Case Report

Nevus of Ota with open angle glaucoma

Tanuja Abhilash, Kanthamani K

Department of Ophthalmology

Sri Devaraj Urs Medical College, Tamaka, Kolar - 563101

ABSTRACT

Nevus of Ota, which originally was described by Ota and Tanino in 1939, is a hamartoma of dermal melanocytes. Clinically, nevus of Ota presents as a blue or gray patch on the face, which is congenital or acquired and is within the distribution of the ophthalmic and maxillary branches of the trigeminal nerve. The nevus can be unilateral or bilateral and in addition to skin, it may involve ocular and oral mucosal surfaces. We report a case of a 50 year old male patient presenting with pigmentation on right side of face and open angle glaucoma.

Keywords: *Nevus of Ota, Open angle glaucoma*

INTRODUCTION

Ota`s nevus was first described in 1939. Nevus of Ota or "naevus fuscocaeruleus ophthalmomaxillaris," is an uncommon disorder of periocular hyperpigmentation affecting the first and second divisions of trigeminal nerve and is associated with scleral melanosis. It is commonly seen in orientals and is considered a congenital rather than a hereditary disease. This condition is comparatively rare in Indians and uncommon in males with female to male ratio of 5:1[(1)]. We report a case of a 50 year old male who presented with pigmentation on right side of face since childhood.

Corresponding author:

Dr. Tanuja Abhilash

Department of Ophthalmology

Sri Devraj Urs Medical College,

Tamaka, Kolar - 563101

Ph: 9449979441

Email: tanuja.abhilash@gmail.com

CASE REPORT

A 50 year old male was referred to our department for ocular examination. He gave history of pigmentation involving right side of forehead, cheeks, right eye since childhood. Pigmentation began during his childhood on his right cheek. It then progressed to involve the periorbital area and right eye. There was no family history of this condition. Examination revealed best corrected visual acuity of 6/6 both eyes. There was pigmentation on right side of face- cheeks, forehead, periorbital region (Figure1). Pigmentation was also noted in the conjunctiva, sclera of the right eye (Figure 2). Gonioscopy revealed hyper pigmentation of trabecular meshwork of right eye and normal open angle in the left eye. Fundus examination revealed glaucomatous cupping in the right eye with a cup disc ratio of 0.5 (Figure3). Intraocular pressure measured by Goldman applanation

Figure 1 Pigmentation of right side of face

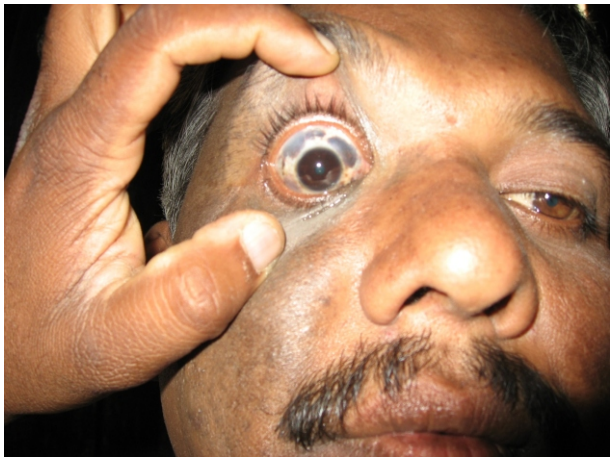

Figure 2 Scleral pigmentation-Right eye

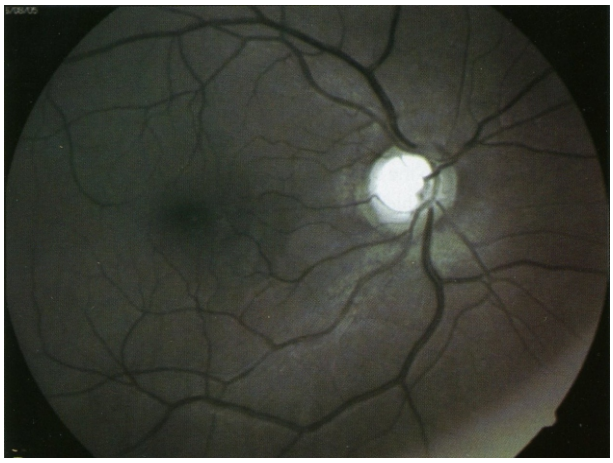

Figure 3 Glaucomatous cupping in the right eye

tonometry in the right eye was 24mmHg and 16mmhg in the left eye. Automated perimetry of the left eye showed a normal central 30^0 field, right eye revealed an early superior arcuate scotoma. Therapy was started with Timolol 0.5% eye drops twice daily.

DISCUSSION

Nevi of Ota occurs most frequently in Asian populations, with an estimated prevalence of 0.2-0.6% for nevus of Ota in Japanese persons[2-4]. Ocular hyper pigmentation most commonly occurs in the episclera, but may commonly involve the conjunctiva, tarsus, cornea, lens, choroid, optic disc, anterior chamber, angle and iris. Ocular pigmentation occurs between 22% and 77% of cases according to different studies[5,6].

Elevated intraocular pressure ,one of complications of this condition , was seen in approximately 10% of patients in one series.[3] Several glaucoma mechanisms have been described including congenital glaucoma, acute angle closure, uveitis and open angle glaucoma, although obstruction of aqueous outflow by accumulated melanocytes in an open angle is the most likely mechanism directly associated with nevus of ota[7,8].Transformation to malignant melanoma is the most serious complication and has been reported in several white patients[7].

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