

## Spectral OCT in Follow-up of Patients after Macular Hole Surgery

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### PURPOSE

To evaluate the correlation between S-OCT and visual acuity after macular hole surgery after macular hole surgery.

### METHODS

This study involved eyes who had undergone anatomically successful idiopathic macular hole surgery. Association between type of macular closure, size of well demarcated intra or juxtafoveal defect, foveal shape and best corrected visual acuity were analyzed. Measured parameters included central foveal thickness, photoreceptor thickness, horizontal and vertical diameters of intraretinal defects. Foveal shape was graded according to former described pattern using OCT 3.

### RESULTS

All eyes were classified in 3 groups of foveid, flattend and knotted (with undermined defect of retinal tissues) foveal shape. The measured parameters included diameters of intraretinal defects and central foveal thickness did not collerated with postoperative best corrected visual acuity, however the knotted configuration was combined with delayed or limited improvement of visual acuity. Although the ELM and transition zone between the inner and outer segments of photoreceptors could be visualized the real evaluation of diameters of the photoreceptors was difficult due to inconsistent level of brightness and not adequately software adjustment.

### CONCLUSION

Information provided by he spectral OCT may improve understanding in the anatomic reconstruction of the fovea after macular hole surgery and explain delayed or limited improvement of visual acuity.