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## inSight

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## Glaucoma Awareness Month



We know that we need to raise awareness about glaucoma detection among the public. Glaucoma is the second leading cause of blindness in the world and the leading cause of irreversible blindness overall. According to the National Eye Institute (NEI) over 3 million Americans have glaucoma, 50 percent don't know it. By 2050 this number is projected to grow to 6 million (see graph). More than 120,000 are blind from glaucoma, accounting for about 10% of all cases of blindness.

Also, African Americans are 15 times more likely to be visually impaired from glaucoma than Caucasians. Early detection is key, since all damage to the optic nerve is irreversible.

We need to encourage our patients to have regular annual eye exams, especially African Americans and patients with family history of glaucoma. We need to make sure that our patients do not smoke, eat a healthy diet with plenty of green leafy vegetables that contain a high amount of antioxidants.

In cases of low tension glaucoma low nocturnal blood pressure may be a significant contributing factor Glaucoma therapy initially consists of applying topical medications with prostaglandin analogs being the most commonly prescribed group. Topical medications usually are dispensed in a multi-use bottle with added preservatives to ensure sterility of the formulation down to the last drop in the bottle. The most commonly used preservative is Benzalkonium Chloride (BAK). In addition to ensuring the sterility of the solution it also increases the penetration of medication through the cornea, but is also toxic to the ocular surface tissues.

However, ocular surface disease (Dry eyes, Meibomian gland dysfunction) can become a serious problem, especially when more than one medication is being administered. Therefore formulations without BAK and also preservative-free formulations have been developed.

<u>Glaucoma medications without BAK</u> Travatan Z (travoprost 0.004%, Preservative: Sofzia) Alphagan P 0.1% (Brimonidine tatrate 0.1%, Preservative: Purite) Xelpros (Latanoprost 0.005%, Preservativie: Potassium Sorbate)

Preservative-free medications Timolol in Ocudose (first in class, Timolol maleate 0.25 and 0.5%) Cosopt PF (Dorzolamide 2%/Timolol maleate 0.5%) Zioptan (Tafluprost 0.0015%) Iyuzeh (Latanoprost 0.005%) An alternative to topical medication is the intracameral sustained-release device Durysta (Bimatoprost) and Laser trabeculoplasty, most commonly performed as Selective Laser Trabeculoplasty (SLT).

All White Black Hispanic Other

Projections for Glaucoma 2010 - 2030 - 2050 (in millions)

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## To schedule an appointment at the Kentucky Lions Eye Center, please call 502-588-0588.



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