Successful Correction of Macular Ectopia and Disc Intortion with Vitreoretinal Surgery

Dr Simi Manojkumar, Dr Jyothirmayi, Dr Vanaja Raghavan, Dr Abhijit Khake, Dr Sreeni Edakhlon, Dr Gopal S Pillai

This 30 year old lady had complaints of decrease of vision in the left eye of 3 years duration. There was progressive diminution of vision and on examination, her best corrected visual acuity was 6/6 in the right eye and CFCF in the left eye. There was a left exotropia of about 30 degrees. Anterior segment examination was within normal limits. Retinal examination revealed normal disc, macula and retina in the right eye. Left eye showed an abnormal disc with 90 degrees of intortion. (fig 1) There was a falciform fold arising from the inferior retinal periphery, right till the disc, and the macula was entangled within it. (fig 2) There was a macular drag and the macula was lying inferior to the disc. The retinal periphery was screened and found to be normal. There were no cells or any other evidence of active uveitis.

The patient underwent a pars plana vitrectomy and dissection of the falciform fold. Underneath the fold, there was a choroidal granuloma and the connection between the fold and the granuloma was severed. There was an epiretinal membrane on the surface of the falciform fold which was peeled out. Postoperative period was uneventful.
After 1 month, the disc remained intorted, but the falciform fold showed signs of opening up and the macula got free from the fold. The fovea and macula were seen separately from the fold, but there was still retinal detachment involving the macula. The vision had improved to 1/60 in the left eye.

After 3 months, the disc started to show signs of extortion. The macula further moved towards its original location. The retinal detachment around the macular region was showing signs of settlement. Vision improved to 2/60 and the squint disappeared.

After 6 months, the disc almost completely became normal with nearly 80 degrees extorted from the first picture. The macular morphology was nearing normalcy and the fluid around the macula had dried up significantly. Her vision had improved to 6/60 and the squint was not to be seen.

Discussion

Macular ectopia and disc tortions or drags can be seen in certain cases like ROP, Toxocariasis, high myopia etc. Macular ectopia may be a cause of severe visual loss and in most cases, it is irreversible. Here we are presenting a case where there was a macular ectopia and disc intortion, probably secondary to a peripheral retinal toxocara granuloma.

Vitrectomy and dissection of the epiretinal membrane has freed the macula from the traction completely and this has over a period of time moved out from the ectopic location to the central location. This was also associated with an improvement of visual acuity.

A search of the literature has shown that macular ectopia is a common accompaniment of ROP, but seldom has anyone tried vitrectomy in the management of ROP induced macular ectopia, because it is usually long standing and visual prognosis is guarded. In cases with diabetic macular traction and macular heterotopia, the results of vitrectomy has been excellent. In such cases, as patients undergo vitrectomy early, the visual prognosis is much better. However in this case, we had attempted vitreo retinal surgery because the history dated only a few years.

Thus vitrectomy and epiretinal membrane dissection can be of help in cases with macular ectopia especially of a short duration of onset. The squint caused by the same was corrected spontaneously as the eye took up foveal fixation.

References:

