

Effect of Pregnancy on Diabetic Retinopathy

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Objective: To establish the effect of pregnancy on progression of diabetic retinopathy and the correlation between diabetic retinopathy during pregnancy with age, glucose control and duration of diabetes.

Setting: Obstetric, Medical and Ophthalmology clinics.

Methods: This is a retrospective study of pregnant patients who attended obstetric, medical and ophthalmology clinics during January 1996 till December 1998. Non-pregnant diabetic patients in reproductive age groups who attended medical and ophthalmology clinics during the same period served as controls. A total of 60 pregnant insulin dependant patients were studied while 80 non-pregnant insulin dependant diabetics served as control.

Results: Diabetic retinopathy was found in 58% (35 patients) of pregnant women, while it was present in 30% (24 patients) of the controls. Background diabetic retinopathy was found in 20 pregnant patients, in 3 of them (15%) progression to proliferative retinopathy occurred. Proliferative retinopathy was found in 15 patients. Two out of 7 patients (29%) of photocoagulation- treated group progressed to severe form while 5 out of 8 patients (62.5%) of the untreated group developed progression. Twenty-four of the 80 control patients (30%) had retinopathy. No progression occurred in the patients with no-retinopathy or in controls. Duration of diabetes was the only significant factor in progression of disease.

Conclusion: Understanding the risk factors contributing to aggravation of diabetic retinopathy during pregnancy is helpful in designing criteria for the team management of pregnant patients with diabetes. Pregnancy may deteriorate retinopathy and photocoagulation prior to pregnancy may protect against rapidly progressive proliferative retinopathy and visual impairment. Therefore, in diabetic women a full retinal evaluation must be done as a part of pre-pregnancy counseling procedure.