

SYMPOSIUM: ARMD SURGICAL APPROACH

Moderators: Klaus Lucke, Karl Ulrich Bartz-Schmidt, Frank Koch, Sven Crafoord

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Retinal pigment epithelium (RPE) and choroid translocation in patients with exudative macular degeneration

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Purpose:

To evaluate the visual outcome after one-year of autologous midperipheral retinal pigment epithelium translocation following the removal of a subfoveal choroidal neovascularization in patients with exudative age-related macular degeneration (ARMD) and to identify preoperative factors that correlate with vision improvement. To present current developments of the technique.

Methods:

In 41 consecutive patients best corrected ETDRS was measured preoperatively and at one-year postoperatively and converted to LogMAR. The correlations between preop vision, type and size of the neovascular membrane, presence and size of subretinal hemorrhage and duration of visual loss and either a vision of 20/80 or more or an 3 ETDRS lines increase were tested with multivariate analysis.

Results:

Mean visual acuity change was 0.034 LogMAR, a decrease of 0.3 ETDRS line. 63 % of patients lost less than 3 ETDRS lines. Preoperatively 1 patient's vision was 20/80, whereas 7 patients' vision was 20/80 or better after 1 year. Multivariate analysis failed to reveal a statistically significant relation between the preoperative variables and visual outcome. Postoperative complications included retinal detachment with PVR in 2 patients, suprachoroidal hemorrhage in 1 patient and recurrent choroidal neovascularization in 6 patients.

Conclusion:

An autologous RPE translocation results in moderate visual loss in the majority of patients as well as in a vision of 20/80 or more in 18%; we were unable to identify preoperative factors for better patient selection, possibly due to too many other variables, such as peroperative ones (because of the current lack of a standardized surgical technique) and postoperative complications.