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Role of Diabetologist in Evaluating Diabetic Retinopathy

Nathan et al. (1) compared the accuracy of ophthalmologists with diabetologists in screening for diabetic retinopathy with seven-field color stereoscopic fundus photography. Although we agree with the final conclusion of this study that well-trained diabetologists can make ophthalmology referral decisions, we found the methodology and some results worthy of remark.

Nathan et al. compared two different examination methods. The diabetologists used direct ophthalmoscopy through undilated pupils, and the ophthalmologists used indirect ophthalmoscopy through dilated pupils with only occasional use of slit-lamp biomicroscopy. Indirect ophthalmoscopy gives a small magnification (20 dpt × 3) and is not sensitive enough to detect subtle diabetic lesions such as microaneurysms, small hemorrhages, and early new vessels. To screen effectively, it is therefore essential to perform direct ophthalmoscopy or slit-lamp biomicroscopy through a dilated pupil. The predominant use of indirect ophthalmoscopy in the study explains the poor results of the ophthalmologists. Moss et al. (2) showed that ophthalmologists using indirect supplemented with direct ophthalmoscopy concurred with seven-field color stereoscopic fundus photography 85.7% of the time, significantly better than in the study by Nathan et al.

We were disappointed by the decision of Nathan et al. not to dilate the pupil before direct ophthalmoscopy. Klein et al. (3) found this to be both an insensitive and nonspecific method. Even when pupillary dilation was used, Sussmann et al. (4) found a serious error rate of ~50% for diabetologists.

The impression from these studies is that if diabetol-

ogists make ophthalmology referral decisions for their patients, appropriate training is indispensable. If this is not guaranteed, regular detailed examination by an ophthalmologist is necessary.

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Patient-Oriented Educational Material on Diabetes

In diabetes, much of the success of treatment depends on patient education. Therefore, educational material must be oriented toward the average patient's ability to understand sometimes complicated medical concepts. The following is offered as an example of patient-oriented educational material (POEM) that patients and professionals alike may find both comprehensive and comprehensible.

I
Diabetes has two forms,
(Exceptions can defeat the norms)
The one's acute and in a child,
The other initially seems mild,
Its onset in adults is stealthy,
Though the patient feels quite healthy,
Till the sugar in the blood
Has started up a urine flood
That courses in the night at first,
And then all day. A nagging thirst
So difficult to satisfy,
Can leave you feeling limp and dry.
Although there's sugar in excess,
The cells are starving nonetheless.
And so you eat a lot and still
You're hungry, weak, fatigued, and ill.
Infections such as furuncles