## (II) MicroPulse Case Report <br> | | | | | | | First, do no harm

## Diabetic Macular Edema | IQ 532 ${ }^{\text {TM }}$



Physician: David Gossage, DO | East Lansing, MI
Patient: 28-year-old male with type 1 diabetes, previously treated with argon focal/grid laser in February 2006 and July 2008. In December 2011, the patient was treated with 532 nm MicroPulse ( $100-\mu \mathrm{m}$ spot, 80 mW power, 200 -ms duration and a $5 \%$ duty cycle and delivered 111 shots) with just a $9 \mu \mathrm{~m}$ reduction in macular thickness at 3 months follow-up. At that point, I retreated with MicroPulse using a higher power.

## MicroPulse Treatment Parameters

Laser | Wavelength: IQ 532 | 532 nm
Spot Size on SLA: $100 \mu \mathrm{~m}$
Contact Lens: Mainster Focal Grid
Power: 200 mW*
Duration: 200 ms
Duty Cycle: 5\%
Evidence of Laser Treatment on FA: None
Physician Technique: It is possible to treat with a higher power without thermal spread. I now treat my patients more heavily (high-density applications), using the same paintbrush technique back and forth but followed by an up-and-down motion, essentially creating a grid over the area I want to treat. Thus, not only am I using a much higher power, I am also applying the laser twice, and am seeing excellent results in patients with type 1 and type 2 diabetes, still without seeing any thermal damage.
*The power used for MicroPulse treatment was based on doubling the power determined from a pre-treatment test spot performed in CW mode in a non-edematous area of the retina.
Start at 50 mW and titrate power up by increments of 10 mW (moving to new locations) until a barely visible burn is achieved.

Treatment techniques and opinions presented in this case report are those of the author. IRIDEX assumes no responsibility for patient treatment or outcome.

