Abstracts

Edited By Dr. Qasim Lateef Chaudhry

Antagonism of Vascular Endothelial Growth Factor for Macular Edema Caused by Retinal Vein Occlusions: Two-Year Outcomes

Hafiz G, Channa R, Shah SM, Nguyen QD, Ying H, Do DV, Zimmer – Galler I, Solomon SD, Sung JU, Syed B.
Ophthalmology 2010; 117: 2387-94.

A study by Campochiaro et al suggests that anti-vascular endothelial growth factor (VEGF) treatment provides long-term benefit in patients with macular edema due to branch retinal vein occlusion (BRVO) or central retinal vein occlusion (CRVO). In this small prospective, randomized clinical trial, 20 patients with macular edema due to BRVO and 20 patients with CRVO received injections of anti-VEGF agents at 4 weekly intervals for 3 months. After month 3, the patients were seen every 2 months and received injections as needed for recurrent edema. At 2 years, the BRVO patients experienced a mean improvement of 18.8 letters, while the CRVO patients experienced a mean improvement of 8.5 letters. However, frequent injections were required in some of the patients with BRVO and most patients with CRVO. According to the authors, this latter finding suggests that excessive VEGF production represents a long-term problem in many patients with CRVO. They calls for additional studies to determine the long-term effects of frequent-possibly monthly-injections and/or the use of higher doses of anti-VEGF agents

Randomized Evaluation of the Trabecular Micro-Bypass Stent with Phacoemulsification in Patients with Glaucoma and Cataract

Samuelson TW, Katz LJ, Wells JM, Pharm D, Duh YJ, Giamporcaro JE.
Ophthalmology 2011; 118: 459-67.

Samuelson et al conducted a large-scale randomized, controlled, multicenter study comparing cataract surgery with a glaucoma drainage device versus cataract surgery alone in patients with mild to moderate open - angle glaucoma. The investigators found the cataract surgery patients who received the stent demonstrated clinically and statistical improvement in terms of IOP reduction with less medication use compared with those undergoing cataract surgery alone. The investigators enrolled 240 eyes in the study, randomizing them into 2 groups: the treatment group, who underwent cataract surgery with trabecular micro-bypass stent (iStent) implantation, and the control group who underwent cataract surgery only. At 1 year, 66% of treatment eyes versus 48% of control eyes achieved ≥20% IOP reduction without medication. Incidence of adverse events was similar between the groups. The researchers assert the iStent demonstrates a positive benefit-risk intervention in patients with mild to moderate glaucoma undergoing cataract surgery, and may represent a novel therapeutic approach that may avoid the lifelong risk of complications, which can be associated with filtering blebs.

Central serous chorioretinopathy: an update on phathogenesis and treatment

Gemenetzi M, Salvo GD, Lotery AJ.
Eye 2010; 24: 1743–56.

Central serous chorioretinopathy (CSC) is a chorioretinal disease, incompletely understood with systemic associations, a multifactorial aetiology, and a complex pathogenesis. Increased permeability from the choriocapillaris leads to focal or diffuse dysfunction of the retinal pigment epithelium causing a detachment of the neuro-sensory retina. CSC has been described in patients with endogenously high levels of corticosteroids as well as in patients with hypercortisolism due to the treatment of ocular or systemic diseases. It is therefore the only' inflammatory' choroiditis, not proven to be associated with infection that is precipitated or worsened by glucocorticoids. Foveal attenuation, chronic macular oedema, and

damage of the foveal photoreceptor layer have been reported as causes of visual loss in CSC. Photoreceptor atrophy in the fovea, despite successful retinal reattachment, typically occurs after a duration of symptoms of approximately 4 months. Treatment should therefore be considered after 3 months if there is angiographic evidence of ongoing foveal leakage in recurrent chronic CSC or in a single CSC episode accompanied by signs of chronic CSC alterations. Based on results of trials conducted so far, it appears that photodynamic therapy with verteporfin is effective and safer than argon laser treatment and should be considered as the treatment of choice, whereas micropulse diode laser photocoagulation seems to be an effective alternative. Glucocorticoid inhibitors are an interesting alternative treatment. Clinical trials are ongoing to test their efficacy. In addition, it is important, where possible, to discontinue any corticosteroid treatment. The possible association of CSC with stress should also be discussed with patients.