The Retina Specialist's Role in Systemic Diabetes Control

he statistics on the incidence of diabetes are, in a word, alarming. According to the Centers for Disease Control and Prevention (CDC), there was a 373% rise in diagnoses of new cases between

1980 and 2011. In real numbers, there were approximately 493 000 cases diagnosed in 1980; by 2011, that figure rose to 1 568 000 new cases. In 2011, 63% of all adult cases occurred in individuals 40 to 64 years of age (with the largest percentage among individuals 50-59 years at 15.4% of the total).

Two observations on this last point. First, individuals between 40 and 64 years of age are still typically vibrant individuals of working age. Average life expectancy is about 78 years in the United States, meaning that an individual at the latter part of this age range would still be expected to live for another decade. Individuals diagnosed with diabetes, on the other hand, face the prospect of significant sequelae from their systemic disease. That is assuming, of course, that they even survive. Time and again in published studies, diabetes is linked to lower life expectancy. In our subspeciality, we deal with patients at significant risk of losing their vision; yet, it seems, a diagnosis of diabetes is a veritable early death sentence.

Second, while it is important to note that although diabetic retinopathy is the leading cause of blindness among working age individuals, and although we are observing an alarming incidence among individuals 45 to 64 years old (5.2 per 1000 in 1980; 11.9 per 1000 in 2011) and among those 65 to 79 years old (6.9 per 1000 in 1980; 15.4 per 1000 in 2011), there is also a rising incidence among younger individuals 18 to 44 years (1.7 per 1000 in 1980 rising to 3.3 per 1000 in 2011).

These data highlight the seriousness of the problem we are facing with regard to diabetes. There is every potential that we retina specialists will be seeing more patients with diabetes and its attendant complications, and that those patients will be young but with every expectation to maintain their vision and quality of life

well into their golden years. It is a daunting proposition. The CDC predicted that among individuals 18 years of age or older, about 4 million suffer some form of visual impairment.² It is somewhat frightening to think where

that number could be if trends in the incidence of new diabetes diagnoses do not decline. But what is the realistic possibility of that happening given a parallel rising incidence of obesity in America? When more than one-third of Americans are obese?3

We are fortunate to have therapies at our disposal to treat the vision threatening consequences of diabetes. A peek down the pipeline reveals many more potential options to come. Yet there is one additional thing we can all do to help our patients with diabetes help maintain their vision—and their overall health. As physicians, we have a responsibility to advise our patients to monitor and achieve optimal A1C levels. As retina specialists we have unique leverage to change behavior since patients value vision; furthermore, we have opportunity to promote wellness because we often see these diabetic

patients more frequently than their other doctors. Asking patients for their numbers may not be enough; we should also be educating about and advocating for optimal metabolic control. Control of A1C has been linked to lower incidence of visual sequelae, but more importantly, it is just the right thing to do by our patients.

Now and in the future, retina specialists will be called upon to help patients with diabetes maintain their vision. Yet, it is important to remember that we can also be influential in helping patients with diabetes maintain their overall health and quality of life.

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^{1.} U.S. Centers for Disease Control and Prevention. National Diabetes Surveillance System. Age-adjusted prevalence of obesity and diagnosed diabetes among U.S. adults, www.cdc.gov/diabetes/statistics. Accessed March 25, 2015. 2. U.S. Centers for Disease Control and Prevention. Number (in millions) of adults aged 18 years or older with diagnosed diabetes reporting visual impairment, United States, 1997—2011. http://www.cdc.gov/diabetes/statistics/visual/ fig1.htm. Accessed March 25, 2015.

^{3.} U.S. Centers for Disease Control and Prevention. Adult obesity facts. http://www.cdc.gov/obesity/data/adult.html. Accessed March 25, 2015.