Different surgical approaches to remove subfoveal blood in hemorrhagic AMD: A comparative study

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Purpose: To compare and evaluate anatomical and functional outcomes of two different surgical techniques to treat hemorrhagic AMD.

Methods: The method involved prospective interventional case series. Twelve eyes of 12 patients having subfoveal hemorrhage secondary to wet-AMD were enrolled and divided in two groups. Group 1 includes eight eyes of 8 patients, where PPV was performed. Using 41 Gauge subretinal cannula BSS diluted with tPA (125 mg/ml) was injected to detach the macula. After fluid-air exchange, non-expansile gas was used to fill up only 50% of the vitreous cavity. Group 2 includes four eyes of 4 patients. After PPV peripheral, temporal 200° retinotomy was performed, retina was detached, and free flap was inverted, subfoveal hemorrhage was removed via direct approach and conventional silicone oil tamponade was used. Cases were followed up for 12 months.

Results: In Group 1 submacular hemorrhage was successfully displaced inferiorly within 3 days and then completely reabsorbed after few weeks in all 8 cases. The mean VA improved from baseline 0.01 decimals (varied from HM to 0.02) to 0.2 decimals (varied from 0.09 to 0.7) at 12 months. In Group 2 submacular hemorrhage was completely removed in all cases, but mean VA at 12 months was not as high as in Group 1, where mean preoperative VA was 0.01 decimals (varied from HM to 0.03) and mean postoperative VA was 0.05 (varied from HM to 0.1), respectively. No recurrent subfoveal hemorrhage was observed in any group. Subfoveal fibrosis was progressed in 2 out of 8 eyes in Group 1 and 2 out of 4 eyes in Group 2. Significant Optic Nerve atrophy was observed in Group 1 in all cases. This latest can be the main reason why we couldn't achieve significant improvement of VA in Group 2.

Conclusions: This study shows that the technique used in Group one is superior than the technique used in group 2. Thus, minimally invasive procedure should be considered to treat cases of wet AMD complicated with subfoveal hemorrhage.

Biography
Ana Vachiberidze started from Georgia State Medical University – State Medical College and worked as Faculty of Medicine; Medical Doctor MD at Tbilisi State Medical University TSMU. Currently she is a Junior Doctor at Junior doctor /seeker at “Akhali Mzera” Ltd. by Pof. Merab Dvali as a Residency program in General Ophthalmology.

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