



Media Statement

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Lions Eye Institute seeking WA children for myopia trial

Can the progression of myopia in children be slowed down or even stopped altogether?

This is the question researchers at the Lions Eye Institute (LEI) are seeking to answer with a major trial testing the effect of low-dose Atropine eye drops on myopia (short-sightedness) in Western Australian children.

The WA Atropine for the Treatment of Myopia (ATOM) trial was initially funded by the Telethon Perth Children's Hospital Research Fund. Recently the research team, led by Dr Antony Clark, was awarded an additional \$50,000 by the Ophthalmic Research Institute of Australia to support an extension of the trial to treat more children.

Dr Clark said there was a misconception that myopia was a benign condition.

"Because myopia involves an elongation of the eye, it is associated with an increased risk for a number of serious conditions including cataract, retinal detachment, macular disease and glaucoma," he said.

"It is important therefore to identify treatments that will halt or slow down the progression of myopia."

Flynn Reid and Rhys Stubbs have already been recruited to the trial but researchers want many more children to participate.

Rhys, aged nine, of Australind, began having problems with his vision about a year ago and after testing by an optometrist was found to need glasses. Subsequent tests have found his myopia is worsening.

“I am concerned about his eyesight deteriorating at such a young age,” Rhys’ mum Melissa said.

“I do hope that his eyesight doesn’t get much worse because he is so young still and has a long life ahead of him.”

Flynn Reid, aged eight, of Canning Vale, was diagnosed with myopia and began wearing glasses at the age of six.

His mum Melanie noticed he was very tired at the end of each school day.

“I think he was trying so hard to concentrate and focus at school that he was exhausted by the end of the day,” she said.

“I took him to an optometrist and the myopia was picked up. Since then, his myopia has progressed and we were offered the chance to be part of the LEI trial.

“Being involved in the trial has been really easy so far and it’s good to know that it could help Flynn and other children in future.”

Atropine is usually used to enlarge the pupil and relax the muscles of the eye – making it easier for a doctor to conduct an examination.

A previous ATOM trial in Singapore demonstrated the effectiveness of low-dose Atropine in slowing myopia progression with minimal side effects in Asian children. Low-dose Atropine is now widely used as a treatment in many Asian countries.

But LEI Managing Director Professor David Mackey said there was evidence that Atropine was not as effective in Caucasian children in slowing myopia progression.

“Perth has more hours of sunlight than any Asian city and there is evidence that outdoor activity and exposure to sunlight is protective against myopia,” he said.

“Our sporting and outdoor culture is very different to the highly urbanised and education-focused culture of Asian cities.

“The effect of Atropine in the Australian context has not been studied and this trial will provide us with the evidence to support – or not – the use of low-dose Atropine for Australian children with myopia.”

The LEI is seeking children aged from six to 16 years who have myopia (-1.50 dioptres or more) and have confirmed myopia progression (-0.50 dioptres over the past 12 months). Participants will be randomly allocated to treatment with low-dose Atropine (0.01 per cent) or placebo eye drops.

The effect of treatment on myopia progression will be assessed after three years. Trial participants will be seen three times in the first year and twice a year in the following two years.

If you think your child might be eligible for the WA ATOM trial, email myopia@lei.org.au or contact the study coordinator on (08) 6382 0507.

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Image: Rhys Stubbs, 9, of Australind, completing a vision test with Joyce Henderson Paediatric Ophthalmology Fellow Dr Adrian Koay at the Lions Eye Institute

Image: Flynn Reid, 8, of Canning Vale, is participating in the WA Atom Study which is testing whether the progression of myopia can be slowed down