

Multifocal IOLs Are Ideal for Patients Who Cannot Wear Spectacles

These premium IOLs are worth considering for patients with medical conditions.

BY MITCHELL C. SHULTZ, MD

Patients who are unable to wear glasses may be good candidates for multifocal IOLs. I recently implanted a Tecnis Multifocal IOL (Abbott Medical Optics Inc.) in a 78-year-old woman with aggressive facial cancer and achieved great results.

This patient had had most of her lower right eyelid removed in September 2006 by another physician secondary to sebaceous cell carcinoma. She first presented to my office in September 2007, because she was experiencing some changes in her lower right eyelid where the surgery had been performed. During her first visit, I noted that she had residual scarring in her lower right eyelid, and in January 2008, I performed a cicatricial ectropion repair by full-thickness skin graft on that area.

RECURRENCE OF CANCER

The patient was doing well after the aforementioned surgery. In March 2008, however, I noticed that she had a new lesion in her right medial canthus. The lesion was biopsied, and the initial diagnosis was basal cell carcinoma. After a further review of the pathology, it was determined to be a recurrence of sebaceous cell carcinoma. In September 2008, she underwent a complete exenteration of the right orbit by her original oculoplastic surgeon.

Post exenteration, the patient was noted to have a mild cataract in her left eye, but she maintained a BCVA of 20/25. In July 2009, my colleagues and I started to see some metastatic changes from sebaceous cell carcinoma, and the patient began radiation treatment to her head and neck. She underwent more than 30 sessions of radiation, and her vision started to decline. After her radiation treatments, her BCVA was 20/40 OS with a slight

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increase in her cataract. She did not have any significant complaints until April 2011. By this time, her BCVA had deteriorated to 20/70, and now, she had a significant posterior subcapsular cataract. At this time, we discussed her cataract surgery.

I implant various multifocal and accommodating IOLs, including the Tecnis Multifocal, Crystalens AO (Bausch + Lomb), and the AcrySof IQ Restor IOL +3.0 D and +4.0 D (Alcon Laboratories, Inc.). In addition, I consider the AcrySof IQ Toric lens if moderate or high astigmatism (> 1.00 D) is present and if the patient tolerates or prefers blended vision. I select the IOL based on the patient’s age, lifestyle, hobbies, and activity level. To date, I do not believe the field has developed a one-size-fits-all technology. Because of the size of the tumor on the right side of the patient’s head, she could no longer wear glasses (Figures 1 and 2). She was extremely uncomfortable with her visual acuity at both distance and near. She no longer drove at night, and prior to the progression of her sebaceous cell carcinoma, she was an avid reader. I decided that the best IOL for this patient would be a Tecnis Multifocal 1-Piece IOL. In my experience, I have found



Figures 1 and 2. Patient with a Tecnis Multifocal implant in the left eye. She underwent exenteration of the right orbit for sebaceous cell carcinoma.

that the Tecnis Multifocal lens offers the best unaided near acuity in all light conditions without compromising uncorrected distance acuity.

IMPROVED QUALITY OF LIFE

I performed surgery on May 11, 2011. This patient had about 0.75 D of cylinder with a steep axis at 90°, so I decided to make my incision at 90°. At her 1-week postoperative visit, her UCVA was 20/40 at distance and J1 (20/25) at near, and she was extremely happy. Three months postoperatively, her uncorrected distance acuity had improved to 20/30, and she remained J1 at near. Now, 1 year postoperatively, she still enjoys spectacle-free vision, although her health is declining rapidly as a result of her aggressive terminal illness.

I believe a multifocal IOL was a good fit for this patient because of her monocular status, her love of reading, and her inability to wear glasses secondary to her medical condition. Because she no longer drives or spends much time outdoors at night, I was not concerned about any potential problems with glare and halo. For patients who want to have excellent reading and distance vision, I find that the Tecnis Multifocal gives me the best result. Patients can read under all lighting conditions; bright light is not required. Additionally, in my experience, intermediate vision with this lens is equal to or better than that provided by other available multifocal IOLs and, in this patient, was 20/40 by 1 week after surgery.

DISCUSSION

Many patients cannot wear spectacles or corrective eyewear secondary to medical conditions that are beyond their control. They include paraplegics and patients with severe demyelinating disorders like

amyotrophic lateral sclerosis, Duchenne muscular dystrophy, and advanced-stage multiple sclerosis. In addition, deformities or birth defects resulting in a loss of the use of their arms, amputation secondary to trauma or peripheral vascular disease, and trauma or surgical deformities of the nose and/or ears all present challenges to independence. These individuals rely on assistance and require optical aids to see at near and/or far distances. Although this is by no means a complete list, I hope it encourages surgeons to be cognizant of patients who would benefit tremendously from multifocal or accommodating IOLs.

In consideration of my patient's medical condition and inability to wear glasses, I did not feel right charging a premium lens fee. I believe that individuals such as this one require ophthalmologists to consider the compassionate use of advanced technologies, which can make a huge difference in the quality of life of patients who could not otherwise afford them. It is important for ophthalmologists to remember that they are doctors first and foremost. This patient's quality of life greatly improved after the implantation of the multifocal lens. Although there is no cure for sebaceous cell carcinoma, and she will eventually succumb to this deadly cancer, she is now happier with whatever time she has left and her ability to do the things she wants. ■

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