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Sir,
Large metallic fragment found in the angle of anterior chamber after phacoemulsification, and its removal

The presence of intraocular metallic fragments after phacoemulsification surgery is common. Some times the tip of the second instrument can break off and dislodge, this might not be revealed in immediate postoperative period. We report an interesting case in which a large metallic fragment was found at the angle of the anterior chamber on post-phacoemulsification examination. This was later removed under gonioscopic visualisation.

Case report

A 78-year-old male underwent left eye phacoemulsification. During surgery, at the end of lens removal, the tip of the second instrument appeared to have broken off (Figure 1). The way the tip of the second instrument broke is not known. The procedure otherwise went well. Despite thorough search, the metallic fragment was not found either inside the eye or in tubing

Figure 1 Lens manipulating instruments, the right extreme instrument with blunt bulged tip and narrow neck, the middle instrument with broken head from our case, compared with, left extreme, another instrument with no narrow weak point.

cassette. X-ray of orbits did not show the presence of intraocular foreign body.

On postoperative examination, visual acuity in the left eye was 6/5 and the eye was settling down quite well. However, on gonioscopy, a metallic fragment was found located in the inferior angle of left anterior chamber (Figure 2).

The fragment was removed with the aid of gonioscope under operating microscope (Figure 3). The postoperative course was completely uneventful.

Comment

The presence of intraocular metallic fragments is not uncommon after phacoemulsification.¹ Such particles are believed to derive from the phaco-tip surface;^{1,2} from irrigation–aspiration ducts;³ and from contact of phaco-tip with the second instrument.⁴ Second

Figure 2 Gonioscopy of the inferior angle of the anterior chamber showing large metallic fragment.

Figure 3 Removal of the metallic fragment with the aid of gonioscope. Forceps holding the fragment with its reflection in the gonio-mirror is seen (a, a'). On the right side of the picture artefact, air bubble with its reflection is seen (b, b').

instrument is used in phacoemulsification for lens manipulation. Some of these instruments are designed at the tip with blunt bulbous head and narrow neck (Figure 1). The bulbous head can break away at the neck.

The fragments might not easily be located during surgery. Immediate postoperative X-ray and CT scan might not be helpful to find the fragments.⁵

The fragments are often seen on iris during postoperative examination. One study reported postoperative metallic fragment on iris. This study postulated that the fragment was missed during immediate postoperative examination because of its original location within the angle, and the iris movement spontaneously revealed it after a while.⁶ However, in our case, the metallic fragment was detected in the angle as gonioscopy was performed in early postoperative period.

Some metallic fragments may cause intraocular reaction and could masquerade as chronic postoperative inflammation.⁶ The nonmagnetic metallic fragment in our case was removed to prevent any such occurrence. Surgical approach for removal of the fragment depends not only on magnetic nature and location of the fragment but also on the presence of natural lens in the eye. Intraocular magnets can be helpful for removing the fragment from anterior chamber.⁷ Removal of the fragment with forceps could be counterproductive in the presence of natural lens. In these cases, a different approach to remove the fragment from the angle, for example, using a magnet under a trabeculectomy-type flap can prevent lens damage. However, in our case, we felt appropriate to remove the nonmagnetic fragment using the forceps, as the eye was pseudophakic. As per our knowledge, this is the first case reporting the visualisation and removal of the metallic fragment from the angle in post-phacoemulsification patients using gonioscope. Gonioscopy is an invaluable tool in such cases.

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Sir,

Unilateral amiodarone keratopathy: occlusive contact lens spares development in the contralateral eye

Amiodarone, a diiodinated benzofuran derivative, is used to treat patients with atrial and ventricular arrhythmias and angina pectoris.^{1,2} Its use has been associated with numerous side effects including pulmonary fibrosis, thyroid dysfunction, gastrointestinal problems, neuropathy, dermatopathy, and ocular effects.^{1,3–5} Ocular changes caused by amiodarone may involve the lens, the retina, the optic nerve, and more commonly the cornea.^{3,5–7} Amiodarone keratopathy (AK) has a prevalence of 70–100%, but only 10% of patients experience visual disturbances.^{6,7} AK is typically bilateral.^{3,6,8} We report an unusual case of unilateral AK in a patient using an occlusive contact lens in the contralateral eye.

Case report

A 67-year-old male patient who had been using an occlusive contact lens (Optifree Xpress) for 5 years was reviewed to evaluate the status of the cornea. The occlusive contact lens had been prescribed for the left eye to prevent troublesome diplopia, which could not be