

THU NGUYEN, West Virginia School of Osteopathic Medicine, Lewisburg, W.V., ROBERT MORRIS, HAROLD F. LEEPER, Harold F. Leeper, M.D., Ph.D., Inc., Wheeling W.V. Progressive and severe proliferative diabetic retinopathy.

Proliferative diabetic retinopathy (PDR) is a progressive condition leading to blindness. PDR develops in twenty percent of patients with diabetes mellitus (DM) with equal occurrence in type I and type II DM. This case study describes a relatively young patient who presented with deteriorating, severe PDR in both eyes. A 44-year-old male presented with a two-week history of blurred vision in the right eye. The history is significant for insulin dependent diabetes mellitus. Examination revealed retinal hemorrhages, exudates and microaneurysms in both eyes. Fluorescein angiography and Ocular Coherence Tomograph (OCT) were performed. There were macular edema, fibrous and vitreo-retinal traction for each eye. Color photographs demonstrated proliferative diabetic retinopathy with associated clinically significant macular edema, ischemia and neovascularizations for both eyes. There was vitreo-retinal traction for each eye. Treatment included scatter photocoagulation, focal laser therapy and Avastin injections. The patient was diagnosed with PDR and leakage apparent in the mid to late stages of the angiogram consistent with the degree of macular edema noted clinically in both eyes. Furthermore, ischemia and neovascularizations were apparent in both eyes. Severe PDR increases the risk for blindness for which early diagnosis is crucial. The patient had significant macular edema and neovascularizations. He is at an increased risk for a retinal detachment due to vitreo-retinal traction. Focal laser treatment, scatter photocoagulation and a series of Avastin injections reduces macular edema, decreases neovascularization, and reduces the vascular component of fibrosis. The patient blurred vision improved after course of treatment. Early diagnosis of PDR is vital to reducing blindness. Focal laser treatment, scatter photocoagulation and Avastin injections reduce macular edema and neovascularizations resulting in improved prognosis. Patients with DM are encouraged to have annual eye examinations.