

# Study shows low rate of CNV recurrence after macular translocation surgery

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**In Fort Lauderdale**

Two-year follow-up data from the Duke Macular Translocation study show a relatively low rate of recurrent choroidal neovascularisation in eyes that undergo macular translocation surgery with 360-degree peripheral retinectomy (MT-360) as a treatment for exudative age-related macular degeneration.

The Duke Macular Translocation study is a prospective, non-comparative investigation that enrolled 64 second eyes of patients with bilateral vision loss from neovascular AMD who were ineligible for or who failed non-surgical treatment. In all cases, the operative eye had subfoveal CNV and a maximum of six months of central vision loss. At baseline, the patients had a median lesion size of 9 MPS disc areas, but their lesions ranged up to 22 disc areas in size.

Speaking at the annual meeting of the Association for Research in Vision and Ophthalmology, Claxton A Baer MD reported that among 61 eyes seen after one year, 12 (21%) had developed a recurrence. CNV recurrence

occurred in two more eyes over the next 18 months yielding a cumulative recurrence rate of 25% for the 56 eyes evaluated after two years. Nine recurrences extended subfoveally. No eyes developed geographic atrophy.

**“The fact that almost every recurrence originated in the old CNV bed and that most recurrences occurred from its foveal side suggests there is some signalling going on from the fovea,”**

Treatment for recurrent CNV was performed in some eyes with MPS laser photocoagulation or verteporfin photodynamic therapy. At two years, median visual acuity for the 14 eyes with recurrent CNV was 20/200 or worse compared with their counterparts that remained recurrence-free.

“We recommend these eyes be followed closely for recurrence during the first postoperative year as early

recognition and new methods of treatment for CNV may prevent vision loss in these individuals and improve overall outcomes,” Dr Baer stressed.

In MT-360 surgery, the retina is detached, cut 360 degrees peripherally, and reflected back

to remove the CNV membrane. Then, the fovea is translocated off the CNV bed, and the retina is reattached with placement of a silicone oil tamponade. At two months postoperatively, extraocular muscle surgery is performed to correct tilt in the visual field, and the silicone oil is removed at that time or in subsequent surgery.

Cynthia Toth MD is the principal investigator for the Duke Macular Translocation

Study and performed all of the surgeries.

## **CNV recurrences primarily on original site**

Dr Baer noted that in following patients after MT-360 surgery, it is important to pay close attention to the foveal side of the CNV bed. That comment was based on the observation that of the 14 recurrences seen in this series, 13 occurred from the old CNV bed and all crossed the margin of the old CNV bed. In the remaining eye, the recurrence also appeared to have come from the old CNV bed, but the connection was not entirely clear. No patients developed CNV recurrence “de novo” in the intended position of the translocated repositioned fovea.

In the 13 eyes with definite recurrence from the old CNV bed after MT-360 surgery, the recurrence crossed the superior margin of the old bed in 12 eyes. In 8 of those eyes, the superior margin, which is the margin closest to the repositioned fovea, was the only margin crossed, Dr Baer noted.

“The fact that almost every recurrence originated in the old CNV bed and that most

recurrences occurred from its foveal side suggests there is some signalling going on from the fovea,” Dr Baer said.

That concept may also explain the fact that the two-year recurrence rate after MT-360 surgery was only half that of the 52% rate observed during the same duration of follow-up in the Submacular Surgery Trial (SST). The vast majority of recurrences that developed after submacular surgery also crossed the margin of the old CNV bed, while three percent remained totally confined within the CNV bed margins.

“We believe that the lower recurrence rate after MT-360 surgery compared with submacular surgery can be explained by an anatomical difference between these procedures in the resulting location of the fovea relative to the old CNV bed – in submacular surgery, but not in MT-360, the fovea overlies the old CNV bed,” Dr Baer said.

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