

Vitreous surgery for proliferative diabetic retinopathy with end stage renal disease

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Background:

Anatomical and functional results after vitreoretinal surgery in patients with diabetic retinopathy and renal failure, undergoing hemodialysis or after renal transplantation are presented.

Material and method:

Vitreous surgery was performed in 22 patients (29 eyes), combined procedures of phacoemulsification and vitrectomy was performed in 5 of them. All surgical procedures were performed on the day between hemodialysis.

Results:

In 21/29 (72,4%) eyes visual acuity 1/50 or better was achieved, 0, 1 to 0,8 in 11/29 (37,9%) eyes. 17 patients (25 eyes) had anaemia. In these eyes visual acuity 1/50 or better was achieved in 17/25 (68%) eyes and 0,1 or better in 8/25 eyes (32%). In 4 patients (4 eyes) without anaemia achieved visual acuity was 1/50 or better and in 3 of them was above 0,1.

Conclusion:

Vitreous surgery can be safely and successfully performed as one-day surgery in patients with renal failure, undergoing hemodialysis or after renal transplantation. Even in cases of anaemia and severe diabetic vitreoretinopathy some degree of success is possible.

Take-home message:

Vitreous surgery is an effective method of treatment of severe complications of proliferative diabetic retinopathy in patients with end stage renal disease.

