

25g Sutureless Surgery and Silicone Oil Injection

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PURPOSE

Until now 25g sutureless surgery had limitations, due to instruments small lumen and flexibility. With the new instrumentation we present our technique of injecting silicone oil without sutures and the special indications that need to do so.

METHODS

We present 25 cases with patients suffering from PVR, central retina holes and inability to position with macula holes, that silicone oil would be the choice for 20g surgery. Technique complications and difficulties are presented also.

RESULTS

Out of 25 patients in 2 cases we needed to suture the sclera due to extensive manipulations. At the rest 23 patients no suture was required to keep the silicone oil into the vitreous cavity. The time of injection is between 5-7min if we use 35mm of pressure, 3mm if we have special reinforced infusion cannulas and 55mm of pressure. There was no cannula removal because of the induced pressure, but twice the plastic has been removed from the tip of the infusion because we put more pressure than 35mm in non-reinforced cannulas. The use of 25g flute needle is essential but without the plastic end. The results were no different in success rate than 20g retrospective cases. But the eyes were much less inflamed and quit with less overall time for the local anesthesia surgery.

CONCLUSION

We are now able to minimize the iatrogenic trauma in vitrectomy complicated cases by using 25g sutureless surgery even for those indications, successfully.