TRAUMATIC OEDEMA OF THE MACULA

by

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TRAUMATIC oedema of the macula, or commotio retinae, was first described by Noyes in 1871. Many instances have been reported since then, especially following the last war, Salzmann (1919) finding eight cases in 2,400 war injuries, and Middleton (1919) 23 in 100,000. No apology is offered before presenting the following four cases, for it is a condition that is not uncommonly missed because it cannot be seen until the pupil has been dilated.

The condition arises following a blow on the anterior pole of the eye, the macula being the point of contre-coup. More rarely it has apparently followed a blow on the side of the eye. The patient will complain of misty vision and examination of the macula will reveal the typical grey coloration with a central orange-red pit at the site of the fovea. The swelling may subside in a few days in which case some central vision may return, or it may persist for some weeks and in such a patient the outlook for useful vision is very bad, and marked pigmentary changes will be found at the macula. In some patients the oedema does not subside, and after many months or even years the atrophic retina breaks away at the edge of the pit leaving a hole at the macula which has the appearance of having been punched out with a trephine. If this should happen, a retinal detachment is likely to be the end result. The following recent cases are recorded not because they throw any new light on the subject, but because they demonstrate these four stages in the progress of macular oedema: 1. Oedema of the macula. 2. Oedema replaced by pigmentary changes. 3. Hole formation. 4. Retinal detachment.

Case 1. E.L., aged 35 years, Belgian refugee, July 27, 1942.—While working on demolitions, a wall collapsed on him. Admitted to hospital semi-conscious and with a large haematoma of the right orbital region. X-rays showed a fracture of the vault of the skull, R. side, extending into the anterior fossa. The right optic disc was swollen and eventually became atrophic with loss of all vision in that eye. When this patient recovered he found that he could not see well with the left eye and examination of it revealed the typical appearance of macular oedema (Fig. 1). The vision of this eye was 6/60, not improved by lenses, and neither the fundus appearance or the vision had improved when he was last seen.
Case 2. Sergeant H.L.G., aged 28 years.—Had always had good vision until twelve years previously, when he was struck a violent blow in the left eye. After that he could never see well with that eye, and reading vision never returned. On examination the vision in this eye was less than 6/60, and the macula showed pigmentary changes such as one would expect to find after the subsidence of traumatic oedema (Fig. 2).

Case 3. J.S., aged 29 years, a soldier.—Four years previously he had had a severe motor-bike accident and was unconscious for four days. The damage was chiefly to the right side of the head, and there was a large scar over the right eyebrow. After the accident his R. vision failed and he found he could not shoot from the right shoulder. On this account he was transferred to the Ordnance Corps.

On examination the vision of the right eye was finger counting at 2 feet, no improvement with lenses. There was a punched out hole at the right macula, and the surrounding retina was slightly detached (Fig. 3).

Case 4. J.S., schoolboy, aged 9 years.—Three years previously he was struck on the left upper lid by an air-gun pellet. After this he could not see well with this eye, and has never done so since. Examination L. eye, less than 6/60, not improved. There was a circular punched out hole over the left macula, and a thin disc of tissue floating in the vitreous in front of it. The inferior half of the retina was detached. No other retinal hole found (Fig. 4).

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A Case of Fistula of the Cornea. A Method of Treatment

by

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De Schweinitz defines a fistula of the cornea as an orifice remaining after a wound, or more commonly because of the failure of an ulcer to heal. Fistula is an unusual sequel and when it does occur it is the central part of the cornea that is most often affected. De Schweinitz recommends to touch the mouth of the fistula with the point of the lunar caustic—and even to pare the edges and introduce a corneal suture. In Fuchs' Text-Book of Ophthalmology the line of treatment suggested is: