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DOCTORS PERFORM AUSTRALIAN FIRST EYE SURGERY

Doctors at Sydney Eye Hospital have taken a step forward in the treatment of chronic corneal blindness by performing Australia's first artificial cornea transplant using a Boston keratoprosthesis (Boston Kpro) device.

The operation involves replacing the cornea with an artificial device designed in Boston, US, which helps to restore sight.

While many people with corneal disease can benefit from corneal transplantation involving tissue from human donors, in some cases this treatment fails. The Boston Kpro offers an alternative treatment for patients for whom other options have been unsuccessful.

It is the first time the device, which has the shape and size of a collar button, has been used in Australia to treat a patient with serious eye problems.

Dr Gregory Moloney, who performed the surgery on 60-year-old Marie Robinson, from Orange, NSW, said the operation represented a significant breakthrough for patients who have corneal related blindness but for whom all other treatment options have failed.

He said: "There have been worldwide efforts to help these people and one way to do so is through the insertion of an artificial cornea rather than a human donation."

The operation has transformed Marie's vision. It has given her a new outlook on life and the confidence to move around independently.

She said: "Before the operation I had very poor vision and could just see light and dark. Now I can count fingers, see features in a room and make out shapes and forms.

"I can walk down the street by myself, go up and down steps, which previously I was too frightened to do."

Marie has suffered from poor vision for the past 30 years as a result of the condition Aniridia, which is the absence of an iris. She has undergone two previous corneal transplants but both failed.

Following the operation Marie had seen her own reflection in the mirror for the first time in 15 years and she had seen her partner Ray for the first time ever.

She said: "I said to him, you're as good looking as I thought you were."

Marie will have to continue to have regular check-ups and stay on eye drops for the rest of her life but Dr Moloney says the prognosis for her recovery is good.

As of 2012, more than 7,000 of the operations had been performed on patients around the world and it is gaining in popularity.

Dr Moloney said: "While there are still some problems with this solution, at present it represents one of the better options we have to restore sight to this group of patients."

He has now identified several more patients who might benefit from the procedure and expects to perform around one a month for the next six months with plans to expand the program in the future with support from the Sydney Eye Hospital Foundation.

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For more information or to arrange an interview with Dr Moloney or Marie Robinson contact Alison Purdy on 9382 8226 or 0428 628 722

Background information

The cornea is the eye's outermost layer. It is the clear, dome-shaped surface that covers the front of the eye.

Its purpose is to act as a barrier to help shield the rest of the eye from germs, dust, and other harmful matter. It is also the eye's outermost lens. It functions like a window that controls and focuses the entry of light into the eye. The cornea contributes between 65-75 percent of the eye's total focusing power.

When the cornea becomes cloudy, light cannot penetrate the eye to reach the light-sensitive retina. Poor vision or blindness may result.

Corneal transplant surgery involves removing the central portion of the cloudy cornea and replacing it with a clear cornea, usually donated through an eye bank

Corneal transplants are the most commonly performed and successful type of organ transplant, but there is a significant shortfall in donor eyes. In Australia, around 1700 corneal transplants take place each year.