

Full-thickness macular holes treated with vitrectomy and tissue glue.

Authors: Tilanus MA, Deutman AF

Publication Date: 1994

Abstract:

In the surgical treatment of full-thickness macular holes good results have been published with the combination of vitrectomy, gas and application of Transforming Growth Factor beta 2. Other authors report a 73% success rate in closing a full-thickness macular hole after vitrectomy and gas tamponade alone. We used, in addition to vitrectomy and gas tamponade, a tissue glue to stimulate adhesion of the elevated cuff of neurosensory retina surrounding a full-thickness macular hole and to close to hole itself. A total of 15 eyes of 13 patients (3 men, 10 women), with stage 3 and 4 macular holes were operated. All of the 13 uncomplicated cases showed complete closure of the macular hole. In one case (8%) the visual acuity decreased one line in spite of a funduscopically closed hole, and in two cases (16%) visual acuity remained the same despite closure. Increased visual acuity was seen in ten cases (76%), eight of which improved more than two lines.