

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Retina and Vitreous

Nº CEP

Treatment of Experimental Vitreous Hemorrhage in Rabbits with Perfluoropropane

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Purpose: To determine the potential of gas-mediated vitreous compression in the management of experimental vitreous hemorrhage.

Methods: One eye each of ten white New Zealand received a vitreous injection of 0.4 ml of autologous blood. Six eyes were randomly assigned for treatment with a vitreous injection of 0.2 ml of 100% C3F8 gas (group 1 treated) 24 hours after the vitreous hemorrhage induction, four eyes acted as control and received an equivalent volume of balanced salt solution (group 2). The extension of the vitreous hemorrhage was graded at difference times during the 32 days of follow-up based on the visibility of retinal details in each one of the 4 pre established quadrants.

Results: In-group 1, at 15 days, a partial examination of the retina in all four quadrants was possible. At 30 days, the vitreous cavity was completely free of blood in all treated eyes. No retinal details could be observed in the control group after the follow-up period.

Conclusion: The gas-mediated vitreous compression proved efficacy in the treatment of experimental vitreous hemorrhage. Its low cost and technical easiness support further studies to determine its potential for human use.