

## P245

**OUTCOMES OF MICROPULSE TRANSSCLERAL CYCLOPHOTOCOAGULATION IN PATIENTS WITH GLAUCOMA - A CASE SERIES**

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**Purpose:** The purpose of the study was to evaluate the efficacy and safety of micropulse transscleral cyclophotocoagulation for the treatment of glaucoma.

**Methods:** Patients with moderate to advanced glaucoma and uncontrolled intraocular pressure despite maximally tolerable antiglaucoma medications were selected to the study. We included 8 patients with various glaucoma subtypes. All of them underwent micropulse transscleral cyclophotocoagulation in September 2019. All procedures were performed by the same surgeon. Patients were treated with the Micropulse P3 device powered by the CYCLO G6 (Iridex, Mountain View, CA, USA) at 2000 mW for a duration of 90 seconds per hemisphere. After the procedure we assessed the post-operative intraocular pressure, the number of adverse events and complications that occurred with treatment and the number of antiglaucoma medications.

**Results:** We present the early outcomes of micropulse transscleral cyclophotocoagulation. The mean reduction in intraocular pressure was from  $30.5 \pm 5.2$  to  $21.5 \pm 5.9$  and  $24.6 \pm 9.2$  mmHg respectively 2 and 4 weeks after surgery. No decrease in BCVA and amount of anti-glaucoma topical medications was observed. No complications were reported. One of the patients a one month after the surgery was qualified for another antiglaucoma surgery due to high intraocular pressure. The rate of inflammation seems to be lower with the micropulse mode, making it a safer alternative for cyclophotocoagulation. But we have to notice that retreatments are often needed, because of the mild intraocular pressure decrease.

**Conclusions:** Micropulse transscleral cyclophotocoagulation appears to be a safe and effective treatment for glaucoma, although further studies are required to assess the long-term effect and late postoperative complication rate.