

Images in clinical medicine



A sudden heterochromia: congenital or metastatic?

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A sudden heterochromia: congenital or metastatic?

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Image in medicine

This is a case report of 26 years old Arab female, who is followed up at the Ophthalmology Department in Morocco for heterochromia. The right eye blue and the other green that showed up 2 years ago. As for her medical past history, she was diagnosed at the age of 15 years for a lymphoma and was treated by chemotherapy for 6 years until obtaining complete remission at the age of 21 years old. Six months later, she had an osteosarcoma for which she received chemotherapy and radiotherapy until now. On enquiring about her family history, her mother and two of her cousins also had unsimilarly colored irises, while the other siblings were unaffected. At the clinical examination: visual acuity 20/20, no proptosis, a present photomotor reflex, non deformed iris, and the rest of the examination is

without particularities. Eye colour is one of the most important characteristics in determining facial appearance. Heterochromia is a difference in color between the iris of the two eyes or between parts of the same iris. Diverse etiologies for heterochromia including: congenital, syndromic as Waardenburg and Horner, tumor, traumatic. The surface layer of the iris contains melanocytes rich

in melanin pigments. There are innervated by the sympathetic system. So, any deficit in this system can cause alteration of the innervation of these cells and the pigmentation decrease. Based on that, the following scenarios supposed are: genetic family transmission or an attack of sympathetic system by a metastatic cervical nodules due to blood or bone cancer.



Figure 1: photo of the iris (A) before (2 years ago) and (B) now