Reviewer's report

Title: A Machine-independent Method to Have Active Removal of 5,000 Centistokes Silicone Oil Using Plastic Infusion Tube and 23-gauge Microcannulas

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Reviewer: Gopal Lingam

Reviewer's report:

Comments:

1. The authors describe a technique of removing silicone oil using a plastic (polyethelene) tube to surround the 23 gauge cannula and suction generated in a 10 ml syringe by fixing the retracted plunger with an artery clamp.

2. The poly ethelene tube is directly threaded over the nipple of the syringe without any silicone tubing in between making the assembly stiff throughout.

3. This means the pulling of the plunger forcibly to create the vacuum has to be done while the polyethelene tube is placed around the cannula and firmly pushed against the conjunctiva to create a vacuum seal. This is rather inconvenient since on one hand the pulling of plunger tries to shift the syringe away from the eye, and the surgeon has to push the syringe against the conjunctiva to create the vacuum seal. Having a flexible silicone tubing on the nipple of the syringe instead of a stiff polyethelene tube, would make the procedure easier. The surgeon can clamp the silicone tubing, generate the vacuum and then place the silicone tubing over the cannula. The silicone tubing can also be chosen with a diameter that is a snug fit over the cannula, thus eliminating the need to press on the conjunctiva to produce vacuum seal.

4. The pressing on the conjunctiva to produce vacuum seal can be traumatic to the conjunctiva since it would be continuously sucked into the rim of the opening around the cannula.

5. The suction generated by a 10 ml syringe is limited- especially if the amount of silicone oil to be removed is significant (as in an aphakic and highly myopic large eye ball). One should realize that as the syringe gets filled with silicone oil (and sometimes air that leaks from the loose seal), the vacuum dramatically reduces and there could be need to regenerate the vacuum. Fluid (BSS) can also be sucked in, towards the last part of the surgery when the residual bubble of silicone oil can float away from the cannula tip. Since the fluid comes out easily, this quickly consumes the entire available vacuum in the syringe. To some extent use of a 50ml syringe is of advantage.

6. A machine driven suction is more controlled, even if it takes a little longer.
Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests