## Rising to the Challenge of Diabetic Retinopathy

When the National Football League gets involved in the campaign against a growing trend of obesity

(NFL Play 60), it can mean only one thing: obesity is officially an epidemic. In all seriousness, however, there is a disturbing trend throughout most of the United States toward obesity in both children and adults. In the ophthalmology world, of course, we are seeing an increasing number of patients with diabetic eye disease as a direct result of this trend. Thus, the demand for better treatments, as well as the demand on retinal practices, is ballooning.

In terms of treatment, big news was made recently with the Diabetic Retinopathy Clinical Research Network's (DRCR.net) release of data from the National Institutes of Health-sponsored study evaluating the effects of ranibizumab (Lucentis, Genentech) injections with prompt or deferred laser compared to laser alone for patients with diabetic macular edema (DME). The results were significant—the

patients in the ranibizumab group with prompt and deferred laser experienced an average visual acuity gain of 9 letters or 2 lines, compared with a 3 letter average gain in patients treated with laser alone. Furthermore, a recent randomized controlled clinical trial with pegaptanib (Macugen, Eyetech) anti VEGF therapy demonstrated positive results for DME. Promising results have also been achieved in studies with sustained-release corticosteroids (Iluvien, Alimera; and Ozurdex, Allergan, Inc.). These data represent a paradigm shift in diabetic eye disease and have the potential to change the standard of care for DME, but it is difficult to say exactly which will prove most effective; however, these results clearly point to a change on the horizon.

In terms of the demand on our practices, we are simply seeing higher numbers of patients with eye disease as

complications of type 2 diabetes. These patients tend to be more challenging and demand more of a physician's

time and attention due to the numerous comorbidities that exist with diabetes. We must carefully consider how we treat patients to ensure that the benefits we achieve outweigh the risks. As the patient population shifts to include more patients with diabetes, the retina specialist may have to reevaluate his or her practice: the physical office set-up, patient scheduling, staffing, inventory, and record keeping, not to mention his or her own hectic schedule.

The recent DRCR.net, pegaptanib, and corticosteroid (Alimera and Allergan) data are important information for those of us who treat patients with diabetic eye disease, but don't discard your laser box. We will now have an opportunity to improve vision in our patients with diabetes to an extent that was not previously possible. The increase in patient demand for injections or other such medical treatment

will be far more significant than what we experienced in 2006 when ranibizumab was approved for age-related macular degeneration, simply because the prevalence of diabetes is so high. However, this also means that our profession can have a positive impact on a large portion of the population—every physician's goal. Can we meet the challenge? As Vince Lombardi once said, "People who work together will win, whether it be against complex football defenses, or the problems of modern society."



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