Public health

USVI screenings find undiagnosed glaucoma

Outreach program aims to help identify those at risk or with glaucoma, raise awareness

By Beth Thomas Hertz

A glaucoma specialist from Omaha, NE, who travels the world to help underserved patients, recently applied glaucoma-screening efforts developed in the Midwestern United States to help residents of the U.S. Virgin Islands (USVI).

About one-third of the approximately 2,500 USVI residents who have been screened so far have glaucoma, said Sade Kosoko-Lasaki, MD, MSPH, MBA, associate vice president of health sciences, professor of surgery (ophthalmology), and professor of preventive medicine and public health at Creighton University in Omaha.

With a multiethnic population of 150,000 people, the USVI was chosen for this screening program in part because of support from Rep. Donna M. Christensen, MD (D-USVI) and the Friends of the Congressional Glaucoma Caucus Foundation. Also, glaucoma has been documented to occur in higher rates in black people in St. Lucia, the West Indies, and Barbados than blacks in the mainland United States.

“Because of this past research, we expected to find a lot of glaucoma blindness and undiagnosed glaucoma in the U.S. Virgin Islands,” Dr. Kosoko-Lasaki said.

Since 1985, as a preventative ophthalmologist, she has conducted epidemiological research on glaucoma and vitamin A deficiency in St. Lucia, the Philippines, and the Sahel area of Africa. In addition, she has organized screening programs in the Dominican Republic and Africa, as well as Asia and the Far East. Dr. Kosoko-Lasaki decided to take on the USVI as the next challenge for her team of ophthalmologists and technicians.

They traveled to the island chain three times from 2009 to 2011. Screening sites were set up at central locations in St. Croix, St. John, and St. Thomas. All subjects completed screening forms provided by the Friends of the Congressional Glaucoma Caucus Foundation.

Each subject underwent a screening eye exam that included best-corrected visual acuity and IOP measurements. A subset of patients had weight, height, and body mass indices determined. Assessment of visual field was performed with frequency-doubling technology. Dilated fundus exam was done as needed.

Identifying a need

Patients were grouped into four categories: refractive error, suspected glaucoma, suspected cataract, and other ocular disease. Recommendations then were made: urgent glaucoma consultation, non-urgent glaucoma consultation, ophthalmic consultation, or routine follow-up exam.

Starting with the first trip in 2009, the team worked closely with local ophthalmologists, particularly Alfred L. Anduze, MD. Dr. Anduze was the key liaison and he identified a full-time glaucoma screening coordinator and a part-time glaucoma assistant coordinator, who made contact with health-care clinics and/or local organizations to arrange the screenings.

“We always work with in-country ophthalmologists to ensure patients will have access to follow-up care after we leave, and to continue the screening processes,” Dr. Kosoko-Lasaki said.

Publicity for the screening was generated by congresswoman Christensen’s office and the Ministry of Health in the Virgin Islands. Also,

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announcements were made in local churches and businesses, encouraging people to participate and raising glaucoma awareness overall for the population.

Patients found to have abnormal results were asked to follow up with local ophthalmologists or their personal eye-care provider. Each was given a copy of the eye exam results to give that provider. Participants without insurance were issued a coupon to help cover future diagnostic tests and care. Advice on applying for Medicaid or Medicare, or receiving free care in other venues, was provided as appropriate.

Dr. Kosoko-Lasaki returned to the islands in spring 2010, to examine patients with difficult cases of glaucoma and perform surgery. Follow-up care was provided by Dr. Anduze. In summer 2011, Dr. Kosoko-Lasaki and her team also visited St. Croix and examined about 100 participants over 3 days. Referrals and follow-up exams were again done by Dr. Anduze.

Overall, 126 uninsured individuals (among a total of 2,281 screened) were seen for complete eye exams and glaucoma evaluations at different clinics (primarily seen by Dr. Anduze) from October 2009 to July 2011. Of these, 67 patients tested positive for glaucoma. Of the 67 with early glaucoma diagnosed, 12 without insurance had follow-up visits.

The project’s long-term goal is to expand the glaucoma screening and awareness efforts to reach all corners of the U.S. Virgin Islands. (Photos courtesy of Sade Kosoko-Lasaki, MD, MSPH, MBA)

Interested in public health work?

Sade Kosoko-Lasaki, MD, MSPH, MBA, has traveled around the world to help identify and treat patients with glaucoma. Having a part-time clinical practice in the United States helps her find time to make these trips, but sometimes she uses vacation to make it happen. Even when that happens, though, she knows it is worth it. She also has a full-time administrative and preventative and public health practice.

“It is very gratifying to do this work,” she said. “Leaving the comforts of the United States and adapting to life is a great experience.”

One cultural difference she frequently encounters is that patients see her as a physician, not an eye expert, and they often want to discuss other problems with her, such as their high blood pressure. She always tries to refer them to the right local resources to get help.

“You can’t just treat eye signs,” Dr. Kosoko-Lasaki said. “Some of them have walked miles to get there and we need to help them in any way we can, so we need to be open to listening to them and trying to help.”

This is one of reasons it is so important for outreach programs to partner with local caregivers. Ophthalmologists who want to get involved in international public health work can start by signing up to help an existing project and then later develop their own initiatives based on what they have learned, she suggested.

“Don’t reinvent the wheel, at least not at first,” Dr. Kosoko-Lasaki said.

Ideally, it would not require patients to travel between the islands, which can be challenging because this requires the use of ferries.

“There really is more poverty there than you would think,” she said. “People forget that the native residents live in villages, not at the beach resorts, and they need help.”

Although the USVI sounds like a glamorous destination, the team’s work there was no vacation, she added.

“There are rough roads and it is rough traveling,” she said. “It is not as fun as it sounds, but it is very gratifying.”

The USVI project was patterned after a screening program for open-angle glaucoma in Iowa, Kansas, Nebraska, and South Dakota at outreach programs from 2004 to 2010 that was staffed by certified Creighton University Glaucoma Outreach Initiative members under the direction of Dr. Kosoko-Lasaki. This program, also supported by the Friends of the Congressional Glaucoma Caucus Foundation, goes into neighborhoods where glaucoma affects people at higher-than-normal rates, including African-Americans, Hispanics, and uninsured people.

Over the years, it has resulted in 10.2% of patients being identified with suspected glaucoma in the right eye and another 10.2% in the left eye. Urgent glaucoma consultations were advised for 11.3% of patients; 4.9% were recommended to have non-urgent consultations.