Malignant Hypertension: Ocular Manifestations

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Malignant hypertension may be the first manifestation of systemic hypertension. We report a clinical case of a Caucasian 41-year-old man with no previous history of blood hypertension seen at casualty because of blurred vision. Fundus examination disclosed optic disk swelling, retinal hemorrhages and infarcts. The blood pressure was 220/130 mmHg. After the appropriate management of hypertension, optic disk and retinal edema resolved, leaving minor changes as mild optic disk pallor and hard exudates.

KEYWORDS: Optic disk swelling, cotton-wool spots, malignant hypertension, hypertensive neuro-retinopathy

FIGURES 1 RE – 2 LE. Bilateral optic disk edema with prominent telangiectatic vessels on the surface of both optic disks. There are retinal microinfarcts (cotton-wool spots) and hard exudates in the macular area forming a macular star.

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FIGURES 3 RE – 4 LE. Fluorescein angiogram showing an artery occlusion (RE superior temporal branch) and wide areas of choroidal ischemia in both eyes. Retinal haemorrhages are seen as black dots as they block normal fundus fluorescence.

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FIGURES 5 RE – 6 LE. Two months later, there is still optic disk swelling and lipid (hard) exudates.

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FIGURES 7 RE – 8 LE. Eight months after hypertension onset, temporal optic disk pallor is seen, as well as retinal arterial narrowing and lipid exudates.

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