Surgical Retina

COMBINED INTRAVITREAL ALTEPLASE, RANIBIZUMAB AND PNEUMATIC DISPLACEMENT WITH C3F8 IN SUBMACULAR HEMORRHAGE SECONDARY TO WET AMD

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INTRODUCTION: Submacular hemorrhage (SMH) is an uncommon complication of choroidal or retinal vascular abnormalities that has poor visual prognosis if treatment is delayed. There is no consensus regarding the best care for SMH with pars plana vitrectomy (PPV) and intravitreal approaches having been described. We present two cases of SMH secondary to wet AMD treated successfully with intravitreal injection of alteplase, ranibizumab and pneumatic displacement with C3F8.

METHODS: Clinical cases review.

Case #1. 85 y.o. female presented due to sudden decrease in visual acuity in her left eye (LE) since 3 days prior. Best corrected visual acuity (BCVA) was counting fingers (CF) in her LE and an extensive SMH was found. Patient was treated with the combined intravitreal therapy and at 1 week post-op had remarkable improvement with LE BCVA 20/70 with almost no hemorrhage or subretinal fluid detectable on OCT.

Case #2. 86 y.o male presented due to a sudden decrease in visual acuity in his right eye (RE) with less than 1 day of evolution. BCVA was CF and extensive SMH was diagnosed. At 1-week post-op vision improved to 20/100 and continued to improve with 20/60 BCVA 3 weeks post-op.

CONCLUSIONS: Combined intravitreal injection of alteplase, expansile gas and ranibizumab seems to be an effective approach to treat recent SMH in patients with exudative AMD. Compared with PPV approaches, it is less invasive, with a likely lower complication rate, and is more accessible since there is no need for a dedicated vitreorretinal surgery team.