

Diabetic vitreo-macular traction syndrome

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Purpose:

To evaluate effect of pars plana vitrectomy on visual acuity (VA) and development of macular edema in diabetic macular traction syndrome.

Methods:

In the period of July 2002 to January 2003, we identified 35 diabetics in total, with clinically significant macular edema. The OCT examination was carried out with all of the patients. In 5 patients, the diabetic macular traction syndrome was detected and these patients underwent pars plana vitrectomy. The monitoring period was 6 months.

Results:

The VA improved in 4 eyes at least by one line on the Snellen chart and in one case the VA worsened in relation to the progress of ischaemic changes in macula. It was necessary to perform supplementary direct photocoagulation in one of the improved patients, however, for the most part, intervention with laser after vitrectomy was not necessary. Development of the macular edema after operation: before operation, in all of the 5 patients, cystoid macular edema (CME) was present, in one patient with a significant ischaemic component. The CME practically completely disappeared in 3 cases, in one case a significant reduction occurred and in one case the CME did not change (the patient with ischaemic macula). We re-operated once due to development of an epimacular membrane 6 months after the first operation.

Conclusion:

In the case of development of the macular traction syndrome, we recommend pars plana vitrectomy, which in 80% improves the VA and significantly reduces macular edema. However, for definitive conclusion, further investigation will be necessary. In the case of the diabetic macular traction syndrome, the anatomic improvement, however, does not always lead to vision improvement.

Take-home message:

OCT examination is suitable for all the patients with the diabetic macular edema, and if diabetic macular traction syndrome is discovered, then pars plana vitrectomy can resolve diabetic macular edema.

