

# Docs find better way to transplant corneas

New method easier and safer; patients recover faster too

■ BY MELISSA PANG

WHEN Mr Chok Teck Chow was recently told he needed a corneal transplant in his right eye, he was apprehensive. The 59-year-old had undergone two such operations in his left eye in the last decade because of ageing corneas.

"The operation required 20 stitches, and recovery time was about six months each time," noted Mr Chok, who is semi-retired.

But thanks to an improved corneal transplant technique now offered at the Singapore National Eye Centre (SNEC), he said that he suffered blurry vision only for

the first few days. "By the fourth day, I could see well enough to go out by myself."

He underwent the procedure, known as Descemet's Membrane Endothelial Keratoplasty (DMEK), last month.

It is the latest in minimally invasive corneal transplantation and costs between \$1,500 and \$1,700 with subsidies. Private patients pay up to \$5,900.

The procedure involves transplanting a delicate sheet of corneal cells on a 1/100mm-thick membrane – a thinner layer than previously used – in patients whose corneas are cloudy from ageing processes or diseases.

The cornea is the transparent, protective outer layer of the eye. It serves as a defence against germs and particles, and also plays a key role in vision.

"The future will be DMEK,"

said SNEC medical director Donald Tan. "We have a chance for a transplant that provides for 20/20 vision and a rejection risk that is 1 per cent or less. What we are doing now is to make the procedure even easier."

The extremely delicate membrane naturally wrinkles into a tight roll when touched and can cause damage to the corneal cells.

But Prof Tan and a team at the Singapore Eye Research Institute have since developed a method that is easier and safer to perform. Details of the procedure are not available.

About 350 transplants are performed here each year, of which about 40 per cent involve patients with ageing corneas.

It is a number that is expected to grow with the ageing population, said Prof Tan.

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