



FIGHTING BLINDNESS

Retinitis Pigmentosa is the name given to a group of diseases, which affect the retina of the eye. The retina, located in the back of the eye, is the part of the eye that acts like the film in a camera. It is a delicate layer of cells which picks up the picture and transmits it to the brain - where "seeing" actually occurs. In RP, the retina begins to degenerate, which causes vision to diminish. One of the earliest symptoms of RP is difficulty seeing at night or in dimly lit places (night blindness). Later there is a reduction in side (peripheral) vision.



Normal Vision



Vision Affected by RP

Through the efforts of RP organisations in many countries, including Western Australia, the number of highly qualified investigative scientists working full time on RP and related diseases, continues to grow. Research efforts into these types of retinal diseases are difficult because there is no opportunity to safely biopsy - that is, remove and examine living retinal tissue under a microscope - the delicate eye.

RESEARCH

As yet there is no effective treatment or cure for RP. The great hope is that scientific research will unlock the knowledge of how to effectively treat and prevent RP.

So far over 30 genes causing forms of RP have been located and some of the vital proteins they fail to produce in the body have been identified. In the foreseeable future this is going to enable defective gene material to be replaced by healthy material and so save sight.



Researchers are also investigating a number of other avenues to prevent the process of premature cell destruction in the retina.

Although it is not possible to transplant the retina (because of its connection through the optic nerve to the brain), transplantation of cells nourishing the retina promises in the near future to become a practical technique for preserving and perhaps improving sight.

These exciting prospects opening up through research are made possible by generous public donations around the world. But research is very expensive and what can be achieved is restricted by the money available.

The Western Australian Retinitis Pigmentosa Foundation (WARPF) finances RP research in Australia and has an urgent need of funds for this purpose.

All contributions go directly to the charity.