



More about Retinal Vascular Disorders

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Dear Friends,

Among the various retinal vascular disorders, diabetic retinopathy (DR) is the most common while retinal vein occlusion (RVO) is the second most common vascular disease. Diabetic retinopathy, most common microvascular complication of diabetes mellitus (DM), is a leading cause of legal blindness within the working age population in developed countries.⁽¹⁾ The reason behind loss of vision are diabetic maculopathy and complications of proliferative diabetic retinopathy (PDR) such as vitreous hemorrhage, tractional retinal detachment and neovascular glaucoma, Risk of PDR is high in Type- I DM while diabetic macular edema (DME) is more commonly seen in Type- II DM. The prevalence of DR has been reported to be ranging from 3-4% in European population.⁽²⁾ Population based studies in western world have revealed the prevalence of DR to be 28.7% whereas PDR and DME account of 9% and 17%, respectively.⁽³⁾ United Kingdom prospective diabetes study (UKPDS) estimated a prevalence rate of DR of 35-39% in NIDDM.⁽⁴⁾ Although the exact metabolic pathway causing DR is still unknown. The disequilibrium between vaso-proliferative and vasoinhibitory factors in retina and vitreous may result in excess release of VEGF which leads to vascular proliferation.⁽⁵⁾ The accumulation of bi-products of glucose metabolism like fructose & sorbitol, in retinal cells may lead to retinal/ macular edema. Several host related risk factors activate the above pathogenic mechanisms such as duration of diabetes, glycemic control, anemia and dyslipidemia etc. Literacy status, socioeconomic status and pregnancy status also play important role in pathogenesis of DR. Low level of diabetes awareness in our country results in late detection of DR. Hari Ramakrishnan *et al.* in this issue, has published a study related to awareness of DR among the South Indian diabetic population and Divya *et al.* has published study on relation of body mass index and severity of DR.

RVO is the second most common retinal vascular disease after DR. Non ischemic type RVO is 9 times more common than the ischemic type. Branch retinal vein occlusions (BRVOs) are roughly 12 times more common than central retinal vein occlusions (CRVOs). CRVO causes loss of vision due to macular edema and / or retinal ischemia.⁽⁶⁾ Various treatment modalities are laser photocoagulation, anti-VEGF therapy and intravitreal triamcinolone acetonide injection (IVT).⁽⁷⁾ Eales disease (retinal phlebitis) is another idiopathic inflammatory vascular disorder affecting young adults. Patients of Eales disease usually present with recurrent vitreous haemorrhage and may lead to tractional retinal detachment. The modalities of treatment include oral corticosteroids, intravitreal anti-VEGF agents, laser photocoagulation and microincisional vitrectomy.⁽⁸⁾ Sanjeev Kumar & Jyotirmay Biswas, in this issue has published a study on Eales disease.

I am sure this issue will provide some interesting studies on retinal disorders and their management.

References

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