SYMPTOMATIC SILICONE OIL DROPLETS IN THE VITREOUS CAVITY FOLLOWING INTRAVITREAL AFLIBERCEPT INJECTION

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Purpose: To raise awareness to a rare but real complication of intravitreal injections, whose solution is far from having been found.

Material and Methods: Description of a case-report.

Results: A 71-year-old man, followed in our ophthalmology department with exudative AMD in the left eye, under treatment with monthly intravitreal aflibercept injections, presented 4 days after his last injection, complaining of painless deterioration of vision in the left eye, caused by multiple floaters obscuring his visual axis. The symptoms started immediately after the injection, remaining stable since then.

Best-corrected visual acuity was equivalent to the last assessment (20/25 on the right and 20/100 on the left). On slit-lamp examination, anterior segment findings were unremarkable, and no signs of inflammation were present. Fundoscopy revealed multiple round, transparent, glowing spheres, resembling silicone oil droplets floating in the vitreous cavity. B-scan ultrasonography displayed the characteristic reverberation pattern described in the literature, with hyperechogenic waves extending posteriorly from the droplet, consistent with silicone oil bubbles.

The patient was followed-up regularly. No signs of inflammatory activity have ever appeared. Ultimately, he reported some improvement of visual disturbing complaints over time, although silicone oil droplets remained present on fundus examination.

Conclusion: Silicone oil droplets in the vitreous have been described after intravitreal injections of anti-angiogenic agents. Although rare, this is a documented complication and should be discussed with patients and included in consent forms. Furthermore, the exact origin of these particles remains to be cleared and enrollment of the manufacturing companies in this investigation would be crucial.