

HYPERAUTOFLUORESCENT VERMIFORM IMAGE IN THE MACULA AFTER VITRECTOMY



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PURPOSE

To report the finding of an unknown vermiform image in the macular region of a patient undergoing vitrectomy for treatment of retinal detachment.

INTRODUCTION

Surgical management of rhegmatogenic primary retinal detachment has changed dramatically over the years, and incremental improvements in retinal detachment repair have led to progressively higher success rates.

After such improvements, the use of vitrectomy via pars plana for the repair of rhegmatogenous retinal detachment increased dramatically (72% increase from 1997 - 2007)

The use of silicone oil in vitreoretinal surgery was introduced in 1962 and is used as a temporary vitreous substitute in complex cases of retinal detachment.

CASE REPORT

60 yo female, referred for specialized evaluation due to retinal detachment in the left eye (LE). She was pseudophakic in both eyes, and in LE she had a history of infectious uveitis and laser treatment for retinal detachment performed 2 years ago and surgery for retinal detachment performed 1 year ago.

The ophthalmological examination showed no changes in the right eye. In the LE, vision was counting fingers, biomicroscopy and tonometry were unremarkable. Retinal mapping revealed detachment of the lower retina, affecting the macula, in addition to peripheral scars from the temporal laser, adjacent to the applied retinal area. The rupture was identified in the middle periphery, adjacent to the described laser area.

Posterior vitrectomy was performed and silicone oil was used as a temporary vitreous substitute. The postoperative recovery was satisfactory, with anatomical improvement and maintenance of visual acuity.

Three weeks after surgery, multimodal retinal evaluation was performed, with retinography, autofluorescence and SD-OCT. An atypical lesion was identified in the macula region (Figures 1 to 4).

Three months after surgery, the ophthalmic examination of the left eye remained unchanged. The multimodal retinal evaluation was repeated, and the same pattern of images was identified.

Although it was very clear to notice the location of the lesion, there was no clear cause or origin.

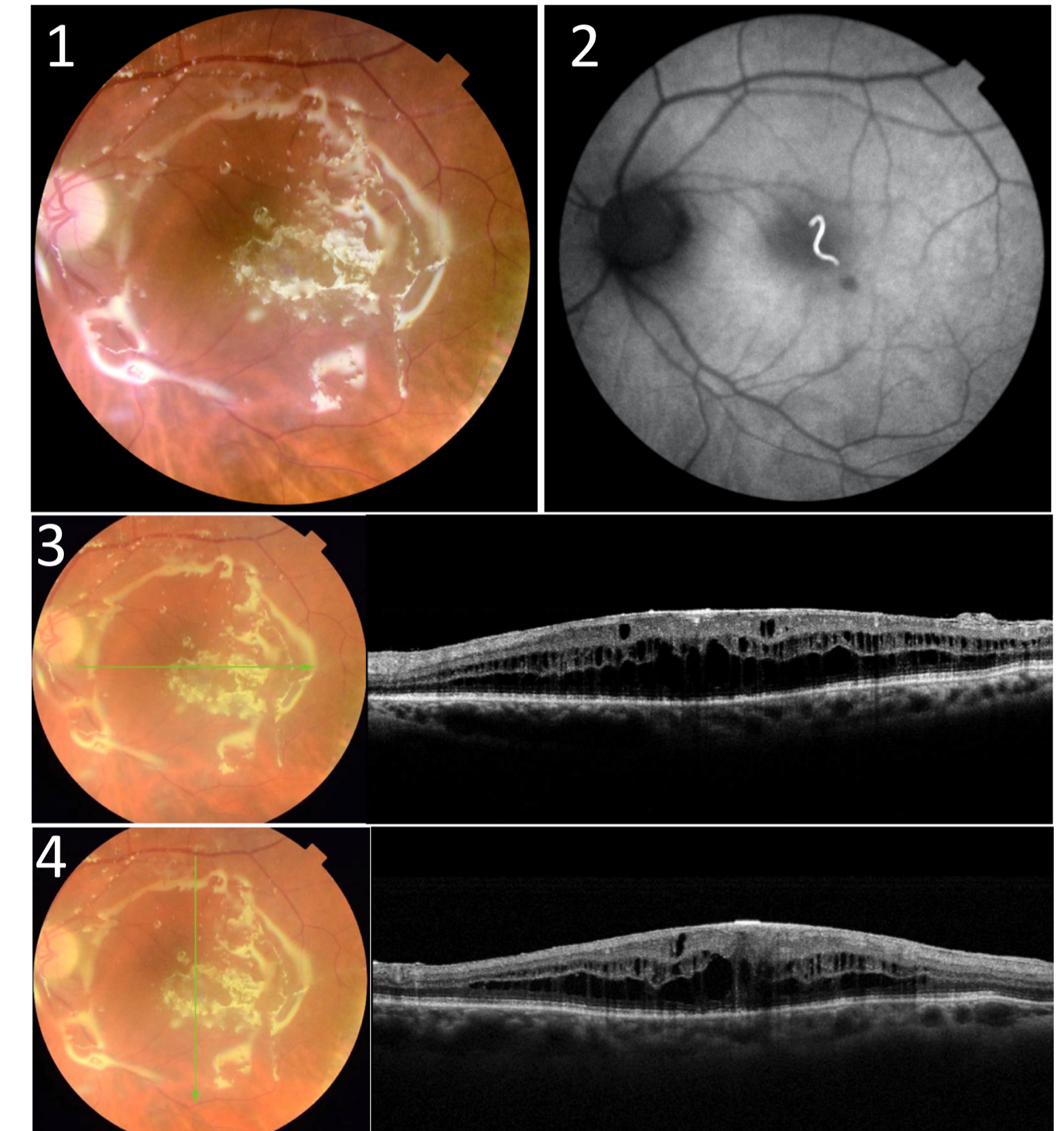
DISCUSSION

The tests carried out made it possible to determine that the hyper-autofluorescent lesion is found on the surface and internal layers of the retina, and has a hyper-reflective character in the SD-OCT.

No similar report has been found in the literature. The hypothesis for the origin of the lesion are nematodes, artifacts and foreign bodies (cotton, gauze or suture fragment), however, it was not possible to determine the exact cause of the image.

It remains as an unknown finding in a routine case that was wasn't justified by other reasons.

The history of uveitis in this eye may be an explanation, but without confirmation no diagnosis could be made.



1. Color retinography showing a reflection corresponding to the presence of silicone oil making it difficult to see details.
2. Short-wave autofluorescence highlighting a hyper-autofluorescent vermiform lesion in the macula.
3. and 4: SD-OCT showing hyper-reflectivity in the inner layers of the retina corresponding to the hyper-autofluorescent lesion (white arrow).

Bibliography

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