DIDACTIC IMAGE

CATARACT FORMATION AFTER A MAGNETIC RESONANCE IMAGING (MRI) SCAN

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A 39-year-old man consulted his ophthalmologist with severe visual loss in the left eye, one day after a Magnetic Resonance Imaging (MRI) scan of his shoulder. The man worked in construction and was the victim of a serious accident with rib fractures and a pneumothorax 4 months earlier. He could not remember any eye injury.

The examination by his ophthalmologist showed a visual acuity of 0.1 in the left eye improving to 0.4 with pinhole. Slit lamp examination of the left eye showed epithelial oedema, an anterior chamber reaction and an anterior, flower shaped cataract. After dilation, a hole in the anterior capsule was seen, surrounded by a rust ring (Figure 1). The intraocular pressure (IOP) was increased to 40 mmHg.

The patient was referred to our department with an anti inflammatory and intraocular pressure-lowering treatment. On arrival, the cornea was clear and a gonioscopy was performed. We found an oblong intraocular iron foreign body lying in

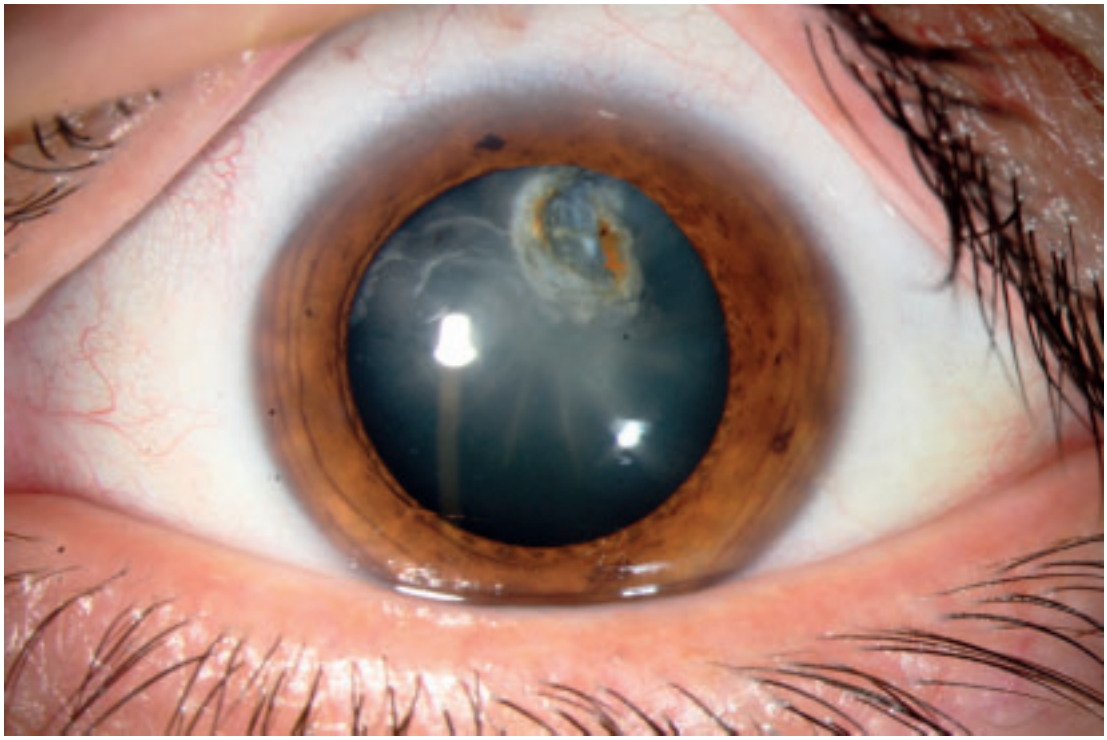


Fig. 1: Slitlamp overview of the left eye after dilation. The anterior capsule is ruptured and a rust ring is visible.

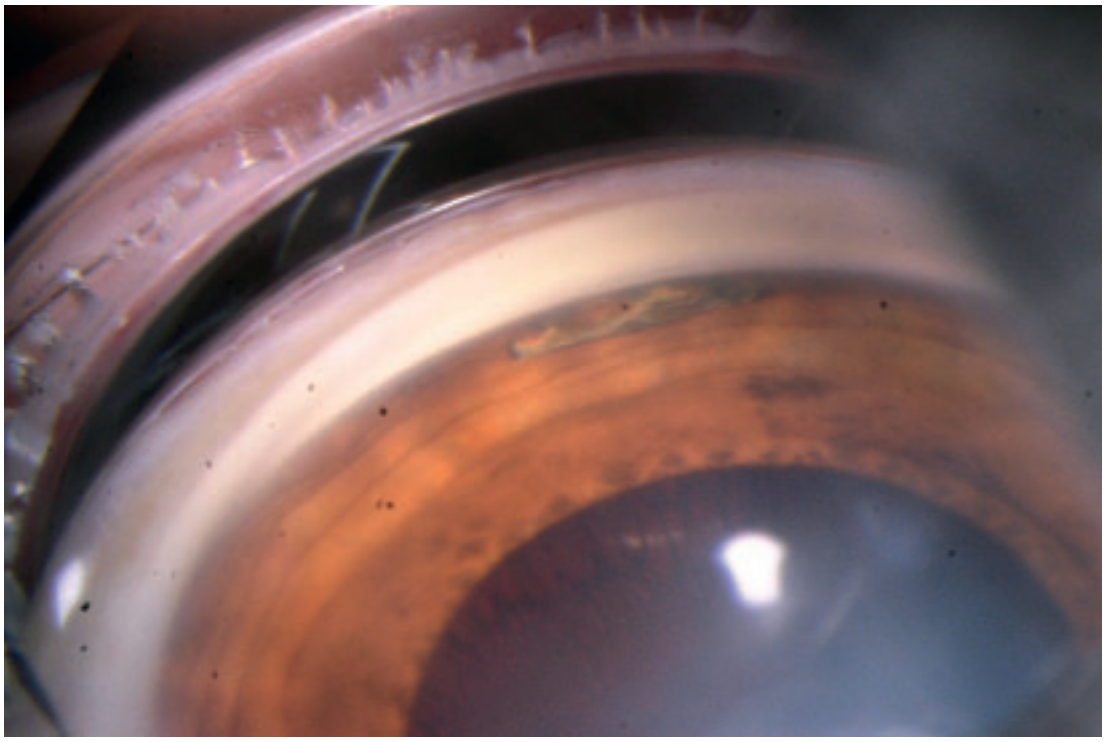


Fig. 2: Gonioscopic view of the iron body lying inferior in the anterior chamber angle.

the inferior chamber angle (Figure 2). No entry wound could be identified. Cataract surgery was performed and the iron particle removed with the endomagnet. Postoperative course was uneventful and associated with a good visual recuperation.

Because of the formation of rust, we assume that the iron foreign body stayed inside the lens for a longer period of time. The MRI scan caused the iron particle to move out of the lens into the anterior chamber, thereby opening the capsular hole and inducing cataract. Ferromagnetic foreign bodies are known to move during MRI and thus causing ocular injury (1). Intralenticular foreign bodies have been described to be undetected and uncomplicated for up to 60 years (2).

REFERENCES

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(2) Dhawahir-Scala FE, Kamal A – Intralenticular foreign body: a D-Day reminder. Clin Experiment Ophthalmol. 2005; 33(6): 659-60.

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