CORRESPONDENCE

The Medical and Surgical Treatment of Glaucoma

by Prof. Dr. med. Thomas S. Dietlein, Dr. med. Manuel M. Hermann,
PD Dr. med. Jens F. Jordan in volume 37/2009

Controlled Cyclophotocoagulation

The description of cyclophotocoagulation does not mention controlled cyclophotocoagulation, which—in contrast to conventional cyclophotocoagulation—does not have side effects. The mechanism of action is the real-time dosing control of each individual effect, so that overdosing or underdosing, and especially “pop” effects, can be mostly avoided. The procedure not only reduces the production of aqueous humor in the anterior chamber but also improves the uveoscleral outflow. Controlled cyclophotocoagulation achieves a good pressure lowering effect, has a low complication profile, and is simple to perform; facts that are borne out not only by our own clinical experience. It is a non-invasive procedure, and almost no reports of pain have been recorded.

The procedure was developed by Professor Preußner of the eye hospital at the University Medical Center of the Johannes Gutenberg University Mainz.

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In Reply:

The correspondence confirms what we said our article: “There is wide disagreement among surgical ophthalmologists as to the value of this treatment.”

For this reason, the American Academy of Ophthalmology has set up a working group that is tasked with

defining the indications for laser cyclophotocoagulation in detail (1).

Laser cyclophotocoagulation is recommended, for example, after failed filtration surgery or glaucoma implant surgery, when no visual function exists, and when intraocular pressure needs to be lowered—for example, because of pain—as well as in patients who refuse to have other procedures (for example, filtration surgery or glaucoma implants) or who are not eligible for such procedures because of other reasons (such as their general condition).

The US working group explicitly mentions the lack of evidence provided by the published data, which makes a comparison of individual modifications of laser cyclophotocoagulation difficult.

As things stand, this includes the modification of controlled cyclophotocoagulation mentioned by our correspondents.

Mr Preussner deserves much praise for having developed a tool—in the shape of a controlled laser system that is particularly adapted to patients with strongly pigmented skin—that can be used in the surgical treatment of glaucoma, especially by doctors in medically underprovided developing countries.

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Conflict of interest statement

The authors of both contributions declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.