Presumed copper keratopathy from prolonged sunflower seeds usage

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One of the causes of metallic toxic keratopathy could be accumulation of copper in the in layers of cornea. This has been reported in patents with Wilson's disease, chronic lymphocytic leukemia. We are presenting a case of 72 years old female who got uncomplicated cataract phacoemulsification surgery one eye 4 years ago and other eye 2 years ago with Alcon IQSN60 lenses. One year ago during regular checkup bilateral green vertical corneal opacification at the level of Descemet membrane was noted by slit lamp, which six months later got discoid shape. Work up for Wilson disease, leukemia, infections, systemic disease was negative. The blood test for copper level showed 89.2 mkmol per liter (Normal 24 & 34) was observed with normal level of ceruloplasmin. Urine test of copper was also within normal limits. The patients claimed of eating every day sunflower seeds (2-3 packs per day) for two years. 100 g sunflower seeds giving 97% of copper need for body and one pack of sunflower seed are about 250 g. So one could conclude that the reason of hypercopperemia in this particular case was the over intake of sunflower seeds. The abuse of copper containing meals, particularly sunflower seeds could result in hypercopperemia and deposition of copper in deep cornea.

Biography

Ani Hambardzumyan has obtained her Fellowship in Eye Banking in 2004 at Lions Eye and Tissue Bank in Tampa, Florida. She has received Fellowship of Cataract Phacoemulsification Live Surgery in 2010 in Nagpur, India. She has received PhD degree from Malayan Ophthalmologic Centre. She is a Doctor in Cornea-Uveitis Department since 2005 at Malayan Ophthalmologic Centre.

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