**Could British breakthrough lead to cure for blindness? Gene therapy treatment stops five men from losing their sight - and some can even see better than before**

* **Professor Robert MacLaren developed the technique at Oxford University**
* **So far five men have been stopped from going blind by the treatment**
* **Following the successful test, some of the patients have improved vision**
* **The five men were suffering from a condition called  choroideremia**

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A cure for blindness is in sight after pioneering British treatment produced astonishing results.

Five men have been stopped from going blind after undergoing the gene therapy – and some can see better than before.

One can see the stars in the night sky again while another can read the numbers on his mobile phone.

Excitingly, the eye op is still working up to four years on – raising hopes that a single treatment could last a lifetime.

Treated early enough, it may be even possible to stop vision ever deteriorating.

All of those treated so far have a rare eye condition called choroideremia.

But the technique, which was developed with NHS funding, is being adapted to treat other conditions, including age-related macular degeneration.

This affects 300,000 people and is the most common form of blindness in the elderly.

Robert MacLaren, the eye surgeon who led the world-first trial, said: ‘This is the breakthrough we have all been waiting for.’

Choroideremia, which had been considered incurable, occurs when a missing gene leads to key light-gathering cells at the back of the eye dying.

Vision gradually deteriorates from childhood and most sufferers go completely blind by their 40s.

The treatment involves injecting billions of copies of the missing gene into the eye.

It had been hoped this would stop the disease in its tracks.

But the gene therapy treatment has exceeded expectations, with the New England Journal of Medicine reporting that some of the patients received dramatic improvements in vision.

Joe Pepper, a 24-year-old history teacher, cried tears of joy when he realised the jab had worked.

Mr Pepper, of Croydon, south London, was just 16 when deteriorating sight forced him to give up playing cricket, the sport he loved.

The prospect of going completely blind terrified him.

He said: ‘I was scared of what would have happened. I was scared of not being able to see or live the life I had.’

He had the operation at Oxford’s John Radcliffe Hospital in October and his vision started to improve soon after.

Shown an eye chart, in which the letters got smaller with each line, he was able to read row after row.

He said: ‘For the first time in my memory, I read on an on. I laughed and shed a tear.

‘I will remember that day for the rest of my life.’

Wayne Thompson, a 46-year-old IT worker from Staffordshire can see the stars in the night sky again.

Jonathan Wyatt, a retired barrister, has told how the vision in his treated eye is twice as good as before.

Mr Wyatt, 68, of Bristol, said: ‘It has made me more independent. Without the operation, I think I would be tapping with a white stick.’

‘I feel lucky, privileged and honoured to be part of the fantastic research group.’

Professor MacLaren said the finding that five of the first six patients given the jab have seen lasting benefits is ‘unequivocal proof’ that gene therapy provides lasting results.

More research is needed but he hopes the jab will be available as a treatment for choroideremia just three years from now.

And he plans to apply for approval to treat other conditions, including age-related macular degeneration next year.

In the future, the jabs could be given to children before their sight starts to fail, stopping them from ever going

blind.

Dr Stephen Caddick, of the Wellcome Trust, which part-funded the research, said: ‘To permanently restore sight to people with inherited blindness would be a remarkable achievement.’

Read more: <http://www.dailymail.co.uk/health/article-3564793/Could-British-breakthrough-lead-cure-blindness-Gene-therapy-treatment-stops-five-men-losing-sight-better-before.html#ixzz4BkxwWkfl>   
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