ERM PEELING IN THE OCT ERA

R. Stein, A. Hadayer, I. Knisbacher, A. Pollack, A. Bukelman

Department of Ophthalmology, Kaplan Medical Center, Israel

Background: Traditionally, evaluation of patients with Epiretinal Membrane (ERM) was based on visual complaints such as metamorphopsia, visual acuity, ophthalmoscopy, and fluorescein angiography. The introduction of OCT enabled fine retinal imaging which more clearly demonstrated previously hard to detect pathological macular changes. Consequently, OCT has become a major factor when considering surgical treatment. Purpose: To evaluate the change in vitrectomy rate for ERM peeling following the introduction of OCT in our department. Methods: We reviewed all cases of vitrectomy: Group 1: 2002-2004, before the introduction of OCT in our department. Group 2: 2007-2009, after the introduction of OCT. We evaluated surgery indications, demographic data and ophthalmic status for all cases of vitrectomy for ERM peeling during these time-periods. Results: ERM peeling as a proportion of total vitrectomies increased from 12% (24/215) in group 1 to 17% (54/318) in group 2 (p=0.08). Excluding retinal detachment surgery, ERM peeling increased from 16% to 26% (p=0.01) of total vitrectomies. Mean visual acuity (VA) before surgery was 0.22 in group 1 and 0.20 in group 2. Mean VA one year following surgery was 0.30 and 0.31, respectively. In group 1 there were no diabetic retinopathy patients whereas these comprised 37% (20/54) of cases in group 2. Conclusions: Following the introduction of OCT, ERM was the main indication for surgery in a greater proportion of vitrectomies and was performed more often in diabetic retinopathy. Mean VA improved following surgery. There was no significant difference in post-operative VA improvement between the two time.