

Visual prognosis after pars plana vitrectomy for tractional retinal detachment in diabetic patients

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Purpose:

To evaluate the surgical outcomes and patient benefit after pars plana vitrectomy for diabetic tractional retinal detachment.

Methods:

In this retrospective study, data were analyzed for 96 consecutive vitrectomy for tractional diabetic retinal detachment procedures performed between 2001 and 2003 with follow up of at least three months. Patients gained 0,1 or better Snellen visual acuity were accepted as having benefited from vitrectomy. Preoperative and postoperative visual acuities and factors having influence on postoperative visual outcome were analyzed by repeated measures and ANOVA test.

Results:

Mean patient age and mean follow up time were 55.2 ± 11.5 years and 7.8 ± 7.2 months respectively. Preoperative and postoperative mean visual acuities after one, three and six months were 0.0014 ± 0.085 , 0.0032 ± 0.051 , 0.0034 ± 0.0036 and 0.0027 ± 0.038 Snellen respectively. While there was statistically significant difference between mean preoperative and postoperative visual acuities after one month ($p=0.013$), the difference was diminished after three ($p=0.048$) and six months ($p=0.228$). In comparison with preoperative 8.3% eyes having 0.1 or better visual acuity, postoperative ratios were increased to 18.5%, 29.4% and 25% after one, three and six months respectively but the increase was statistically significant only in the third month ($p=0.008$). Factors associated with postoperative visual outcome were preoperative visual acuity ($p=0.0001$), hypertension ($p=0.023$) and duration of diabetes ($p=0.026$).

Conclusion:

Visual acuity improvement could be achieved after pars plana vitrectomy for diabetic tractional detachment, but patient benefit is limited after six months. Thus before vitrectomy for such patients the risks and benefits have to be weighed.

Take-home message:

As patient benefit is limited after pars plana vitrectomy for tractional retinal detachment, preoperative thorough evaluation of patients is important.

