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SPOTLIGHT ON TECHNOLOGY & TECHNIQUE

Control IOP without incisions

Iridex Cyclo G6 Glaucoma Laser System uses MicroPulse technology for safe treatment and quick recovery.

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More than 2.2 million Americans have glaucoma, which is also the second leading cause of blindness globally, according to the Glaucoma Research Foundation.

The new Iridex Cyclo G6 Glaucoma Laser System helps slow glaucoma progression and delays the potential need for surgical intervention.[1]

MICROPULSE TECHNOLOGY

The Cyclo G6 Glaucoma Laser System features an infrared wavelength laser used to control intraocular pressure (IOP), says Robert Noecker, MD, of Ophthalmic Consultants of Connecticut. "This is a transscleral treatment where we're targeting the ciliary processes on the inside of the eye," he says. "The system's probe is placed directly on the sclera."

The laser system with the MP3 device uses a proprietary MicroPulse technology for laser delivery. MicroPulse applies the laser for a half millisecond, followed by 1.1 milliseconds of rest, and cycles that thousands of times over a 50-second treatment, says Nathan Radcliffe, MD, cataract and glaucoma surgeon at the New York Eye Surgery Center. Dr. Radcliffe says this approach is different from traditional transscleral photocoagulation, which uses a continuous laser application. Because the MicroPulse energy is applied slowly and at a low level, Dr. Noecker finds it can be a viable first course of treatment. Due to the MicroPulse technology, other glaucoma treatment methods are still available to the physician, including repeating the MicroPulse P3 procedure as

necessary.

"We typically find that after the first treatment, we can always go back and do the exact same procedure for a little longer period of time or a little higher energy setting."

SAFETY

Dr. Radcliffe says the MP3 device is safe for patients because it does not destroy the eye's ciliary body or cause inflammation. "[This] allows the tissue to be treated, but without causing all this collateral thermal accumulation of damage."

Also, because the surgeon does not need to make an incision for the laser to reach the sclera, the risks of bleeding and infection are eliminated, Dr. Radcliffe says. Plus, the treatment does not alter the anatomy of the eye, so the post-op recovery period is shortened and does not require immediate follow-up.

"[With] almost every incisional surgery the patient needs to be seen around one day after the procedure and frequently thereafter," he explains. "With this procedure, we aren't changing the eye's anatomy and we aren't worried about infection, so we could see them two weeks later or the next day depending on what works for the patient and the doctor."

RESULTS

In a Wills Eye Hospital study, mean pre-op patient medications decreased from 2.54 to 1.77 after treatment.[2] Also, Dr. Radcliffe reports a 30% decrease in IOP in patients treated with the MP3 device. "Patients have less inflammation in the postoperative period, their vision recovers very rapidly, and we're getting very good pressure responses," he says.

In addition, Dr. Radcliffe says the MP3 device, because of its proven safety, is a treatment option for a wide range of patients, from those who do not want incisional surgery to emergency cases that can be treated in the office.

"As we accumulate more experience with this device, I think it's going to be moving earlier and earlier [forward] in the treatment paradigm, and it makes sense for a lot of patients."

Dr. Noecker says the MP3 device will make surgeons reconsider their glaucoma surgical therapy because it gives a gentle, low-risk option to control IOP. "This makes us rethink our treatment algorithms in terms of interventions for our glaucoma patients, which is a good thing." **OM**

REFERENCES

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