[Comparison of Functional and Morphological Outcome after Aflibercept or Ranibizumab in Chronic Recurrent Neovascular Age-Related Macular Degeneration].

Abstract:
Background: To assess functional and morphological outcomes in patients with chronic recurrent neovascular age-related macular degeneration (nAMD) previously treated with ranibizumab, who were either switched from ranibizumab to aflibercept or received further ranibizumab injections. Methods: Retrospective analysis of eyes with recurrent nAMD previously treated with ranibizumab. On recurrence of the macular oedema, patients had received either 3 injections of aflibercept (2.0 mg) or ranibizumab (0.5 mg) at 4 week intervals. Patients were examined before the first injection and four weeks after the last injection. The main outcome measures included change in visual acuity (VA) in logMAR, subfoveal central retinal thickness (CRT), subretinal fluid (SRF) and height of pigment epithelial detachment (PED height), as well as the maximum height of macular subretinal fluid (SRF max) and of macular pigment epithelial detachment (PED height max) in spectral-domain optical coherence tomography (OCT). Changes in VA and OCT were compared between the two groups to investigate differences in the therapeutic effects of aflibercept and ranibizumab. Results: 60 eyes of 55 patients were included. The aflibercept group (n = 30) and the ranibizumab group (n = 30) showed no statistically significant differences in mean age (p
Mean VA logMAR improved in both groups, though only in the ranibizumab group was the difference significant (0.50 ± 0.33 to 0.44 ± 0.29 logMAR; p = 0.013; Table 1). CRT decreased in the aflibercept (p = 0.133) and ranibizumab groups (p = 0.043). PED height was reduced in both groups (aflibercept p = 0.068; ranibizumab p = 0.241). SRF, SRF max and PED height max showed statistically significant decreases in both groups. Comparison of the aflibercept and the ranibizumab groups showed no statistically significant differences between the two groups in change in VA logMAR (p = 0.680), CRT (p = 0.882), SRF (p = 0.871), PED height (p = 0.524), SRF max (p = 0.940) or PED height max (p = 0.762). Conclusions: Aflibercept and ranibizumab were similarly effective in improving visual acuity and morphological parameters of patients with recurrent nAMD after four months. There were no statistically significant differences in the therapeutic effects of the two drugs.