Ocular perfusion pressure in glaucoma.

This review article discusses the relationship between ocular perfusion pressure and glaucoma, including its definition, factors that influence its calculation and epidemiological studies investigating the influence of ocular perfusion pressure on the prevalence, incidence and progression of glaucoma. We also list the possible mechanisms behind this association, and discuss whether it is secondary to changes in intraocular pressure, blood pressure or both. Finally, we describe the circadian variation of ocular perfusion pressure and the effects of systemic and topical medications on it. We believe that the balance between IOP and BP, influenced by the autoregulatory capacity of the eye, is part of what determines whether an individual will develop optic nerve damage. However, prospective, longitudinal studies are needed to better define the role of ocular perfusion pressure in the development and progression of glaucoma.