Unilateral Bluish Sclera

Sir,

A 16-year-old boy was referred to our department for ruling out a metabolic bone disorder. He presented to the emergency with an elbow fracture due to a fall on out-stretched hand. He denied history of recurrent fractures, deafness, skeletal deformities, and dentition abnormalities. His past medical history was otherwise normal and none of the immediate family members had history of fractures. Systemic examination was unremarkable except for the fracture olecranon process on the right side. Ophthalmic examination revealed bluish sclera (Panel A) involving the right eye (Panel B) as shown in Figure 1. His visual acuity, field of vision, color vision, pupillary reflexes, and extraocular movements were normal in both eyes. Skeletal survey and markers of bone metabolism were normal. He was diagnosed as a case of idiopathic unilateral bluish sclera and was kept under follow-up.

Bluish sclera is associated with osteogenesis imperfecta, Marfan's syndrome, Ehlers Danlos syndrome, Blue sclera syndrome (Van der Heave syndrome), incontinentia pigmenti, and many other inherited conditions. [1] The sclera is involved bilaterally in all these conditions and the unilateral appearance is a rarity. Unilateral bluish sclera is reported earlier with nevus depigmentosus, familial, and idiopathic in origin. [2,3] The bluish hue of the sclera is due to the thinning of the collagen fibers and increased transparency which exposes the underlying uvea. The bluish sclera, therefore, is seen in many conditions with the defective type 1 collagen formation. Osteogenesis imperfecta is the classical condition associated with the bluish sclera. However, our patient did not have any

formation. Osteogenesis dition associated with the patient did not have any

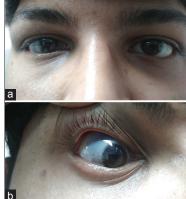


Figure 1: Bluish sclera of right eye (a) in close up (b)

features to suggest the same. It is essential to screen for musculoskeletal and connective tissue abnormalities in patients with blue sclera.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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