

# Ocular argyrosis in a jeweller

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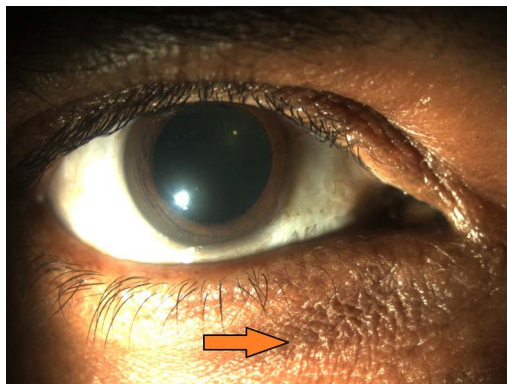
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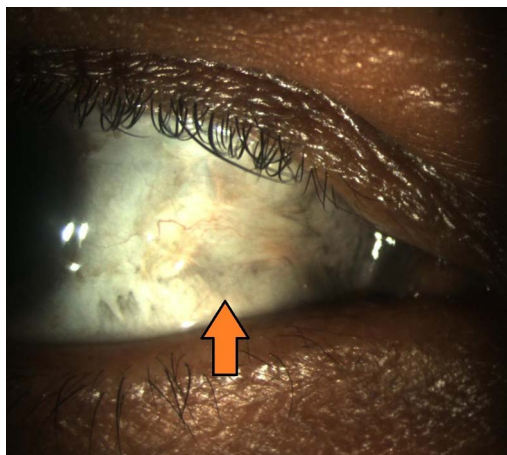
## DESCRIPTION

A 50-year-old jeweller presented with a 6-month history of diminution of vision for near sight with his old glasses. His best corrected visual acuity was 6/6, N6 in both eyes. On slit-lamp biomicroscopic examination in both eyes, he had a grey-black pigmentation of the periorbital skin and lid margins (figure 1). The lower and medial bulbar conjunctivae also exhibited a similar discolouration, more prominent at the medial canthal region (figure 2). The corneal descemet membrane had a slate grey pigmentation more prominent towards the limbal region (figures 3 and 4). The rest of the anterior and posterior segment findings were unremarkable. Intraocular pressure by applanation tonometry was within normal limits. He refused any biochemical analysis of blood or urine.

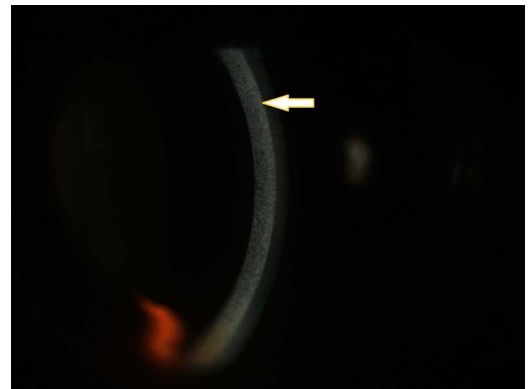
Although a differential diagnosis of melanoma of the conjunctiva was initially considered, the characteristic descemet layer deposits, and his



**Figure 1** Greyish black pigmentation of eyelid skin.

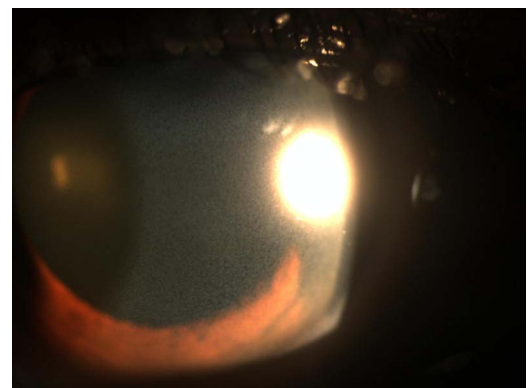


**Figure 2** Greyish black pigmentation of the conjunctiva near medial canthus.



**Figure 3** Slit-lamp biomicroscopy of the cornea showing grey deposits in deeper layers.

occupational history of predominantly crafting silver ornaments led to the clinical diagnosis of ocular argyrosis. The incidence of ocular argyrosis has considerably decreased after the cessation of use of colloidal silver as an ocular disinfectant,<sup>1</sup> and better safety measures in mirror and battery manufacturing industries.<sup>2</sup> There have been isolated reports following silver clip disintegration after previous strabismus surgery, prolonged eye rubbing after contact with photographic developing solution<sup>1</sup> and use of eye cosmetics.<sup>3</sup> Pala *et al.*<sup>4</sup> have described a case similar to ours where there was a prolonged history of crafting silver articles. The use of gloves and face shield was probably a deterrent to the skill and fine dexterity involved in the crafting of silver jewellery by our patient, who had been in the profession for over 35 years. However, in view of the suspected association between ocular argyrosis and sight threatening open angle glaucoma,<sup>5</sup> the use of protective gear especially in such situations of prolonged exposure is advisable.



**Figure 4** Diffuse distribution of the grey deposits in deeper corneal layers.

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## Learning points

- ▶ Ocular argyrosis is the deposition of silver in the eye, predominantly involving the conjunctiva and cornea
- ▶ Occupational exposure is seen in jewellers handling silver articles for prolonged duration
- ▶ Prevention is possible with the use of protective gloves and face shields

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**Competing interests** None.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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