How does atropine prevent myopia
The growth of the vertebrate eye is known to be controlled by visual experience. Depriving young eyes of sharp high contrast vision may produce myopia. This is a species specific phenomenon. Atropine has been widely used clinically as a cycloplegic agent and some reports have suggested that it can prevent the continuing progression of human myopia. The rationale for its use has traditionally been that atropine paralyses accommodation and prevents the accommodative induced myopic changes.
Recent evidence suggests, however, that atropine seems to intrude massively into the vital functions of the retina. Atropine appears to induce spreading depression in experimental models, the exact opposite of what muscarinic agonists appear to do. This research concludes that atropine may prevent myopia by inducing spreading depression, which boosts neurotransmitter release from cellular stores, which in turn cancels out a presumed retinal signal that controls eye growth. Visual Science 2000;17:165–76.

Recommended reading

Xeno is a serious scientific work although it begins as if it were a novel. The authors effectively describe the variety of patients who today would benefit from xenotransplantation (the insertion of cells, tissues, and organs from other species). They review the historical use of sheep blood transfusions, dog bone grafts, and baboon heart and liver transplantations among other examples. They do not sidestep the ethical and complex issues surrounding the use of other species for medical purposes. They are also realistic enough to admit that xenotransplantation will almost certainly be only a transitory therapeutic option that is eventually replaced by successful cloning and stem cell research. This is a fascinating book that is well written and provocative in its detailing of xenotransplantation research.