In patients with glaucoma who require treatment for age-related macular degeneration or diabetic macular oedema, aflibercept may be a better choice of therapy than ranibizumab, as it is less likely to result in a delayed and sustained rise in intraocular pressure (IOP)

The Science behind the Tip

Anti-VEGF injection therapy for age-related macular degeneration or diabetic macular oedema may result in a delayed and sustained rise in IOP\(^1\). Risk factors include: extended treatment duration with multiple injections, history of topical steroid use and the presence of glaucoma\(^2\).

Aflibercept (Eylea) is a recombinant fusion protein which has a higher binding affinity to VEGF isoforms than ranibizumab (Lucentis), with longer biological effects in ocular tissues and therefore a reduced dosing regimen is used. The effectiveness in stabilising and improving visual acuity is similar.

The incidence of IOP elevation is lower in patients treated with aflibercept than those treated with ranibizumab\(^3\). The exact mechanism is not known. However, this effect may be a consequence of the fact that aflibercept is less likely to result in reduced aqueous flow through the trabecular meshwork, secondary to protein aggregation and is less likely to cause inflammatory trabeculitis\(^2\).

References


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