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REVERSAL OF ALTITUDINAL VISUAL FIELD DEFECT IN A PEDIATRIC PATIENT WITH EHLERS-DANLOS SYNDROME

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ABSTRACT

Symptoms: A 12 YOWM presented for his weekly vision therapy visit with the complaint of partial vision loss OD and diplopia in superior gaze.

Objective Signs: The patient had a personal and family history of Ehlers-Danlos Syndrome (EDS), including mitral valve prolapse.

Diagnosis: The patient was diagnosed with orthostatic hypotension causing peripheral vision loss.

Treatment: Electrolytes were administered orally and the patient’s visual field recovered. Implications are discussed.

BACKGROUND & SYMPTOMS

A 12 YOWM is enrolled in ongoing vision therapy for accommodative-vergence skills. He has a family history of EDS, and on this visit, he reports having trouble seeing things high up with his right eye. His review of systems is positive for recent tachycardia, tremor in the lower extremities, tinnitus, and weekly fainting spells which have been progressively worsening for the past two months.

OBJECTIVE SIGNS

Although one of the hallmark eye signs of EDS is persistent blue sclera due to thin connective tissue, it was not present in this patient, nor were related diagnoses of progressive myopia or keratoconus.

DIAGNOSIS & TREATMENT

Figure 1: Patient complains of blackening of vision with variable presentation over two months. Repeated screening 30-5 visual fields using the Humphrey Matrix perimeter revealed an altitudinal defect respecting the horizontal midline OD. This defect was repeatable. Consultation with his cardiologist resulted in a diagnosis of orthostatic hypotension.

Figure 2: After being treated with oral electrolytes, patient reports for a one-week follow up having no visual disturbances. Repeated 30-5 screening visual fields with the Humphrey Matrix perimeter show resolution of the altitudinal defect OD. Vision therapy was continued for binocular vision skills.

DISCUSSION

There are several common eye signs found in connective tissue disorders like EDS, including:

- Blue Sclera
- Keratoconus or corneal ectasia
- Progressive myopia
- Diplopia secondary to CI
- Photophobia
- Exposure keratitis
- Tunnel Vision
- Vitreous Floaters

Patients with EDS will commonly develop soft tissue damage and joint problems from hyperextension and may need to wear braces later in life.

LITERATURE CITED


Blue sclera and finger brace picture sources:
http://badturns.wordpress.com/2012/05/10/am-i-blue/
http://i.ytimg.com/vi/92se2n5NbrY/0.jpg

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