The effect of intravitreal bevacizumab injection in neovascular macular degeneration.

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Background

Bevacizumab is a monoclonal antibody that binds vascular endothelial growth factor. It reduces angiogenesis and vascular permeability. In Italy it's approved for colorectal, lung, breast and renal cancer. In 2007, legislative act 648/96 allowed bevacizumab use in exudative macular degeneration (MD) and neovascular glaucoma. Since 2009 AIFA has authorized its use in under 65 and in no naive patients over 65. Since 2010 bevacizumab can be used only in patients under 65.

Purpose

To assess the effectiveness of intravitreal bevacizumab injection and visual acuity (VA) in patients with neovascular MD.



Material and Method

Between January 1, 2008 and September 30, 2011 we analized 356 patients (179 females and 177 males), that were 69,7±1,22 years of age. 81 patients received a dose of 1,25mg of bevacizumab three times a year, prepared by pharmacists from Avastin 100mg in the Antiblastic Drug Preparation Room. The other 275 patients received bevacizumab as needed. Patient changes in VA were evaluated monthly through Snellen equivalent.

Results

Age-related MD patients were 245, of which 77,4% showed stability of vision, 2,8% showed an improvement of VA and 19,8% had slightly worse acuity. No age-related MD patients were 111, of which 81,8% showed stability of vision, 9,5% showed an improvement of VA and 8,7% had slightly worse acuity. VA score of patients who received quarterly or as needed bevacizumab was respectively 68-82 letters for 31,8% and 33,7%, 53-67 letters for 42,6% and 38,9%, 38-52 letters for 19,2% and 19,8% and 23-37 letters for 6,4% and 7,6%.



81.8

Conclusion

Macular degeneration is the leading cause of irreversible vision loss in the industrialized world. Bevacizumab optimizes vision-related quality of life because it immediately reduces the amount of fluid in or under the retina. In fact, in this analysis, it showed beneficial effect in stabilizing visual acuity loss and in few patients led even to an improvement.





