

## Abstract 90

### **INVERTED INTERNAL LIMITING MEMBRANE FLAP FOR SMALL-SIZED (<250 MICRON) FULL THICKNESS MACULAR HOLE: ANATOMICAL AND FUNCTIONAL OUTCOME**

Oral

Iuliano L.\*, Codenotti M., Bandello F.

*IRCCS Ospedale San Raffaele Scientific ~ Milan ~ Italy*

#### **Purpose:**

To compare the anatomical and functional outcome of small-sized (<250 micron) and medium-sized (250-400 micron) full thickness macular holes (FTMH) treated either with internal limiting membrane (ILM) inverted flap (IF) or with the standard technique.

#### **Methods:**

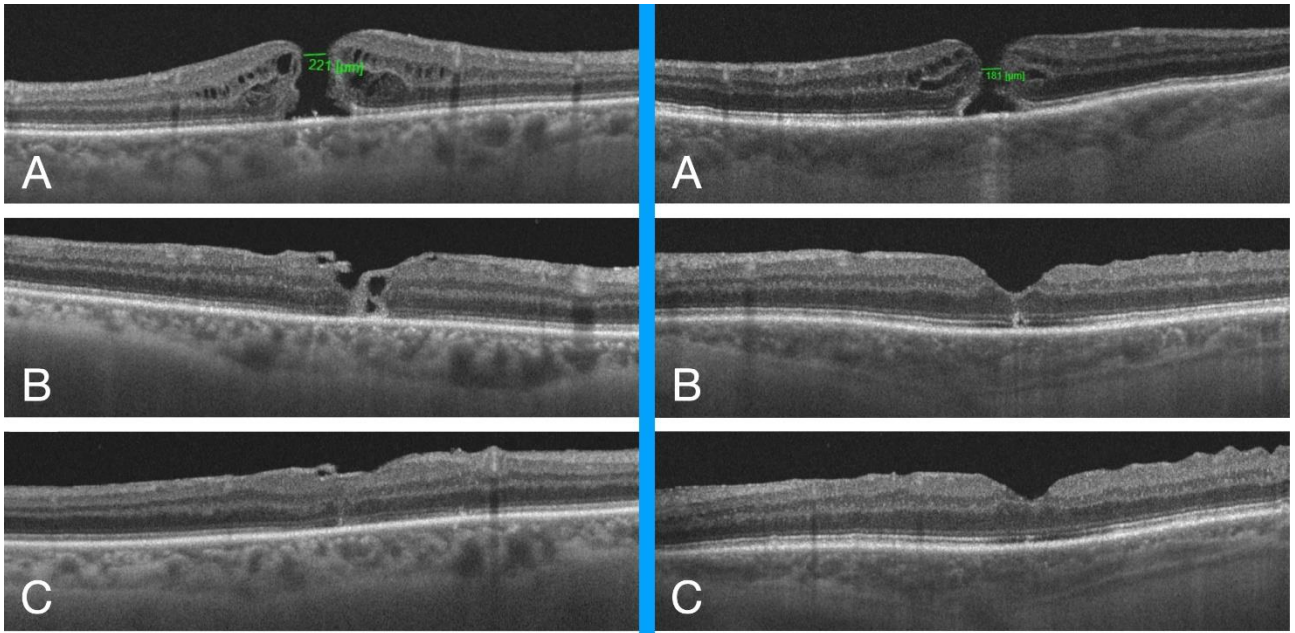
Prospective non-randomized analysis of subjects affected by small or intermediated FTMH followed for 6 months, operated either with IF or with the standard technique. Main outcome measures were best-corrected visual acuity (BCVA), macular retinal sensitivity (measured with microperimetry) and restoration of the external limiting membrane (ELM) and ellipsoid zone (EZ) at 6 months.

#### **Results:**

100 eyes were included, 50 with small and 50 intermediate FTMH. Half of each group (25) was treated with the standard technique, half with IF. BCVA increased in every subgroup, regardless the technique. In small FTMH the 4° retinal sensitivity at 1 month turned out to be inferior in the IF group (19.59+/-2.49 dB) compared to the standard technique (19.84+/-2.42 dB; p=0.0035). Small FTMH with IF disclosed inferior rates of ELM (24%) and EZ (24%) restoration, compared to the standard technique (56% ELM p=0.0420; 64% EZ p=0.0095). At 6 months, both microperimetric and anatomical parameters (ELM and EZ) were similar.

#### **Conclusions:**

Surgical repair of small-sized FTMH with ILM inverted flap achieves successful anatomical and functional results, comparable to the standard technique. ILM inverted flap in small FTMH may slow down the foveal microstructural repair compared to the standard technique.



Inverted flap

Standard technique