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Case images in ophthalmology

Melanosis oculi

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1. Case report

A 20-year-old white female, who is an avid tanning-bed user, was referred for the evaluation of a pigmented lesion in her left eye. She reported occasional lid swelling, pain, tearing and light sensitivity for two years, which she attributed to wearing contact lenses. The patient received a diagnosis of ocular melanosis 6 months prior to her current presentation. On examination, the best-corrected visual acuity (BCVA) of the left eye was 20/20, whose intraocular pressure (IOP) was 13 mmHg. Color vision, pupillary reaction, confrontational visual fields and extraocular muscle movement tests were within normal limits. Slit-lamp examination showed a deeply-pigmented velvety lesion covering the iris between 1 and 5 o'clock positions, suggesting diffuse iris nevus (Fig. 1A and B). The sclera showed a bluish hue consistent with ocular melanocytosis (Fig. 1C). Gonioscopy revealed an increased pigmentation of the angle. However, B-scan ultrasonography excluded the involvement of the posterior uvea or ciliary body. Examination of the right eye was unremarkable. No cutaneous involvement was present. Given the increased risk of melanoma transformation, the patient was instructed to minimize direct ultraviolet light exposure, including that of tanning beds. The lesion remained stable over the next 2 years with no evidence of malignant transformation.

2. Discussion

Iris nevi are hyperpigmented lesions involving the iris. They may be nodular or diffuse. While they are biologically benign, they carry the risk of transformation into melanoma, which may occur in about 5 per 1000 case-year.[1] Unless angle closure occurs, symptoms such as pain, tearing and light sensitivity are not common with ocular melanosis[2] and were possibly due to inappropriate contact lens use in the reported patient. Because the disease can be asymptomatic, regular follow-up is necessary for early detection of nevi progressing into melanoma. Indicators of the increased risk of malignant transformation (summarized in the ABCDEF guide) include young age (<40 years), bloody exudate, inferior position, diffuse distribution, ectropion uveae, and feathery appearance of margin.[1] The current evidence suggests a significant increase in the risk of choroid and ciliary body melanoma with sunbeds and tanning booths.[3] Although the effect is less clear on iris melanomas, the rarity of isolated iris melanomas may have accounted for such discrepancy.[3]

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Conflict of interest

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Authorship

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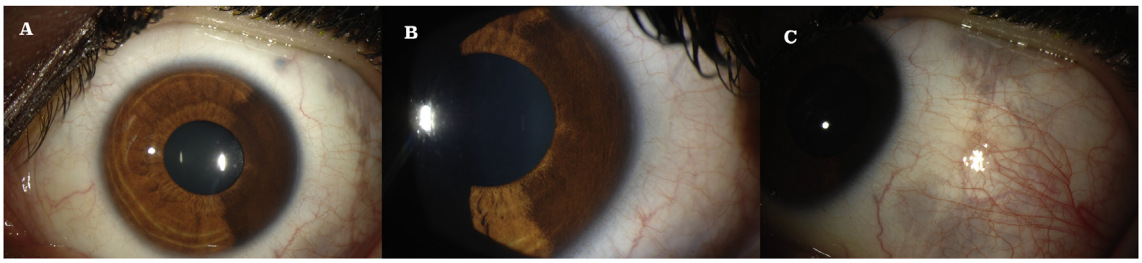

Fig. 1. Biomicroscopic image of the left eye showing deep-brown, velvety sectoral lesion covering the entire iridal margin between 1 and 5 o'clock position (Figure A and B). Patchy areas with bluish hue involving the sclera can be seen at the same side of the iridal nevus (Figure A and C). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

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