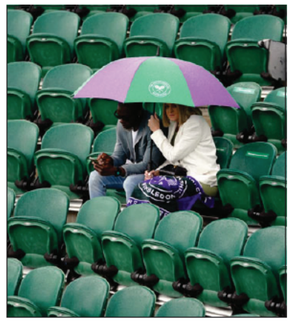

Spectators can expect some rain during the first week of this year's Wimbledon tennis tournament

Showers forecast for the first week of Wimbledon

TENNIS fans have been warned to pack a brolly and raincoat for Wimbledon before the tournament begins tomorrow.

Forecasters are predicting showery spells for parts of the opening week – though the competition is expected to kick off with a sunny start.

Met Office meteorologist Ellie Glaisyer said tomorrow was set to "feel pleasant" thanks to "mostly dry" weather with highs of around 20 to 22C.

She added: "Looking ahead to Tuesday, it looks like there could be a couple of showers around the afternoon.

"There will be some sunny spells between those showers and perhaps it'll be a touch warmer, say 22 or 23 degrees.

"As we start to look a bit further ahead towards the middle of week, it looks like we'll see dry cloud and maybe a spot of rain at times through Wednesday afternoon and into the start of Thursday.

"Temperatures are still staying similar to average, so into the low 20s through the second half of the week. But we'll have more detail on that a little bit closer to the time."

Asked for her advice to Wimbledon spectators, she said: "Make sure you pack your raincoat and umbrella just in case, and also your sunscreen in case it's hot. Maybe a hat, as well."

The unsettled weather is being caused by a jet stream heading to the UK, Ms Glaisyer said, leading to low pressure over the country.

She said: "It's quite a changeable picture at the moment, just due to the location of the jet stream.

"Sunday is generally a day of scattered showers, with quite a bit of cloud around."

Police warning over 'contaminated' pills

Seven people have been taken to hospital after taking the sleeping medication Zopiclone, prompting concerns over a "potential contaminated batch".

Cleveland Police said it had received reports on Friday of the adults being taken to North Tees General Hospital in Stockton-on-Tees, County Durham.

The force is also investigating the death of one man thought to have taken Zopiclone. The force said: "Officers are warning drug users of a potentially contaminated batch which could cause significant illness or lead to an overdose."

Zopiclone, usually used to treat insomnia, takes around an hour to work and helps users to fall asleep faster and stop waking in the night.

The drug is usually taken as a tablet but doctors can order it in liquid form.

INVESTIGATION

By Helen McArdle
Health Correspondent

KEN Reid was just 26 when he was told he was going blind, and there was nothing that doctors could do about it.

Unusually, he said it felt "like a relief".

"My experience isn't typical, but I had been struggling to cope for so long. Pre-diagnosis, I had been adapting, and adjusting, and having close shaves.

"Once I had a diagnosis, I was able to start adapting my life properly to living with sight loss and deteriorating vision."

Mr Reid, now 64 and a former chair of the RNIB in Scotland, is among an estimated 1,800 people in Scotland living with retinitis pigmentosa – one of the most common forms of inherited retinal disorders (IRD).

It is caused by a genetic mutation which leads the light-sensing cells in the eyes to gradually die off, causing progressive and – so far – incurable sight loss.

Scientists at Edinburgh University hope they might be on the cusp of changing that, however, after unravelling previously unknown details about the role that the gene, RPGR, plays in regulating how these light cells function.

Dr Roly Megaw, the academic ophthalmologist who led the work, believes it could pave the way to a drug treatment which might restore sight.

He said: "The approach we've taken is better understanding of RPGR's function in the eye in the light-sensing cells.

"Whenever you have a mutation, the RPGR protein doesn't function properly and so the light-sensing cells die and the patients go blind, which is what's happened to Ken.

"What we've been able to identify is that RPGR is regulating the 'skeleton' within the light-sensing cells which allows it to rebuild itself.

"By lacking RPGR – because of the mutation – you get a very abnormal light-sensing cell that eventually gets stressed and dies.

"What we've shown in our study is that by targeting this 'skeleton' [with small molecules], we can partially rescue these abnormalities.

"The question remains: can you actually rescue the visual loss? Further work will be required on that."

Nature findings

THE findings have been published in the journal Nature Communications.

At the same time, Edinburgh is currently participating in a worldwide trial testing whether a new gene therapy can correct mutations in the RPGR gene to prevent sight loss occurring in the first place.

To date, scientists have identified a total of 280 genes behind inherited retinal disorders, but cutting-edge medicines will only be effective if early diagnosis also improves.

Dr Megaw said: "Only 60% of patients have their mutation identified, and another 40% are left with a diagnosis that 'yes, you have this genetic eye disease but our testing just isn't good enough to say exactly what the mutation is'.

"One of our research projects is trying to improve the diagnosis rates, genetically, because gene therapies are now emerging.

Ken Reid of North Berwick was born with a genetic mutation which causes progressive sight loss. For the first time, scientists are beginning to unravel potential cures

A new breakthrough at Edinburgh University could give sight back to people like Ken Reid, left, after unravelling previously unknown details about the role a gene plays in regulating how light cells function

Above, Ken experiences the sensation of cycling on a tandem

Hope is in sight

How Scots scientists aim to cure blindness

Above, Roly Megaw has been leading the research at Edinburgh

Picture: University of Edinburgh

"We already have one on the NHS for a rare form of IRD, but there will more in the post.

"But you have to use them before the degeneration starts, so you need to know the gene that is causing these patients' disease.

"More funding is required for that research."

Eye departments see more patients than any other area of the NHS, but research into new treatments and cures has been described as "desperately underfunded" with just £9.60 invested each year for every person living with sight loss in the UK.

> "It's not for me – I'm never going to get my sight back – but for the next generation and the generation after that, it could be life-changing

For more than a decade, Mr Reid has been among the patients donating DNA and tissue samples to Edinburgh's human genetics unit to progress its hunt for sight-loss cures.

'Life-changing'

ALTHOUGH any potential drug breakthrough will come too late to restore his own vision, he stresses that it could be "life-changing" for future generations – including within his own family.

Mr Reid's particular mutation – which is responsible for around 15-20% of all retinitis pigmentosa (RP) cases – is passed via the maternal lineage, but only expressed in males due to their XY chromosomes.

His daughter, 32, is a carrier of the mutation and any son she may have in future would have a 50% chance of inheriting the disease.

Nonetheless, Mr Reid's own diagnosis – in 1986 – came out of the blue.

"There was no known history of it in my family," he said.

"But when I was diagnosed, my mother went to be tested and they identified that she was a carrier.

"My grandmother had died by then, so there was no way of knowing whether she had it, but random mutations happen all the time so it's possible it was a fairly recent thing."

Retrospectively, he realised that the signs had been there all along.

He struggled with "colour differentiation" – distinguishing oranges from pinks and blues from greens – and his night vision was poor, both characteristics of RP.

As a teenager in the Scouts, he remembers being puzzled about why his friends managed to avoid running into trees or falling into ditches as they ran around dark woodlands on camping trips.

Later, as his field of vision began to narrow, he found himself liable to walk into lampposts and recalls "with a shudder" almost hitting a lollipop person as he drove past a primary school in Dundee the day before his eventual diagnosis.

By the time he underwent tests at the eye hospital in Edinburgh, the disease was already shockingly advanced.

He said: "My field of vision was already extremely restricted. Everything I could see was basically [within the span of] a dinner plate.

"Most people can see more 180 degrees whereas my field of vision was less than five degrees, but I had just adapted over all those years.

"I had no idea there was anything wrong."

Employer help

AT the time, Mr Reid was only three months into a new job with Edinburgh-based brewery Scottish & Newcastle, but praises them as an "exemplary" employer who provided equipment, job adjustments, and adaptations to the workplace to enable him to continue in various roles.

He remained at the company until 2008 when he was eventually medically retired due to the deterioration in his vision, which can only detect light, dark, and a few shapes.

Now settled in North Berwick with his partner, Hilde, he has learned to read Braille and is a keen tandem cyclist who fundraises for research.

He said: "When I was diagnosed in 1986, I was told: we know what it's called, we know how it's likely to progress, but we don't really know what's going wrong to make it happen and we certainly don't know how to stop it.

"Thirty-four years on, we know better about what's going wrong, we have some ideas about how we might treat it, but there's still no cure.

"That's why the work that Roly is doing is so valuable.

"It's not for me – I'm never going to get my sight back – but for the next generation and the generation after that, it could be life-changing."