

FIGURE 1. Marked diabetic papillopathy with disc oedema and blot haemorrhages. Note the associated macular oedema with blurring of the detail of the underlying tissues

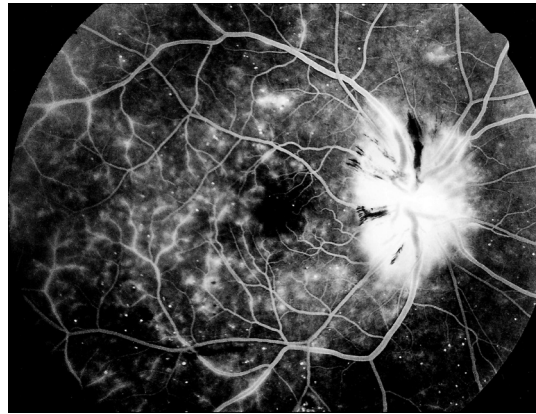


FIGURE 2. Fluorescein angiogram of the same eye as in Figure 1. Note the marked leakage at the disc, widespread microaneurysms and macular oedema

Diabetes Papillopathy

DESCRIPTION

Diabetic papillopathy is a form of optic neuropathy occasionally described in patients with diabetes mellitus. The typical presentation involves slowly progressive, unilateral or bilateral, blurring of vision associated with swelling and hyperaemia of the optic disc. Symptoms are usually mild, and the outcome usually favourable. The pathogenesis is unknown. No relationship has been demonstrated between diabetic papillopathy and either diabetic retinopathy or glycaemic control. Hypoxia is thought to play a role: for example, fluorescein angiography has demonstrated diffuse impairment of retinal capillary perfusion in approximately half of cases. Although diabetic papillopathy has been considered a form of ischaemic optic neuropathy (both arteritic and non-arteritic), its presentation and prognosis differ profoundly from these conditions in which visual loss is sudden and profound, with a poor prognosis for recovery.

SYMPTOMS

May be asymptomatic. Often presents with slowly progressive, mild blurring of vision.

SIGNS

Signs are usually, but not invariably, unilateral. Diabetic papillopathy may be an incidental finding in an asymptomatic patient. Visual acuity is often mildly reduced or normal, with or without an enlarged blind spot. Optic disc swelling may be striking, with distended surface vessels. There is not the pale swelling or atrophic appearance of anterior ischaemic optic neuropathy. Signs of diabetic macular oedema are often present. Cotton-wool spots and other signs of severe retinal ischaemia are uncommon.

PREVALENCE

Rare. The classical presentation is in a young adult with Type I diabetes. Cases have been reported between ages of 17 and 79 years,

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in patients with Type I and Type II diabetes.

SIGNIFICANCE AND DIFFERENTIAL DIAGNOSIS

When a diabetic patient with intact visual function presents with swelling and hyperaemia of the optic disc, the initial priorities are to exclude papilloedema (disc swelling with raised intracranial pressure) and proliferative diabetic retinopathy with neovascularisation on the disc. The importance of regular review and strict glycaemic control for the diabetic patient should be reinforced.

SEE ALSO

Arteritic ischaemic optic neuropathy; Non-arteritic ischaemic optic neuropathy; Diabetes – introduction to retinopathy; Diabetes – macular oedema.

MANAGEMENT

Ocular tests, imaging investigations

The first priority on initial presentation is to exclude other causes of optic nerve swelling, and proliferative retinopathy with neovascularisation on the disc. Tests in this regard will depend on the clinical presentation, but may include imaging investigations of the brain and orbit (see Papilloedema). Fluorescein angiography helps differentiate dilated vessels over the optic disc in diabetic papillopathy (generalised leakage of dye at the optic disc) from neovascularisation in proliferative retinopathy (focal leakage from new vessels). A variable finding is coarsening of the retinal

capillary network in the posterior pole, which is consistent with ischaemia.

Review and advice

No specific treatment is indicated for diabetic papillopathy. Notably, corticosteroids provide no known benefit, and will temporarily disrupt glycaemic control. Initial review is recommended at one month, three months and subsequently as indicated by the patient's underlying diabetic retinopathy. The disc swelling usually resolves spontaneously over several months without residual damage. Rarely, a variable degree of optic atrophy develops. The patient's long-term visual outcome will be optimised by strict glycaemic control and regular review.

The full series of these articles will be available in the book *Posterior Eye Disease and Glaucoma A-Z* by Bruce A S, O'Day J, McKay D and Swann P. £39.99. For further information click on the Bookstore at www.opticianonline.net.

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