

## WHAT'S TRENDING

A round-up of the eye related hot topics that have been trending on social media over the last few weeks.

### #teammates #warringtonwolves

#### #keratoconus

Robbie Mulhern, a professional rugby league player for Warrington Wolves, had never heard of keratoconus prior to his diagnosis in 2019. He was diagnosed with the rare condition - which affects one in 2000 people - during lockdown, when he noticed that his vision was blurring when he was reading.

When Thomas Mikaele signed to join the Warrington Wolves earlier this year, Robbie's brother researched the new prop, and noted that Thomas also had a problem with his eyes. Robbie did some more research, and was shocked to find that Thomas had the same rare condition as him. Neither of them had met another person with keratoconus before this - slim chances! Now both Robbie and Thomas are busy with juggling their eye conditions, whilst preparing for the next Super League season [1].

Keratoconus is a condition where the cornea gradually bulges outwards into a cone shape. This coning shape causes blurring of vision and sensitivity to light. Management involves rigid gas permeable contact lenses, which hold tear fluid in the gap between the irregular cornea and contact lens. Robbie is using these to manage his condition off the pitch, and has been reassured that the condition won't stop him playing rugby [1,2].

### #fakedesigner #UVprotection

#### #heatwave

With recent record-breaking high temperatures and tropical-like conditions in the UK, the College of Optometrists has warned about the risks of buying fake designer sunglasses. The College surveyed 2001 people, concluding that with rising living costs, 33% of people had considered buying cheaper sunglasses. Forty percent of survey respondents admitted to buying sunglasses through social media which were fake designer and lacked adequate UV protection [3].

The College of Optometrists warns that sunglasses are not just a fashion statement, despite 50% of the survey respondents admitting that they would not buy sunglasses if they did not look fashionable. Sunglasses are important in protecting the eyes from UV rays, which can cause long-term problems with eye health, such as cataracts, macular degeneration, and vision loss. These risks are even greater in children, who have larger pupils, and therefore have an increased amount of light reaching the back of the eye [3,4].

### How can we ensure that our new shades are safe?

Cost does not equate to adequate UV protection. It is important to look for

sunglasses with the UV mark and CE or UKCA mark. However, these can also be faked. Therefore, it is advisable to purchase sunglasses from a reputable source. If in doubt, optometrists can advise, and test your sunglasses for adequate UV protection.

### #nitrousoxide #blindness #tiktok

Widely known as "laughing gas," nitrous oxide is the second most used drug among 16 to 24-year-olds. There is a misperception among the public that it is a "safe drug." There are concerns about the rising numbers using the drug, due to drug dealers now selling it in canister form on social media platforms such as TikTok [5,6].

Nitrous oxide has varying side-effects with extensive and prolonged use, including severe vitamin B12 deficiency, fatigue, digestive problems, and anaemia. Nitrous oxide has been shown to oxidise vitamin B12, which converts it into its inactive form. Inactivation of vitamin B12 ultimately results in both peripheral and central nervous system demyelination. If the optic nerve is affected, this can lead to optic neuropathy and irreversible vision loss [7].

This is an important differential diagnosis for patients presenting with new onset neurological symptoms, however it is difficult to screen for nitrous oxide use due to its short half-life. Thus, a thorough drug history is key to this diagnosis. Other common causes of vitamin B12 deficiency include pernicious anaemia, a vegan diet, and alcohol excess, which also need to be excluded [8].

### #workexperiencestudent #hero #retinalveinocclusion

Alexander Pickering, a 15-year-old schoolboy from Ripon, Yorkshire has been hailed a hero for saving a man's eyesight while on work experience at Specsavers. John Morgan visited Specsavers, having noticed blurring of his vision. Alexander was trained to use a "3D optical diagnostic scan", which presumably is ocular coherence tomography. He noticed something unusual in Mr Morgan's retina. Thanks to Alexander's quick thinking, Mr Morgan was sent as an urgent referral to Harrogate Hospital where the diagnosis of central retinal vein occlusion was made. Alexander has now returned to school, and will be completing his GCSEs next year; he hopes to eventually start work in a healthcare setting [9].

### #blindwomanregainssight #seeshusbandfirsttimetime #keratoconus

To end where we started, we return to keratoconus. Sophia Cora, from New Mexico, recounts the moment when she saw her husband's face for the first time. She was

diagnosed with keratoconus when she was 18 and experienced a rapid decline in her vision. Christian, who was only a friend at the time, researched the condition and found there was surgical treatment available. It is not detailed which surgery she had, but presumably this is corneal cross-linking. He helped her raise money to fund the surgery, which cost her over £16,000. In combination with contact lenses, she regained 6/6 visual acuity. By now, Sophia developed romantic feelings for Christian, and worked up the nerve to tell him, though she had never seen his face. She discovered he was "even more handsome" than she could have imagined. Luckily, he felt the same way, and they are now married [10].

### References

1. [www.mirror.co.uk/sport/rugby-league/warrington-wolves-robbie-mulhern-condition-27351777](http://www.mirror.co.uk/sport/rugby-league/warrington-wolves-robbie-mulhern-condition-27351777)
2. [www.zackseyes.co.uk/eye-conditions/common-eye-problems/keratoconus/](http://www.zackseyes.co.uk/eye-conditions/common-eye-problems/keratoconus/)
3. <https://inews.co.uk/news/health/fake-designer-sunglasses-bought-due-to-cost-of-living-squeeze-pose-risk-of-serious-eye-conditions-1783064>
4. [www.college-optometrists.org/news/2022/july/we-urge-the-public-to-protect-their-eyes-as-the-uk-drugwise.org.uk/nitrous-oxide/](http://www.college-optometrists.org/news/2022/july/we-urge-the-public-to-protect-their-eyes-as-the-uk-drugwise.org.uk/nitrous-oxide/)
5. [www.vice.com/en/article/m7eywy/tiktok-is-hosting-ads-for-whipped-cream-but-its-actually-nitrous-oxide](http://www.vice.com/en/article/m7eywy/tiktok-is-hosting-ads-for-whipped-cream-but-its-actually-nitrous-oxide)
6. [www.consultant360.com/article/consultant360-emergency-medicine/nitrous-oxide-use-induced-vitamin-b12-deficiency-subacute](http://www.consultant360.com/article/consultant360-emergency-medicine/nitrous-oxide-use-induced-vitamin-b12-deficiency-subacute)
7. [Chiang TT, Hung CT, Wang WM, et al. Recreational nitrous oxide abuse-induced vitamin B12 deficiency in a patient presenting with hyperpigmentation of the skin. \*Case Rep Dermatol\* 2013;5:186-91.](http://Chiang TT, Hung CT, Wang WM, et al. Recreational nitrous oxide abuse-induced vitamin B12 deficiency in a patient presenting with hyperpigmentation of the skin. Case Rep Dermatol 2013;5:186-91.)
8. [www.itv.com/news/calendar/2022-07-29/work-experience-student-saves-mans-eyesight](http://www.itv.com/news/calendar/2022-07-29/work-experience-student-saves-mans-eyesight)
9. <https://metro.co.uk/2022/08/23/woman-who-regained-sight-recalls-seeing-husband-for-first-time-17228624/>

[All links last accessed August 2022].

## AUTHOR



**Isadora Giles,**  
Foundation Doctor  
Year 2, Rotherham  
NHS Foundation Trust,  
Rotherham, UK.

## SECTION EDITOR



**Stephanie Chiu,**  
Specialty Registrar Year 6,  
Royal Hallamshire  
Hospital, Sheffield, UK.  
[schiu@doctors.org.uk](mailto:schiu@doctors.org.uk)