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## Editorial

### Tobacco and Intra Ocular Pressure

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**G**laucoma is an optic nerve disorder characterised by optic disc cupping resulting in progressive arcuate visual field defects ultimately resulting in irreversible blindness. This condition is most often caused by raised intraocular pressure (IOP) due to poor out flow of aqueous humor. The outflow obstruction could occur at the trabecular meshwork of the anterior chamber angle or subsequently in the episcleral veins due to raised venous pressure.

Among many drugs and agents causing glaucoma by various mechanisms tobacco has been found to be one of the important agents. Cigarette smoking has been associated with immediate / rapid transient rise in intra ocular pressure. It has been hypothesised that nicotine/tobacco induced vasoconstriction leads to raised episcleral venous pressure, thereby reducing aqueous outflow and hence rise in IOP.(1) Smokers with primary open angle glaucoma when stopped smoking for one month were found to have a decrease in IOP of 2-7 mmHg.(2) Several studies have been done in this regard. Wilson et al have reported a definite relation between glaucoma and cigarette smoking.(3)

The present study by Eghosasere Iyamu (4) relating smokeless tobacco and elevated IOP done on non glaucomatous young adults has been an effort to establish the relation between tobacco and IOP. Since tobacco is used as a snuff and gets directly absorbed into the circulation, episcleral venous pressure elevation is immediate and a rise in IOP is noted by one minute. Habitual tobacco users on repeated tobacco sniffing (which is a social custom in certain parts of the world) or repeated consumption

over a day could have an effect on optic nerve head over a period of time.

Hence it is important for the clinical practitioners to be aware of the ill effects of tobacco on ocular circulation and IOP in glaucoma as well as the general population.

Further studies in this regard involving glaucoma as well as normal population is required to establish a definite relation, if any, between IOP, glaucoma and tobacco as Shephard et al (5) and Klein et al (6) reported no relationship between tobacco smoking elevated IOP and glaucoma.

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