

Article title

Kayser–Fleischer ring and sunflower cataract in a patient with Wilson’s disease

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Conflicts of Interest

To the best of our knowledge, the named authors have no conflict of interest, financial or otherwise.

Ethical considerations

This study was conducted according to the tenets of the Declaration of Helsinki and was approved by the Institutional Review Board of Tri-Service General Hospital (TSGHIRB No. : C202005079). The need for participant informed consent was waived.

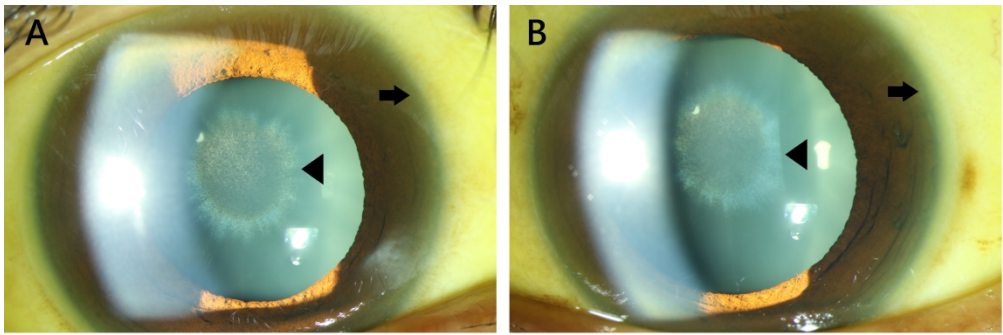
Description of the image

We were consulted by an internist to see this 21-year-old male who was diagnosed as Wilson’s disease. He presented with progressive general weakness, jaundice, and consciousness disturbance for 2 weeks when admission. Acute hepatic failure with hepatic encephalopathy was found. The laboratory examinations revealed normal serum copper (107.2µg/dL), elevated 24hr urine copper (726µg/L), and low ceruloplasmin (10.1mg/dL). Ophthalmic examination showed normal visual acuity (20/20) and intraocular pressure (16 mmHg) in both eyes. Kayser–Fleischer ring and sunflower cataract (see figure; arrows and arrowhead, respectively) were noted in

both eyes on slit-lamp examination. The Kayser–Fleischer ring, which is copper deposition in the Descemet’s membrane of the peripheral cornea, was identified in about 68 % of WD patients. Its frequency was found to depend on the phenotypic presentation of the disease. (100 % prevalence in neurological WD, 57.5 % in hepatic WD, and 14.2 % in asymptomatic patients were reported (1)) The sunflower cataract, which presents as a centralized copper deposition in the anterior capsule surrounded by spoke-like radial cortical opacities, seldom impacts the patient’s visual acuity and occurred in about only 1.2 % of untreated WD patients(1).

Reference

1. Langwińska-Wośko E, Litwin T, Dzieżyc K, Członkowska A. The sunflower cataract in Wilson's disease: pathognomonic sign or rare finding? *Acta Neurol Belg*. 2016;116(3):325-8.



Kayser–Fleischer ring and sunflower cataract (arrows and arrowhead, respectively) were noted in both eyes(A. right eye; B. left eye) on the slit-lamp examination.

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