

PubMed

Display Settings: Abstract

Full text links



J AAPOS. 2009 Dec;13(6):535-8. doi: 10.1016/j.jaaapos.2009.09.018.

## Transscleral diode laser retinal photocoagulation for the treatment of threshold retinopathy of prematurity.

Parvaresh MM<sup>1</sup>, Modarres M, Falavarjani KG, Sadeghi K, Hammami P.

### Author information

#### Abstract

**PURPOSE:** To evaluate the outcomes of transscleral diode laser photocoagulation for treatment of threshold retinopathy of prematurity (ROP).

**METHODS:** Retrospective interventional case series of infants with ROP treated at our center with transscleral diode laser retinal photocoagulation. All patients were followed for 2 months, and regression of ROP, unfavorable outcomes, and incidence of adverse effects were assessed.

**RESULTS:** A total of 103 eyes of 52 infants with ROP at the threshold stage were treated with transscleral diode laser photocoagulation under topical anesthesia, without conjunctival incision. Supplemental transpupillary diode laser photocoagulation was used for posterior zone 2 and zone 1 in 5 eyes. In 99 eyes (96.1%) neovascularization regressed completely; in 96 eyes (93.2%) the outcome was favorable. In the other 3 eyes, macular dragging formed after regression of neovascularization. Four eyes progressed to more advanced stages of ROP. Repeated laser therapy was performed with the same technique in 10 eyes (9.6%). There was no statistically significant association of unfavorable outcomes with age, birth weight, gestational age, clocks of retinal involvement, and rush disease. No adverse effects of diode laser treatment were observed except for mild injection and edema of conjunctiva in all patients, small conjunctival lacerations in 10 eyes, and small self-limited vitreous hemorrhage in 2 eyes.

**CONCLUSIONS:** Transscleral laser treatment may be technically easier for the treatment of retinal periphery, especially in poorly dilating pupils, and obviates the occasional anterior segment complications of the transpupillary approach. This technique can be performed under topical anesthesia.

PMID: 20006811 [PubMed - indexed for MEDLINE]



### MeSH Terms

### LinkOut - more resources

### PubMed Commons

[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)