

Macular Hole Closure after Macular Edema and Intravitreal Anti-VEGF Injections

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April 18th to 21st

Royal Palm Hall
Campinas - SP
Brazil

Objective: This submission aims to present a unique case of complete closure of a full-thickness macular hole (FTMH) following the development of macular edema and subsequent treatment with intravitreal anti-VEGF injections.

Methods: The study involved the retrieval and analysis of data from medical records, with prior informed consent from the patient. The collected information was then reviewed and organized for presentation at the 48th BRAVS Meeting (Retina 2024).



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Case Report: A 72-year-old male with a FTMH in the left eye and a best-corrected visual acuity (BCVA) of 20/80 since 2015 is reported. A posterior vitrectomy, including posterior hyaloid removal and internal limiting membrane peeling, was performed, accompanied by the use of C3F8 as a vitreous substitute. Subsequently, a rapidly progressive cataract necessitated cataract surgery, complicated by a nucleus drop. A second vitrectomy was conducted for nucleus removal, revealing a persistent FTMH. Postoperatively, significant macular edema was documented and managed with ranibizumab and aflibercept intravitreal injections. After three injections, complete closure of the FTMH was observed, maintaining a BCVA of approximately 20/70 along the follow-up time of 8 years, in which subsequent antiangiogenic injections were applied due to reopening of the FTMH and recurrent edema.



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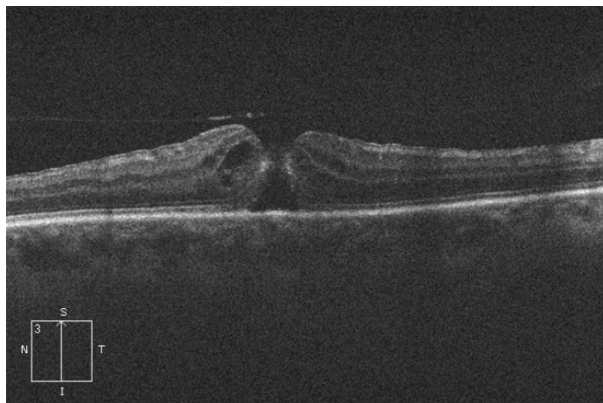


Figure 1 - Before 1st Surgery*

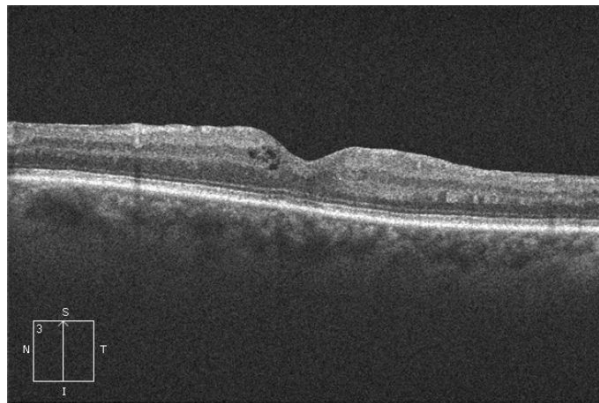


Figure 2 - After 3 Injections*

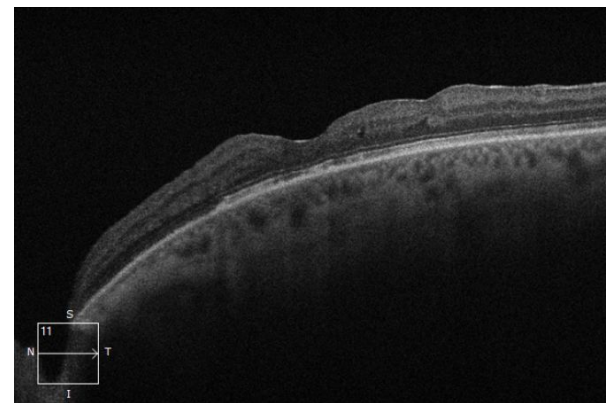


Figure 3 - Current Aspect*

*Images obtained using a Zeiss Cirrus 6000 OCT (Carl Zeiss Meditec, Dublin, CA)

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Discussion: While cystoid macular edema is typically considered a potential risk factor for lamellar or FTMH,¹ in some cases being treated by solving the macular edema,² this case presents a unique scenario where the mechanical effect of edema may have contributed to the closure of the FTMH, preserving a relatively functional BCVA. The case underscores the necessity for further investigation into the intricate mechanisms underlying macular hole formation and closure, particularly in relation to macular edema. This study contributes to the ongoing effort to enhance our understanding of these complex relationships.

REFERENCES

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