



Giant Retinal Tear: case series

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INTRODUCTION

Giant retinal tear (GRT) is a pathological condition that requires immediate action when diagnosed due to the possibility of quickly leading to extensive retinal detachment (RD)⁽¹⁾. It is classified as GRT when retinal breaks extend greater than 90° or more in the presence of posterior vitreous detachment^(1,2). It is known that GRT increases the risk of developing proliferative vitreoretinopathy and frequently affects the fellow eye⁽¹⁾. For this reason, it is important to investigate the cause in order to prevent bilateral involvement and other complications.

METHODS

Medical records review.

RESULTS

We report two cases of GRT greater than 150°. Both were middle aged woman complaining of floaters and visual acuity loss from 7 to 30 days before. Best visual acuity (BVA) was counting fingers in both cases. In one of them, the patient had myopia and fundoscopy showed retinal detachment with inversion of the posterior flap over the optic disc and proliferative vitreoretinopathy (PVR) at diagnose. In the other one, besides retinal detachment lattice degeneration was seen fundoscopically and there was vitreous hemorrhage and macula-off at diagnose. None of them developed hypotony.

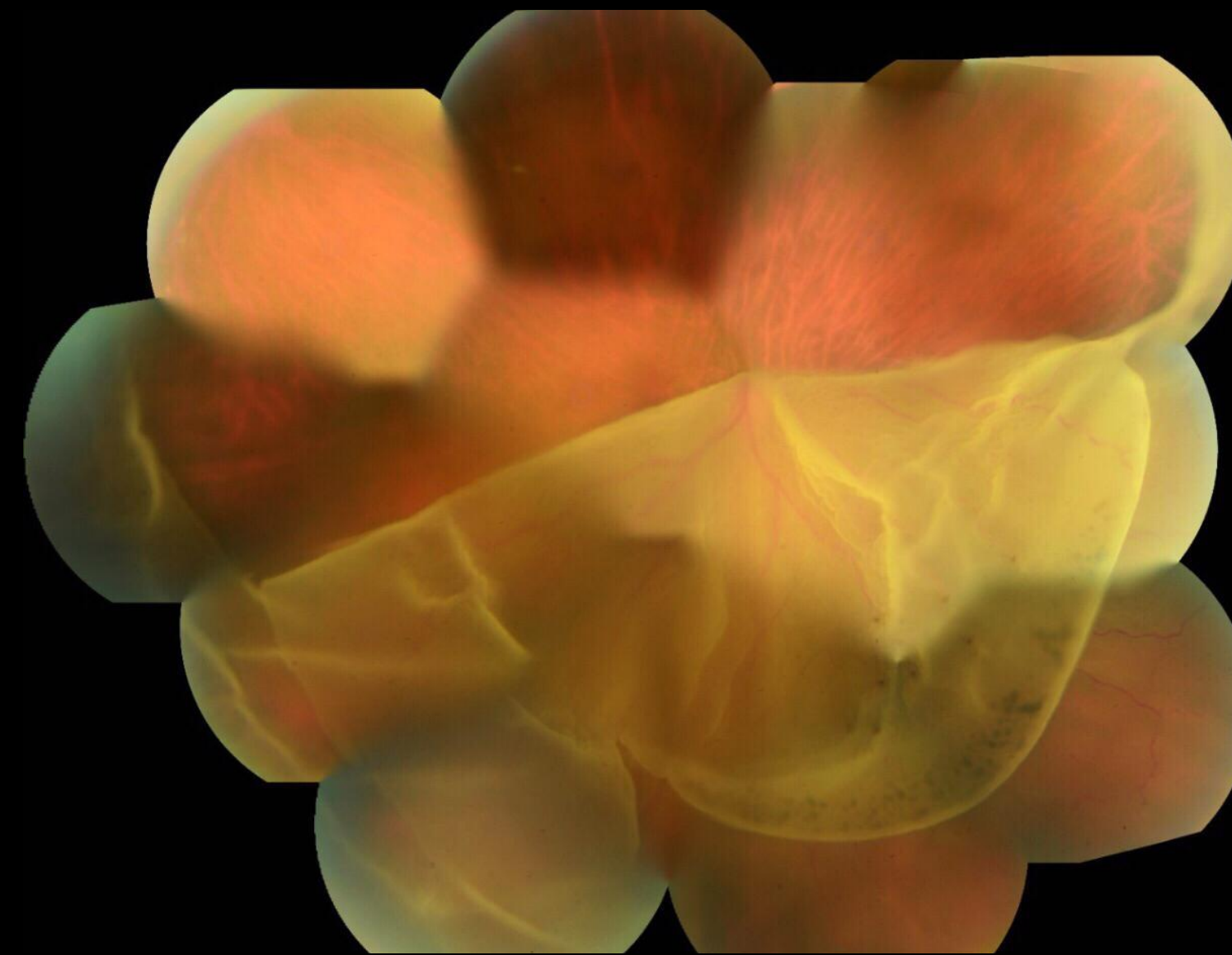


Figure 1: Rhegmatogenous RD with 180° superior tear.

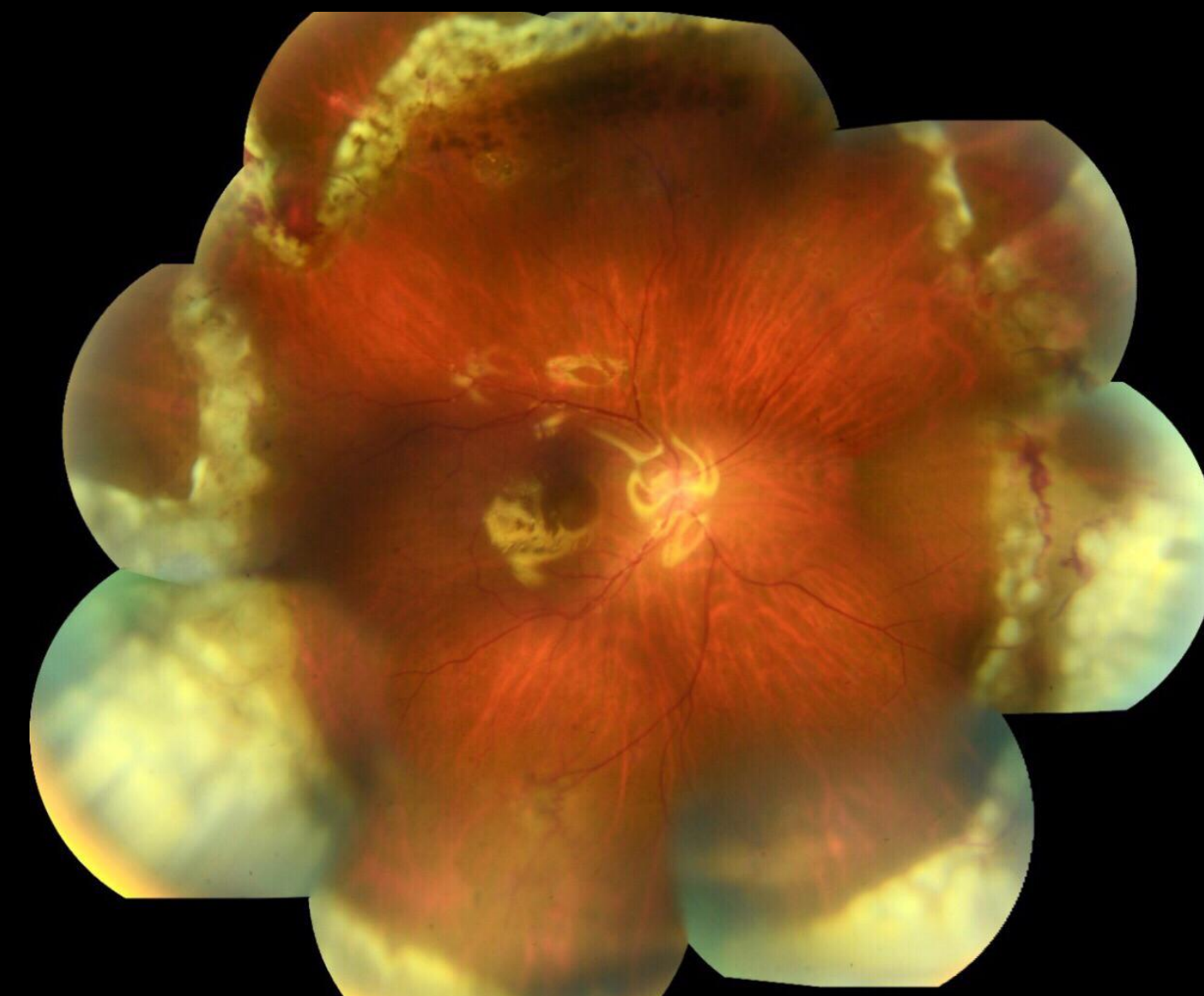


Figure 2: Retinography after pars plana vitrectomy. Retina attached with endophotocoagulation signs 360° and silicone oil.

In both cases pars plana vitrectomy was performed, perfluorocarbon liquid (PFCL) was introduced to retina attachment, endophotocoagulation was executed and PFCL was exchanged with silicone oil. However, the second one was preceded by phacoemulsification, placement of intraocular lens and encircling scleral band 360°. Best visual acuity after surgery was 20/100 in the first case and 20/120 in the second one.

DISCUSSION

GRT represents about 1,5% of the cases of full RD⁽²⁾. It is associated with rhegmatogenous retinal detachment in about 44 to 92% of the cases. Visual acuity is quite reduced and in cases of macula-off it can vary between counting fingers and light perception⁽¹⁾. Surgical management includes complete vitrectomy, unfolding of the retinal flap and sealing the tear.

The presence of GRT should alert the ophthalmologist to prevent rapidly extensive RD and fellow eye involvement. It is known that in 29 to 43% of the cases RD occurs in the fellow eye and GRT in 12.8% of the cases⁽²⁾. In the lattice degeneration case reported, the patient's fellow eye had already been affected by retinal detachment 2 years before. Therefore, it is important not only to recognize the GRT condition and conduce proper treatment as well as prevent fellow eye involvement.

REFERENCES

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