Trabeculectomy versus Ex-Press glaucoma filtration device in ocular pterigectomy after pars plana vitrectomy and silicone oil emulsification

D. Errico, F. Scrimieri, G. Iarossi, R. Fedeli
1)Unità Operativa di Oculistica - Centro Glaucoma - Azienda Ospedaliera “Cardinale Panico” - Tricase - Lecce - Italy
2)Ospedale Pediatrico “Bambino Gesù” - Roma - Italy

INTRODUCTION
Silicone oil is a known cause of increased intraocular pressure (IOP) in glaucoma, particularly in the presence of silicone oil in the anterior chamber. The risk factors for surgical failure include presence of silicone oil in the anterior chamber, previous mitomycin C treatment, and previous vitrectomy.

MATERIALS AND METHODS
This was a single-center, retrospective, comparative study. Consecutive 21 eyes (13 Caucasians, 8 Asians) affected by silicone oil hypotony after pars plana vitrectomy and silicone oil injection were included in the study. They were divided in two groups, the first treated with Ex-PRESS glaucoma filtration device placed under the scleral flap with mitomycin C, and the second treated with trabeculectomy with mitomycin C.

RESULTS
The two groups were compared using the Mann-Whitney test. The success rate in the Ex-PRESS group was 23% (P=0.03) between Ex-PRESS device and trabeculectomy after one year of follow up.

DISCUSSION
Silicone oil is a well-known risk factor for surgical failure after pars plana vitrectomy and silicone oil injection. The presence of silicone oil in the anterior chamber increases the risk of surgical failure. The success rate was 23% in the Ex-PRESS group versus 18.2% in the trabeculectomy group.

REFERENCES
3. Leaver et al. reported that 43% of the patients with postoperative glaucoma had silicone oil bubbles in the anterior chamber angle.