

The Back-Flush Cannula as an Instrument to Introduce Various Substances Onto the Macula During Pars Plana Vitrectomy

Authors: Mario Facino, Benedetto Mochi, Fabio Giacomelli

Advantages:

Precise control of the amount of substance to introduce onto the macula

Injection and removal of the substance with a single maneuver; it is not necessary to exit and re-enter the eye

Less amount of substance needed to obtain ILM/ERM staining or macular hole temporary closure

Methods:

The back-flush cannula reservoir is filled with the substance that has to be introduced onto the macular area (dye, blood, heavy liquid). Once the tip of the cannula is positioned in the near proximity of the macula, the infusion line is temporarily stopped and the surgeon exerts a gentle pressure on the back-flush needle in order to promote a smooth injection of the substance over the macula. After the infusion is resumed the substance is aspirated with the back-flush cannula.

Effectiveness / Safety:

In all the cases the substance has been successfully introduced over the macular area without intra-operative complications such as retinal damage, inadvertent subretinal injection, posterior capsule staining.