CHAPTER 6: Summary and Conclusion

Cataract blindness is the major cause of preventable blindness worldwide especially in the developing countries of Africa and Asia. The potential role of antioxidants in preventing various diseases is well documented. There are reports suggesting the beneficial effects of vitamins C and E in preventing cataract by virtue of their antioxidant property. Various herbal drugs such as Osmium sanctum, Emblica officinalis, Ginkgo biloba, and green tea were shown to delay the onset and progression of cataract development in experimental animals. The anticataract efficacy of these preparations was mainly attributed to their antioxidant potential.

A number of plants are known to possess antioxidative property. Among them we have studied the efficacy of aqueous extract of Kalmegh Andrographis paniculata. The present study was undertaken to investigate the possible anticataract activity of the antioxidants of Kalmegh Andrographis paniculata.

After performing the study we can summerize the aqueous extract of Andrographis paniculata is having potential antioxidative property and can restore the transparency of the crystalline lens by increasing the antioxidative enzyme levels. The major cause of the opacity of the lens is structural modification of the lens proteins. By performing this study, we can conclude that the insoluble fraction of the cataractous lens protein is decreased by instillation of the aqueous extract of Andrographis paniculata. The level of water soluble fraction of the lens protein increases which is helpful in regaining the lens transparency. The elevated levels of the antioxidative enzymes are equally important and instillation of the aqueous extract of Andrographis paniculata is performing the same function.
Further research in this area is required to find out the components of the aqueous extract of *Andrographis paniculata*. If the components are known, then we can study the individual components for its efficacy to prevent cataract.