

New software transforms HRT into diabetic retinopathy tool

The software upgrade allows ophthalmologists to diagnose and monitor diabetic retinopathy as well as glaucoma.

by Katrina Altersitz

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The Heidelberg Retina Tomograph, typically used as a tool for diagnosing and following glaucoma patients, can now be used for diabetic retinopathy, with a recent software upgrade, according to one user.

Mark Fromer, MD, spoke to OCULAR SURGERY NEWS about his experience with the HRT, from Heidelberg Engineering, and how the new software can be used for managing patients with diabetic retinal disease.

The basic technology was introduced about 2 years ago, with grayscale edema indexes that look much like fluorescein angiograms. The new software makes it more convenient to read and interpret retinal thickness, he said.

"The new software allows the physician to evaluate the thickness of the retina in microns," Dr. Fromer said.

Easy to read

Many general ophthalmologists do not have access to fluorescein angiography or optical coherence tomography (OCT) in their offices. This software addition allows them to measure retinal thickness if they have an HRT that they are using for glaucoma in their general practice, Dr. Fromer said.

"This tool allows them to look at retinal thickness in an uncomplicated manner," Dr. Fromer said. "Now they've taken the edema index and they've quantified it in microns. This is done with an image that looks very much like topography."

In the image, thickness is correlated with colors, for example, red signifies a thickned retina. The topography, based on thickness measurements, gives the doctor a graphic representation of the patient's retina. This can be useful in following diabetic macular edema.

"Learning how to interpret this is very simple," Dr. Fromer said. "I generally can explain how to interpret the thickness measurements in a brief lecture."

That simplicity translates into both easy technician training and patient education.

"It's very helpful to be able to show patients where their retinal problem lies with an image," Dr. Fromer said. "The initial edema index applications also can give the general ophthalmologist a lot of information for patients with diabetic macular edema, venous occlusive disease, cystoid macular edema, macular holes and central serous retinopathy."

Tracking patients

The diabetic retinopathy tool of HRT can also be used to track patients over time as they undergo treatment.

"It gives the physician a way to track progression of disease over time. This is useful when evaluating treatment options and determining if a particular treatment plan has been useful," Dr. Fromer explained.

This tracking system can be used to show the patient the progress of their retinal treatment and also as a gauge for referral to a retinal specialist.

"I think this is another tool in the armamentarium of doctors that allows them to explain to their patient where their disease process lies and if they're getting better, worse or the same," he said.

Dr. Fromer suggested that this tool is best utilized by general ophthalmologists who do not have access to fluorescein angiography or OCT

"It's an easy software add-on for the ophthalmologist," he said. "The software can provide the general ophthalmologist with another method to check for macular edema."

Added benefits

The software addition is a cost-efficient method of allowing general ophthalmologists to work with diabetic retinopathy patients.

"Many general ophthalmologists who currently have the HRT in their office for glaucoma evaluation can add the additional software for retinal evaluation as well without purchasing a new piece of equipment," Dr. Fromer said.

Dr. Fromer said the test is reimbursed by insurance.

For more information:

Mark Fromer, MD, can be reached at 550 Park Ave., New York, NY 10021; 212-832-9228; fax: 212-751-9482; e-mail: mfromer@fromereye.com. OCULAR SURGERY NEWS could not confirm whether Dr. Fromer has a direct financial interest in the product mentioned or if he is a consultant for any companies mentioned.

Heidelberg Engineering, maker of the **HRT**, can be reached at 1499 Poinsettia Ave., Suite 160, Vista, CA 92081; 760-598-3770; fax: 760-598-3060; www.heidelbergengineering.de.

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