

RETINAL DETACHMENT IN PREECLAMPSIA

(A Case Report)

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Retinopathy of toxæmia of pregnancy in its earlier stages is associated with angiospasm, narrowing of retinal arterioles, and in later stages is characterised by the presence of hæmorrhages and exudates, frequently accompanied by retinal edema. Occasionally, the exudation may be so massive as to result in exudative detachment of the retina (Duke Elder, 1967).

Frances (1959), Kishore and Tandon (1965), Shukla and Prasad (1976) from India have reported fundus changes in toxæmia of pregnancy but they did not observe any retinal detachment in their study. So far, there is no case report on retinal detachment in toxæmia of pregnancy from our country except for mention of one such case by Siva Reddy (1959). Hence, in view of its paucity in Indian Literature, this case is reported.

CASE REPORT

A 20 years old, 3rd gravida, in her 8th month was brought to the Eye Department on

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Accepted for publication on 8-1-80.

23-2-1978 for rapid loss of vision associated with headache of 5 days duration. There was history of puffiness of face since 2 weeks and swelling of feet since one month, no history of fits or vomiting. Previous 2 pregnancies were normal home deliveries without any symptoms of toxæmia.

On general examination, there was puffiness of face, marked edema of hands, legs and feet. Blood pressure was 180/140 mm.Hg. Ocular examination revealed marked diminution of vision (counting fingers at 6 inches), edema of lids and chemosis of conjunctiva of both eyes. Cornea, iris, pupil and lens were normal in both eyes.

Fundus examination of right eye showed milky white retinal reflex indicating edema of retina. Optic disc was normal but retinal striations were present around the disc. There was spasm and generalised narrowing of all the arteries except the lower nasal branch which showed focal narrowing near the optic disc. The arteries were not clearly visible in the periphery. Veins were full and tortuous. Two small flame-shaped superficial hæmorrhages were present, one below the margin of the optic disc at 6 o'clock position and the other at the bifurcation of the lower temporal artery. There were few small cotton wool exudates in the upper and lower nasal quadrants in the periphery. Macula was grossly edematous, foveal reflex not visible and macular star present.

The fundus appearance was similar in left eye, but the hæmorrhages were absent and the cotton wool exudates were present in the upper temporal quadrant. The retinal reflex was greyish white in the lower part, below was macula from 4 to 7 o'clock position. There were few retinal folds, but no holes or tears indicating exudative type of retinal detachment.

The diagnosis of retinopathy of toxemia of pregnancy in both eyes, with detachment of retina in left eye was made and the patient was referred to Obstetrics Department for check up. Antenatal examination revealed edema of abdominal wall, uterus enlarged to 28 weeks, head mobile and normal foetal heart rate. The patient was admitted in Maternity Ward for immediate treatment of pre-eclampsia.

Investigations: Albuminuria ++++, haemogram, blood urea, X-ray chest and E.C.G. were normal.

Treatment: Complete bed rest, sedatives (Inj. Largactil 25 mg. I.M. b.d., and Inj. Phenergan 25 mg. I.M. b.d. alternatively) and antihypertensive drugs (Tab. Adelphane esidrex 1 tab. b.d.) were instituted. After 3 days, the blood pressure came down to 170/120 mm. Hg. after 3 days and vision was counting fingers at 2 meters in both eyes. But macular edema and detachment of retina were same. Termination of pregnancy was advised to save vision, and it was done by stripping of membranes and syntocinon drip (2 units in 500 ml. of 5% dextrose solution). The patient delivered a live, female, premature baby weighing 1.5 Kgs. Placenta showed white infarcts. Post-partum period was normal. Blood pressure after delivery was 160/110 mm.Hg. The same treatment was continued. The baby died after 36 hours of survival.

The vision improved to counting fingers at 4 meters in both eyes, on the next day after delivery. The retinal edema was less than before and the arteries were visible in the periphery. Spasm of arteries and focal narrowing disappeared, but the macular edema and detachment of retina were persistent. The blood pressure was 140/100 mm.Hg. Albuminuria +++.

In view of the above fundus findings, oral corticosteroids were started (Tab. Deltacortil 10 mg. t.d.s.) in addition to the antihypertensive drugs. Oral sedatives and multivitamin tablets were started. The patient responded well to this treatment. The vision improved to 6/36 in both eyes after 2 days of corticosteroid therapy. Edema of conjunctiva disappeared and macular edema was less. Blood pressure was 130/100 mm.Hg. albuminuria ++. The steroids were continued with a tapering dose as the vision started improving.

In a span of 10 days after termination of pregnancy, the puffiness of face, edema of conjunctiva and eye lids slowly disappeared. Foveal

reflex was visible. The retinal reflex was pin-point and there was spontaneous reattachment of the detached retina. Haemorrhages and exudates were getting absorbed. Vision was 6/9 in both eyes. Blood pressure was 124/92 mm.Hg. albuminuria +. In another 3 days time, the patient regained 6/6 vision in both eyes. Macular edema completely resolved and retinal detachment settled completely. Blood pressure was 120/90 mm. Hg., no albuminuria. There was no edema of feet or hands.

The patient was discharged on sixteenth day after admission with prescription of Tab. Deltacortil 5 mg. per day, Tab. Multi Vitamin 1 tab. b.d. and advised to come for follow-up after one week.

Follow-up examination revealed blood pressure 118/84 mm.Hg., albuminuria nil, vision 6/6 and fundus normal in both eyes. Corticosteroids were stopped. The patient was followed up for 3 months and all the above findings were found to be normal.

Discussion

In toxemia of pregnancy, occurrence of retinal detachment is rare. The first case was reported by Von Graefe (1855) and later a considerable number have appeared in the Foreign literature. The detachment is usually bilateral. It occurs in 1.2% of cases of late toxemia and 10.4% of cases of eclampsia (Fry, 1929). It is always associated with marked retinopathic changes, generalised edema markedly on the face and lids. Indeed it is the localised expression, in the eyes, of systemically diseased condition of the vessels (Duke Elder, 1967). The prognosis of reattachment of retina is good which occurs spontaneously in a few days (Bosco, 1961).

This case is an outstanding example showing spontaneous reattachment of the detached retina in left eye, complete disappearance of macular edema, reversion of vascular pathology and restoration of normal vision in both eyes following termination of pregnancy and institution of systemic corticosteroid therapy, which is

the sheet anchor of treatment for posterior segment diseases of the eye.

Summary

A case of exudative retinal detachment in one eye and severe macular edema in both eyes associated with marked loss of vision in a 20 years old woman suffering from preeclampsia is described. Following termination of pregnancy and institution of corticosteroids, there was spontaneous reattachment of the detached retina in the left eye and complete resolution of macular edema with recovery of normal vision in both eyes.

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