In this issue, several excellent reports as to neovascularization in the eye are included.

**Branch Retinal Vein Occlusion: Classification and Treatment**

*Maurizio Battaglia Parodi, Francesco Bandello*

*Ophthalmologica 2009;223:298–305*

This is an important review article which includes almost all recent advances in the diagnosis and treatments of branch retinal vein occlusion. In these fields, great progress has been made in the last years. Now, we have many ways in the observation of vascular circulation with or without neovascularization and its treatment: for example, simple medical treatment, laser treatment (scattered photocoagulation to the ischemic retinal area to prevent neovascularization and grid photocoagulation on the macular edema), vitrectomy with sheathotomy, corticosteroid and anti-VEGF drug administration with or without vitrectomy and combined therapies of these. The outcome of recent treatments is better than that of 10 years ago. Vitrectomy with injection of corticosteroid or anti-VEGF drugs really improved the visual acuity of branch retinal vein occlusion. Vitrectomy with sheathotomy is a considerably new challenging treatment based on a theoretical background why central retinal vein occlusion (CRVO) occurs. In this issue, Callizo et al. reported radial optic neurotomy for CRVO (pp. 313–319).

**Radial Optic Neurotomy for Central Retinal Vein Occlusion: Long-Term Retinal Perfusion Outcome**

*Josep Callizo, Peter Kroll, Stefan Mennel, Joerg C. Schmidt, Carsten H. Meyer*

*Ophthalmologica 2009;223:313–319*

They reported the long-term (1-year) changes in retinal perfusion and functional improvement, induced by radical optic neurotomy (RON) in cases of central retinal vein occlusion (CRVO). The report is based on an analysis of 63 eyes. The result is clear and they concluded that the retinal perfusion status improved significantly only in the RON group, compared to the non-RON group. The visual improvement in the RON group was also significantly better than in the control group. Moreover, the development of chorioretinal anastomosis was significantly higher after RON than in the controls. In the operated eyes there was a lower incidence of CRVO-related complications. They succeeded in achieving a better functional outcome in CRVO by RON. RON is considered to be an effective treatment, especially compared to intravitreal bevacizumab in the case of macular edema coming from CRVO.

**Comparative Assessment of Photodynamic Therapy for Typical Age-Related Macular Degeneration and Polypoidal Chorioidal Vasculopathy: A Multicenter Study in Hyogo Prefecture, Japan**

*Shigeru Honda, Hisanori Imai, Kenji Yamashiro, Yasuo Kurimoto, Noriko Kanamori-Matsui, Yasuaki Kogotani, Tasushi Tamura, Hiroyuki Yamamoto, Satoru Ohoto, Hitoshi Takagi, Mamoru Uenishi*

*Ophthalmologica 2009;223:333–338*

This report also treated neovascularization in the case of age-related macular degeneration (AMD), although the neovascular mechanism is different from branch retinal vein occlusion or central retinal vein occlusion. The authors evaluated the effects of photodynamic therapy (PDT) on different phenotypes of AMD: typical AMD and polypoidal choroidal vasculopathy (PCV). They treated 246 eyes in total, compared to 125 eyes as a control. They concluded that the phenotype of AMD is significantly correlated with its prognosis after PDT. PCV showed a significantly better response to PDT in terms of best-corrected visual acuity improvement and effect durability. The authors concluded that PDT remains the effective therapy for PCV, a predominant phenotype of AMD in Asian subjects, especially in Japan.

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