

Following silicone oil endotamponade for retinal detachment, there was contralateral optic neuritis.

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ABSTRACT

For the difficult retinal detachment treatment known as ocular endotamponade, silicone oils are employed. It is rare for silicone oil endotamponade to cause neurological problems. According to case reports, silicone oil migrated into the subarachnoid space and ventricular system, causing optic nerve atrophy. Optic neuritis lateral to the treated eye, however, has not previously been documented. We describe a 60-year-old woman who had silicone oil used to heal a retinal detachment in her left eye, but who afterwards experienced optic neuritis in her right eye.

The patient immediately complained of excruciating pain in the left orbit that had spread to the left temporal and occipital regions following the silicone oil injection. She then experienced vision loss in her right eye, which had not previously been afflicted. She was given a hefty dose of steroids intravenously.

for three days before the right eye's vision completely recovered. Two weeks later, she experienced a second episode of blurry vision in her right eye, but this time, it didn't get better. Inflammation on the optic nerves and silicone oil in the ventricular system are both visible on MR imaging.

Conclusions:

Silicone oil has the potential to enter the nerve system and cause optic neuritis in the opposite eye.

INTRODUCTION

In order to treat difficult retinal detachments, silicone oils (polymethylsiloxanes) are employed for ocular endotamponade [1].

It is rare for silicone oil endotamponade to cause neurological problems. Case studies have shown silicone oil migration into the subarachnoid space and ventricular system, as well as optic nerve atrophy [2-7]. Optic neuritis lateral to the treated eye, however, has not previously been documented. We describe a patient who had silicone oil injected into the left eye to treat a retinal detachment who afterwards experienced blindness in the opposite eye. Radiographic findings also showed silicone oil migration into the central nervous system.

CONCLUSIONS

The migration of silicone oil into the nerve system can result in visual neuritis. Clinicians need to be aware of silicone oil endotamponade's neurological side effects. The likelihood of silicone oil migrating into the central nervous system should be raised in the presence of symptoms including refractory ocular pain, headache, ptosis, change in mental status, and deteriorating vision loss (ipsilateral and/or contralateral).

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