Shlomo Melamed, MD

Dr. Melamed discusses the value of glaucoma screenings and the beauty of his rare birds.

Compared with your training in Boston, how does the management of glaucoma in Israel differ? What are the greatest challenges of treating glaucoma in your country?

The management of glaucoma is basically no different here than in the United States or Europe. In Israel, glaucoma specialists and general ophthalmologists are well informed

about large, multicenter studies related to the diagnosis and treatment of ocular hypertension (OHT) and the various stages and types of glaucoma. Consequently, most surgeons have adopted the currently accepted approaches to managing glaucoma. For example, since the published reports from the Ocular Hypertension Treatment Study and the European Glaucoma Prevention Study, pachymetry has become an integral part of the ophthalmic examination of any patient with OHT, and the decision to start treatment is

based upon his or her existing risk factors for conversion.

Treatment usually starts with medication (prostaglandin analogues are the first choice), followed by argon/selective laser trabeculoplasty and surgery as needed. Currently, there are only four selective laser trabeculoplasty lasers in Israel, but the use of this procedure in early glaucoma and even as primary treatment in certain cases is growing. Glaucoma surgery is rather popular here. Ophthalmologists usually start with trabeculectomy, and certain medical centers offer other interventions (eg, aqueous drainage devices and laser cyclophotocoagulation) as needed.

Israel has a high prevalence of pseudoexfoliation glaucoma, especially among immigrants from Russia, Ethiopia, and Yemen but also from other European and Mediterranean countries. This form of high-tension glaucoma requires aggressive treatment, and advanced cases constitute an estimated 50% to 60% of the surgical load at most glaucoma centers.

What have you learned from your work with surgical outreach programs?

During the past 15 years, I have participated in several surgical outreach programs in countries such as India, Papua New Guinea, Micronesia, China, Bolivia, and West Africa. Patients in the developing world pose a challenge in terms of diagnosis and therapy. Many are diagnosed with glaucoma very late in the course of the disease, when their optic nerves and visual fields are severely damaged. Especially in Africa, trabeculectomy is uncom-

mon due to surgeons' lack of expertise and the general population's ignorance and incredulity regarding the operation's visual results. Consequently, combined cataract and glaucoma surgery may be the better approach to treating many people with glaucoma in this region.

How valuable are glaucoma screenings in the community?

A mobile unit for the diagnosis of glaucoma has traveled the country for 15 years. We have already screened approximately 120,000 people in locations such as shopping malls, factories, and villages. This program is very valuable for enhancing public recognition of glaucoma and educating the public about the risks related to the disease. In addition, my colleagues and I have been able to compile some interesting data regarding the preva-

lence of glaucoma and OHT in Israel (1.7% vs 8.0%, respectively) along with the epidemiology of subtypes of glaucoma and risk factors for conversion from OHT.¹

How do you expect glaucoma surgery to evolve during the next 10 years?

I strongly believe that glaucoma surgery must and will evolve in the near future toward more sophisticated and less traumatic procedures. Although quite efficient at reducing the IOP, trabeculectomy is associated with too many complications, ranging from foreign body sensation and dellen formation to leaking blebs, hypotony, blebitis, and endophthalmitis. The major problem is the filtering bleb: its function is needed to control the IOP appropriately, but the bleb is the main reason for these complications.

We need a "blebless" operation. Several technologies and methodologies are already in use or the subject of active clinical research. They include nonpenetrating surgery as (Continued on page 56)

FAST FACTS

- Incumbent, the Zuker-Sussman chair for glaucoma research, Tel Aviv University Medical School, Israel, 2008 to present
- Full professor of ophthalmology, Tel Aviv University Medical School, Israel, 2004 to present
- Director of the Sam Rothberg Glaucoma Center, Sheba Medical Center, Tel Hashomer, Israel, 1990 to present
- Founder and co-president of the International Glaucoma Symposia (IGS), 1991 to 2008





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5 QUESTIONS

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well as procedures involving Schlemm's canal (eg, canaloplasty, ab interno trabeculotomy, the iStent [not available in the United States; Glaukos Corp., Laguna Hills, CA]) or establishing communication between the anterior chamber and the supraciliary space (eg, Solx Gold Shunt [not available in the United States; Solx, Inc., Waltham, MA]).

What do you do when not at work?

Like most of my colleagues, I am extremely busy all week managing a glaucoma center, seeing patients, performing surgery, maintaining a private practice, conducting research, teaching, and organizing educational events. Despite my hectic schedule, I regularly pursue my hobbies, although maintaining this commitment is not easy.



Figure 1. In a self-portrait painted in April 2009, Dr. Melamed drinks wine in a special cellar located in Tel Aviv.

Every Sunday evening, I paint in a studio. Depending on the time available, I do some painting at home, too. I prefer large canvases and acrylic paint (Figure 1). I focus on scenes I construct, based on photographs taken with my camera. I studied art, especially color painting, about 20 years ago—both in Israel and at the Museum of Fine Arts in Boston. I came back to doing large paintings in the last few years. Although it is sometimes difficult, I never miss a session, and I feel very content that I can squeeze painting into my busy schedule.

I also raise Turacos—rare and wonderful birds—and Japanese Koi fish in my garden. The birds fly freely in a rather large aviarium. They benefit from warm weather, a lot of tender loving care, and a diet of fruit salad and special food containing additional necessary nutrients. The Turacos are a family of African jungle birds that are about 40 to 50 cm in size with fantastically colored plumage. Depending on the species, they can be green and blue with red wings and yellow beaks.

 Kurtz S, Goldenfeld M, Melamed S. Early detection of glaucoma by a mobile unit—results from 10,000 examinees [in Hebrew]. Harefuah. 2000;138(4):273-276, 342.