Peer Review

Review of: "Vitrectomy"

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The definition used is not totally accurate. Vitrectomy surgery can be a planned or unplanned procedure. For planned vitrectomy, it is usually performed from the pars plana approach. Pars plana vitrectomy (PPV) for rhegmatogenous retinal detachment (RRD), [1] vitreomacular traction, full thickness macular hole (FTMH), [2] posterior dislocated intraocular lens (IOL) [3] etc. are always removing clear, non-cloudy vitreous. For unplanned vitrectomy, it usually arises from cataract surgery with posterior capsular rupture, followed by vitreous prolapse to the surgical field, thus requiring anterior vitrectomy for continuation of cataract surgery and IOL insertion. [4] In these cases, the vitreous is not cloudy to start with.

There are many different indications for vitrectomy, and some of these may not be aiming to restore sight. For example, the removal of an intraocular foreign body in the vitreous gel or peripheral retina, choroid mass biopsy, and floaterectomy patients may have normal vision to start with. In these cases, eyes may not have cloudy *vitreous humor*.

Besides, vitrectomy surgeries often do not end with replacing the vitreous humor with a salt solution. Various types of gas, such as C_3F_8 , SF_6 , air; and silicone oil (SiO) are also common vitreous substitutes after PPV. For instance, after PPV for RRD and FTMH, gas is commonly injected; whereas SiO is used in RRD with proliferative vitreoretinopathy, or tractional retinal detachment. [6]

The definition by National Cancer Institute is better and more accurate. [7]

References

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- 6. $\stackrel{\wedge}{-}$ National Cancer Institute. (2020). <u>Tractional Retinal Detachment.</u> doi:10.32388/vlaxm9.
- 7. \triangle National Cancer Institute. (2020). <u>Vitrectomy.</u> doi:10.32388/obcll8.

Declarations

Potential competing interests: No potential competing interests to declare.