

One year results of photodynamic therapy in eyes with choroidal neovascular membranes due to age related macular degeneration

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Purpose:

To evaluate the effectiveness of photodynamic therapy with verteporfin in preserving vision at 1 year in eyes with CNVM due to ARMD

Methods:

44 eyes of 43 patients who had photodynamic therapy (PDT) with verteporfin for age related macular degeneration between December 2002 and January 2004 were included in the study. 29 (67%) women, 14 (33%) men, mean age was $70,3 \pm 6,4$. Mean follow-up was $12,9 \pm 6,5$ months.

Results:

Patients with choroidal neovascular membranes of less than 5400 microns, and membranes comprising more than 50% of the total lesion area were treated. Membrane localization was subfoveal in 37 (90,5%) eyes, juxtafoveal in 4 (9,1%). Membrane type was pure classic in 14 (31,8%) eyes, predominantly classic in 15 (34,1%), occult in 10 (22,7%) eyes, and minimally classic in 3 (6,8%) eyes. Mean preoperative best corrected visual acuity was (BCVA) $0,19 \pm 0,19$ (logMAR $0,88 \pm 0,38$), the number of PDT was $2,52 \pm 1,66$. In 20 (45,5%) eyes BCVA was preserved at one year, 12 (27,3%) eyes had moderate vision loss, 2 (4,6%) had severe vision loss and 5 (11,4%) eyes that were lost to follow up were also considered to have severe vision loss (total 7 eyes 15,9%). 4 (9,1%) gained more than 3 lines, and 1 (2,3%) eye gained more than 6 lines. Mean BCVA at the last visit was $0,20 \pm 0,23$ (logMAR $0,93 \pm 0,43$). No change in contrast sensitivity at one year was detected. Greatest linear diameter of the lesion increased from 3059 ± 1336 microns to 3438 ± 1255 at the last visit. Four (9,5%) patients reported back pain during infusion and 2 (4,5%) patients had visual loss with spontaneous recovery in 1 week.

Conclusion:

PDT is a safe and considerably effective method of preserving vision at 1 year in eyes with CNVM due to ARMD.

Take-home message:

PDT is a safe method but it is not satisfactory. Its combination with other therapies may increase the effectiveness in preserving and improving visual function.