

**VISION OF
FUTURE:
Elizabeth
Keell sees
hope in new
technique**



Operation offers hope for sight loss

EXCLUSIVE

By **Lucy Johnston** HEALTH EDITOR

A BRITISH eye surgeon is to perform the country's first synthetic corneal transplant, using a breakthrough technique that could restore the sight of thousands of people.

Previously, the only way to replace the transparent front part of the eye was to find a suitable donor. But donor corneas are in short supply and there is huge demand for them.

Now artificial collagen will be used to build a transplant, giving hope to patients with badly impaired vision due to eye disease, injury or misshapen corneas.

The first operations are expected early next year.

Sheraz Daya, medical director at Surrey-based Centre For Sight, hopes to initially treat up to a dozen patients in a UK trial, following approval from ethics committees.

Mr Daya, also medical director of Cornea Biosciences, which developed the implants, said: "This technology could transform thousands of lives in this country and worldwide."

He said the method would also avoid the risks from using human tissue of graft rejection and disease.

Artificial corneas are made from synthetic collagen, grown in a laboratory

using DNA techniques. During the procedure damaged tissue is removed and the synthetic replacement stitched in its place.

The collagen forms a scaffold for the patient's own cornea to grow into. Vision is expected to be restored within months.

The breakthrough comes amid growing levels of eye disease, which has led to pressure on eye banks for donor corneas.

Elizabeth Keell, 36, a secondary school teacher from Kenilworth, Warwickshire, who has severely impaired vision, owing to degenerative corneal condition keratoconus, hopes to benefit.

The mother of two said: "My children rely on me so much and I need my sight. I welcome this new synthetic cornea."

Helen Gillan, general manager Tissue Services for NHS Blood and Transplant, said: "This sounds like an interesting technique. There is an urgent shortage of cornea donors in the UK."

The UK transplant registry confirmed there was an 11 per cent drop in eye donations last year alone.

And a survey for charity Fight for Sight and eye hospital group Optegra, found people were 15 per cent less likely to donate eyes than other parts of the body.