

## Abstract 49

### AUTOLOGOUS ANTERIOR LENS CAPSULE FLAP AND SERUM TRANSPLANT IN MANAGING IDIOPATHIC AND REFRACTORY FULL THICKNESS MACULAR HOLES

Oral

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#### **Purpose:**

To report the results of pars plana vitrectomy (PPV) with inner limiting membrane (ILM) peeling alongside phacoemulsification and intraocular lens (IOL) implantation with autologous anterior lens capsule flap (ALCF) and autologous serum transplantation (AST) into full thickness macular holes (FTMH) and 14% perfluoropropane (C3F8) tamponade for idiopathic and refractory FTMHs.

#### **Methods:**

Retrospective study involving eleven patients with idiopathic FTMHs and seven with refractory FTMHs after standard surgery with PPV, ILM peeling, and gas tamponade. All eyes underwent a 'combination procedure' of PPV with ILM peeling alongside phacoemulsification and IOL implantation with autologous ALCF and AST into the FTMH and 14% C3F8 tamponade. A face-down position for one week was recommended.

#### **Results:**

The mean preoperative FTMH size was  $558.95 \pm 186.30 \mu\text{m}$ . Seven patients aged  $64 \pm 5$  years had a refractory FTMH and eleven patients with a mean age of  $63.72 \pm 4.97$  years had an idiopathic FTMH. The main BCVA improvement six months postoperatively was  $0.3 \pm 0.29 \log\text{MAR}$ . Seventeen macular holes fully closed six months postoperatively, with one FTMH closure failure because of a retinal detachment.

#### **Conclusions:**

ALCF transplantation alongside AST may help to improve the closure rate and visual outcomes in both idiopathic and refractory FTMHs.