



Welsh University's research could lead to a cure for blindness



Researchers at Cardiff University have shown a way to regenerate parts of the eye using stem cells. Cardiff University, in association with Osaka University in Japan, has found a way to make stem cells take the form of cornea, lens and retina cells.

The procedure has successfully been tested on a near-sighted rabbit. The front of its eye was repaired by the new cells and its eyesight has been significantly improved. This could lead to the cure for age-related cataracts (eyesight problems).

Using a similar technique, the University of California regrew the lenses of 12 babies born with cataracts. They also tested on rabbits, as well as macaques - a type of Asian monkey - before moving on to humans. This shows we can cure babies born with cataracts.

However, scientists are still a long way from curing age-related cataracts. They are unsure how the technique used on the rabbit will translate to humans, or whether there will be any long term side effects, but these are the first steps to curing eyesight problems and maybe even blindness.

The research has also opened up a whole new way of treating damaged or missing cells, and may even lead to a way of repairing or regenerating damaged organs.