measuring tear production) was statistically significant, with no significant improvement in tear break-up time or OSDI scores.The verdict on HRT and dry eye remains inconclusive. This uncertainty may stem from the significant variations in HRT formulations—differing doses and types (oestrogen-only, oestrogen plus progesterone, or combinations including testosterone).

Personal Experience

In my personal experience, I tried HRT for hot flushes on my ophthalmologist's advice. He noted that his patients reported mixed results for dry eye symptoms and suggested a six-month trial. While I observed only slight improvement in my dry eye symptoms, HRT significantly improved my other menopausal symptoms, which led me to continue treatment.
The decision to take HRT is personal and requires careful consideration of benefits and risks based on individual symptoms. Always consult with your doctor to determine the best approach for your specific situation.

NEXT TIME...

The next Dry Eye Association newsletter will be sent to your inbox in November 2025, so look out for it. Don't forget to let us know about ideas for articles you would like to read or contribute. Tell us about treatments you have experienced or top tips you would like to share with others.

Please send all your comments and ideas to dryeyeassocuk@gmail.com. We look forward to hearing from you.