

Is sheathotomy a feasible surgical procedure in branch vein occlusion? Report on our first 10 cases

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Purpose:

To report the clinical experience and results using vitreoretinal surgical technique to decompress the arteriovenous connection in branch vein occlusion with haemorrhage, edema and ischemia.

Study design:

Prospective, nonrandomized interventional case study.

Methods:

Patients with branch retinal vein occlusion (BRVO) and decreased visual acuity due to haemorrhage, edema and ischemia were enrolled, after orally informed consent, in a study of a new surgical decompression procedure. The patients were monitored according to a protocol with pre- and postoperative best corrected visual acuity (BCVA), intraocular pressure, fundus photography and in most cases fluorescein angiography. Postoperative cataract progression as well as other complications were observed.

Material:

10 patients, 7 women 3 men with a mean age 65 years were included. Mean duration of the thrombosis was 7 month (2-12). They were followed-up after 17 months (6-35).

Results:

BCVA improved in six patients, was unchanged in one patient and deteriorated in three patients at last follow-up. Perioperative complications were venous hemorrhage in four patients. Postoperative complications were retinal detachment in one patient and macular hole formation in another patient. Progression of cataract was noted in four patients.

Conclusion:

Surgical treatment of BRVO is a technically feasible procedure with few complications. Postoperative increased reperfusion could explain the resolution of macular hemorrhage, edema and ischemia, which may improve visual function in patients with this common vascular eye disease. The indication for the procedure must be further investigated.