Managing the Diabetic Patient

Tips and pearls for managing these difficult-to-treat eyes.

BY MICHAEL McFARLAND, OD; J. JAMES THIMONS, OD; AND SAM MANSOUR, MD

An estimated 25.8 million children and adults in the United States, or about 8.3% of the population, have diabetes.[1] *Numerous studies have been and are currently being conducted to learn about all facets of the disease: how to prevent it, how to diagnose it earlier, and how to treat it. The wealth of data coming from these studies, however, is difficult for medical professionals to keep up with—and nearly impossible for patients. In this article, three eye care professionals comment on their best practices for managing and educating diabetic patients.*

1. American Diabetes Association. http://www.diabetes.org/diabetes-basics/diabetes-statistics/. Accessed February 27, 2013.

The Benefits of Comanagement

By Michael McFarland, OD

Optometrists are on the front line of diabetic care, and it is apparent that diabetes is on the rise. It is imperative that all eye care providers are well versed in how to manage these patients, or a significant amount of ocular morbidity can result.

The first priority is a thorough examination. I start with a complete patient history, including asking about any current medication regimens. In addition to visual acuity and the other standard eye evaluations, a thorough fundus examination is a must, paying particular attention to the vasculature and grading the amount of diabetic retinopathy, if any. Any signs of clinically significant macular edema and neovascularization should be readily identifiable. If the patient does in fact have diabetic retinopathy with suspect clinically significant macular edema, the diagnosis is confirmed with an optical coherence tomography (OCT) scan of the macula. If neovascularization is present or suspected, fluorescein angiography is performed to confirm the diagnosis. It is important to let the clinical fundus examination guide what testing is needed. Special testing can be useful, especially regarding response to therapy and borderline cases, but it is no substitute for a thorough retinal exam with your own eyes.

Ninety percent of vision loss from diabetes can be prevented, so the second step is patient education. I always take time to elaborate that diabetes is a disease of the vascular system that affects small blood vessels, and there are a lot of small blood vessels in the back of the eye. I explain the value of keeping blood sugar and blood pressure under control, and I reiterate the importance of a healthy diet and exercise, regular eye examinations, and contact with a primary care physician. Patients are routinely questioned about their hemoglobin A1C levels and are educated on the importance of this number. The electronic health records system in our practice automatically generates a brochure specifically for diabetic patients to make sure they have all the information they need. The more patients understand their pathology, the more likely they are to comply with my recommendations.

Working within a group practice, I have a very fluid comanagement relationship with ophthalmology. I complete the comprehensive evaluation, and if intervention is needed, I collaborate with other physicians in our practice, and together we determine if anti-vascular endothelial growth factor injections, steroid injections, or laser treatment is required. I also take on the role of informing these patients of their treatment options and what we feel will be best for them. I explain new technologies like MicroPulse Laser Therapy (Iridex Corporation) that reduces swelling but will not damage retinal tissue.

I find it to be very advantageous to work in a larger practice because I have access to a wide variety of diagnostic devices and I feel that the close comanagement of patients with the ophthalmologist allows me to provide an excellent level of care. We have an integrated model in which primary care problems and diagnoses are handled by optometry, and the ophthalmologist handles the surgical aspect of the case. We stress the importance of diligent follow-up, and the patient has the advantage

of being seen by a specialist and the optometrist in the same visit, if necessary.

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Take a Proactive Approach

By J. James Thimons, OD

I see a large number of patients with diabetes, around a dozen each day, as many of my colleagues do. I have found that a structured protocol for diagnosis and a large amount of patient education are essential to providing the best care.

A THOROUGH EVALUATION

Obviously, the retina and the optic nerve are at greatest peril, so all patients undergo a dilated examination. In addition, I typically run an OCT of the retina to check for clinically significant diabetic macular edema. Patients with diabetes are much more likely to develop cataracts at an earlier age, and they are more likely to have concerns with intraocular pressure, so I look at those factors very carefully. In many instances, I will include an evaluation of symmetry and other diagnostic assessments, because these patients are at a higher risk for vascular-based damage to all tissue, including the optic nerve and the retina. Prior to checking the intraocular pressure, we examine the ocular surface, which is typically more challenged in this patient group. Poor tear film that affects visual function and secondary meibomian gland dysfunction are two areas I find are commonly present in the diabetic population. The optic nerve is also checked for progressive optic neuropathy. In addition to basics like reviewing patient history and current medications, I feel it is very important to delve into blood sugar levels, A1C levels, and relative control of my patients' diabetes.

PATIENT EDUCATION IS ABSOLUTELY ESSENTIAL

With every patient visit, I reinforce that we are trying to maintain the best vision possible over their lifetime, and their follow-through is the most important factor.

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RESOURCES FOR PATIENT EDUCATION

BY SAM MANSOUR, MD

Patients are increasingly interested in being better informed about their conditions so they can participate in their treatment decisions. At the same time, the population with diabetic eye diseases is younger compared to those with degenerative diseases. These younger patients are very savvy, they search for information from a variety of sources before even coming into the practice, and they want to truly understand their pathology and treatment options. The end result is that all physicians are spending more time on patient education than ever before.

Our practice has adopted a patient education program that includes elements developed from within our practice and from commercially available publications. The first step that we took was adding flat screen monitors to each of our examination lanes, which are linked to the Internet as well as to our servers. I can pull up videos or other materials from the web to show patients just as easily as I show them OCT scans or other diagnostic test results. The ability to visualize pathology is enormously helpful for patients.

Industry partners have been excellent in providing us with patient brochures that explain disease states and treatment options. Patients still like to leave the office with something in their hands. On the printed materials that they take with them, we also write down helpful websites such as www.treatmydme.com. This website, and others like it, contain explanations of pathology and information on newer treatment modalities such as MicroPulse Laser Therapy.

The more sources available to patients and the more they are exposed to the information, the greater their understanding. This helps us as physicians, because patients with a more thorough education of their pathology tend to be more compliant with their prescribed regimens as well as more likely to be satisfied with their treatment.

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Patients who are educated about their disease state are much more likely to observe the recommendations of their clinicians and be cognizant of changes that could be significant and that might warrant immediate evaluation. We provide educational brochures and refer patients to websites such as www.diabetes.org and www.treatmydme.org.

Although outside sources are very valuable, I know many patients like to have a direct line to their doctor. Thus, all of my patients have my personal phone number. I get about 15 calls per week as a result, but staying connected with patients who are being treated for a chronic disease state is a valuable service. When patients have questions about recent changes in their vision, which is common, I ask if they have made any changes to their medication or diet. Based on their answers, we would evaluate together if they are going through a normal diabetic fluctuation or if we need to intervene.

A TEAM APPROACH

Our practice takes a very proactive approach in encouraging patients to comply with all medical treatments in order to maintain the best results possible. I review the results of examinations and inquire when patients are scheduled to see the general practitioner, internist, or diabetologist. In addition, regarding patients who are being treated for retinal complications, it is crucial to establish that there is compliance with follow-up. It is astounding to find out the number of patients on a laser treatment protocol that have no idea when their next appointment is. If the patient is unsure, we will confirm the appointment and give him or her a reminder before leaving the office.

All visits generate a return letter to their primary care physicians, and I include patients' reported blood glucose levels in addition to the comprehensive examination data. This information allows the physician to better integrate their care and have greater overall success with patients. I have a standardized letter for diabetic patients to which I add details, and copies are sent to the endocrinologist and cardiologist when appropriate. I believe that the interface we have with our patients is highly proactive, and it benefits everyone in the long run. ■

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