

The Role of Hyperthermia in Control of Subfoveal CNV: Stabilization of CNV with Low Recurrent Rate

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PURPOSE

To evaluate the role of hyperthermia in control of subfoveal CNV.

METHODS

Method: the 93 eyes of 85 consecutive patients with angiographically proved CNV underwent TTT with diode laser emission at 810nm. Mean patients age was 74.0 ± 7.1 years (range: 55-88 years). 59 patients (69.4%) were male and 26 (30.6%) were female. 27 patients (29.0%) had hypertension and 10 (10.7%) had diabetes.

RESULTS

54 eyes with occult CNV, 22 with classic CNV and 17 with mixed type CNV were treated using TTT and followed up for a mean of 11.18 months (range: 6-24 months). 76 CNVs (81.7%) were sub-foveal and 17 (18.3%) were juxta-foveal. Mean CNV area in all 93 eyes was 3.0 ± 1.7 DD (range: 0.1 to 7.0 DD). Simple regression showed significant correlation between CNV area and visual acuity in Log MAR scale (Beta=0.239, P=0.021) 32 eyes underwent two sessions of TTT (28 eyes for persistent CNV) and 4 eyes showed recurrent CNV and needed to additional treatment during the study; 6 of 32 eyes had three sessions, all for persistent CNV. Overall mean treatment session was 1.47. Based on CNV type, visual acuity was stabilized (\pm one line variation) after TTT in 45 eyes (88.2%) of occult group, in 22 eyes (100%) of classic group and in 14 eyes (82.3%) of mixed CNV group. Recurrent CNV occurred in 4 of 93 (4.3%) eyes.

CONCLUSION

Our study showed that TTT is an inexpensive and efficient method to control of subfoveal CNV with low recurrent rate.