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## Visual compromise in the diabetic patient

**T**REATMENT of diabetic retinopathy with photocoagulation is one of the major advances in the management of the diabetic syndrome made in the past two decades. The importance of the Diabetic Retinopathy Study (DRS) in demonstrating the benefits of photocoagulation in proliferative diabetic retinopathy has not uniformly reached the physicians who treat most diabetic patients. Fortunately, this issue is being addressed by the National Eye Institute as part of a national program of eye health education.<sup>1</sup> Zakov, in this issue of the *Cleveland Clinic Journal of Medicine*, also emphasizes the importance of photocoagulation in his review of the concepts underlying the pathophysiology, progression, and treatment of diabetic retinopathy.

■ See Zakov (pp 609–612).

The primary care physician needs to be aware of the following key points in the management of diabetic retinopathy. First, significant retinopathy may occur in the absence of any visual symptoms. Second, even conscientious physicians using hand-held ophthalmoscopes may miss retinopathy that needs laser therapy.<sup>2</sup> (These two features highlight the need for regular eye examinations by an experienced ophthalmoscopist—usually an ophthalmologist who performs careful examinations of the dilated eye.) Third, rigorous glycemic control may reduce the incidence and progression of diabetic retinopathy.<sup>3</sup> Fourth, hypertension in the diabetic

patient plays a role in the incidence and progression of diabetic retinopathy<sup>4</sup> and needs to be treated aggressively. (This topic will be discussed in a future article in this series.)

Visual compromise may affect many aspects of day-to-day management of diabetes. The visually impaired diabetic may draw up the wrong insulin dose, misread medication labels, assess color changes incorrectly on glucose test strips, and be unable to examine the feet and trim the toenails properly in the course of daily foot care. As noted by Zakov, diabetic retinopathy is a leading cause of blindness. Even partial loss of vision associated with progressive retinopathy has an impact which underscores the need for primary care physicians to take an aggressive posture in the evaluation and treatment of diabetic patients at risk for eye disease.

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### REFERENCES

1. Kupfer C. The challenge of transferring research results into patient care. *Ophthalmology* 1989; **96**:737–738.
2. Sussman EJ, Tsiaras WG, Soper KA. Diagnosis of diabetic eye disease. *JAMA* 1982; **247**:3231–3234.
3. Hoogwerf BJ. Tight blood glucose control: Is it worth it? *Cleve Clin J Med* 1990; **57**:390–395.
4. Klein R, Klein BEK, Moss SE. The Wisconsin epidemiologic study of diabetic retinopathy: a review. *Diabetes Metab Rev* 1989; **5**:559–570.