

## ***A new method to treat NVG: Cyclophotocoagulation by sclera depress with non-contact wide angle surgical system (with operation video)***

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### ***Abstract***

The treatment of neovascular glaucoma aims at controlling IOP, saving vision and enhancing visual function. PDR and RVO are main reasons of NVG. Endoscope treatment introduces seriously intraoperative injury. Comparing with traditional and endoscope treatment, vitrectomy (23G/25G) with cyclophotocoagulation by sclera depress using non-contact wide angle surgical system to cure NVG can significantly reduce intraoperative injuries, meanwhile this method shows widespread availability.

This study includes 36 eyes from 27 NVG patients. 10 eyes of these cases were RVO and 26 eyes were PDR. All cases were treated NVG with vitrectomy (23/25G) and cyclophotocoagulation by sclera depress with non-contact wide angle surgical system. BCVA in logMar, IOP and anterior segment neovascularization were evaluated. At postoperative 1 and 3 months, BCVA was improved from  $0.04 \pm 0.126$  to  $0.18 \pm 0.231$  and  $0.18 \pm 0.412$ ; IOP was declined from  $69.28 \pm 22.53$  mmHg to  $15.79 \pm 1.38$  and  $23.21 \pm 3.94$ , respectively. At postoperative one-month, 95% patients can control the IOP well and anterior segment neovascularization of all cases subsided.

Cyclophotocoagulation by sclera depress with non-contact wide angle surgical system is a safety and practical method to treat NVG.

Equipment, editorial board member of Chinese Journal of Ophthalmology. I have a special interest in clinical research of Retina & Vitreous. I had been an academic visitor in Moorfields Eye Hospital in London at 2019. I have authored 19 research papers in reputed journals.

### ***Speaker Publications:***

1. The research on VEGF imaging and quantitative analysis of diabetic retinopathy. (National Natural Science Foundation of China, in research)
2. Study on the design and effectiveness evaluation of novel humor drainage device. (Capital Medical University, 2012/01-2013/12)
3. Development of digital image analysis and diagnosis system for non-proliferative diabetic retinopathy. (Capital Medical University, 2011-2013)
4. The experimental study of retinal adhesives with fibrin glue. (Capital Foundation of Medical Developments, 2002-2005)
5. Retinal progenitor cells transplantation in combination with mesenchymal stem cells intervening to signaling pathways on diabetic retinopathy.

[3<sup>rd</sup> World Eye and Vision Congress](#); Webinar- December 17, 2020.

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### ***Biography:***

Tian Bei is a consultant ophthalmologist in Beijing Tongren Eye Center, clinical assistant professor in Capital medical University, standing committee member of Chinese aging well association, member of Academic Group of Diabetic Eye Diseases of Chinese Research Hospital Association, member of Ophthalmologic Society of China Association of Medical