# Comparison of Combined and Consecutive Surgery for Patients with Proliferative Diabetic Retinopathy and Severe Cataract

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# Abstract

Objective: To investigate the safety, effectiveness and differences of combined and consecutive surgical strategies on patients with proliferative diabetic retinopathy (PDR) and severe cataract. Methods: Eighty-four cases (84 eyes) with PDR complications of vitreous hemorrhage (VH) and/or tractional retinal detachment (TRD) and severe cataract were enrolled in this retrospective analysis. Thirty-nine eyes in consecutive surgery group underwent the surgery of phacoemulsification (PHACO) and intraocular lens (IOL) implantation firstly, and then received the surgery of vitrectomy, panretinal photocoagulation (PRP) and retinopexy (when necessary) two to twenty-five days later. Forty-five eyes in combined surgery group underwent the combined surgery of PHACO, IOL implantation, vitrectomy, PRP and retinopexy (when necessary). The postoperative best corrected visual acuity (BCVA), intraocular pressure (IOP), anterior segment inflammation responses, and surgical complications were chosen as outcome measurements when the two groups were compared. Results: The demographic data of the patients before surgery had no significant difference between the two groups. There was no statistically significant difference on BCVA at postoperative week 6 between two groups (P>0.05). Postoperative inflammation of the anterior segment in combined surgery group was much more serious than that in consecutive surgery group. 91.1% patients (41 eyes) developed moderate or serious inflammation in combined surgery group at postoperative day 3 compared with 46.2% patients (18 eyes) in consecutive surgery group. In addition, there were still 71.1% patients (32 eyes) with mild or moderate inflammation in combined surgery group at postoperative week 6 compared with 28.2% patients (11 eyes) in consecutive surgery group. The IOP elevated in 20 eyes (44.4%) in combined surgery group and seven eyes (17.9%) in consecutive surgery group. The presence of posterior synechia was found in 10 eyes (22.2%) in combined group and one eye (2.6%) in consecutive group 6 weeks after surgery. Conclusion: Although both surgery strategies for PDR patients with severe cataract are safe and effective, combined surgery leads to more postoperative complications than consecutive surgery, which should be carefully monitored and properly treated. For PDR patients with severe cataract which perturbs the vitrectomy and PRP, the consecutive surgery is a priority for surgery choice if the patient's condition allows.


# Background

Vitrectomy and photocoagulation have been widely used for proliferative diabetic retinopathy (PDR) complications, such as vitreous hemorrhage and tractional retinal detachment (TRD), for several decades. Many diabetic patients also have different degrees of coexisting cataract before vitrectomy. In addition, cataract formation is the most common complication of vitrectomy, which is reported in 75%–95% of cases within two years of surgery[1]. So, the combined cataract extraction and vitrectomy has long been described as a valid treatment for such vitreoretinal disorders ADDIN EN.CITE [2] .

Combined surgery of vitrectomy and phacoemulsification (PHACO) eliminates the inconvenience of a second surgery and shortens the mean recovery time[3]. However, whether to remove the crystalline lens during vitrectomy of PDR patients is controversial. Many surgeons attempted to spare the crystalline lens due to an increased incidence of postoperative anterior-segment neovascularization and observations that the crystalline lens provided a barrier that had protective effects on the anterior segment and retina[4].

The purpose of this research was to provide thorough instruction information for the surgery strategies on patients with PDR and severe cataract through comparing the key outcome measurements and complications

between the combined and consecutive surgery.

# Methods

### Patients included

The medical records of patients of PDR were retrospectively analyzed from December 2007 to July 2016 in our hospital. A total of eighty-four cases (84 eyes) were involved, including forty-six male cases (46 eyes) and thirty-eight female cases (38 eyes). The age range of the patients was forty-seven to seventy-nine years (mean, 68.26±7.14 years).

The inclusion criteria were diabetes mellitus (DM) patients with complications of VH and/or TRD with severe cataract which influenced the observation and surgery on posterior segment of eyeball. Patients included were all with good light perception (LP). Patients with retinal photocoagulation history, neovascularization of iris, glaucoma, uveitis, corneal diseases, a history of trauma or other surgery on eyeball were excluded. All patients did not receive intravitreal injection of anti-VEGF drugs or glucocorticoid.

### Procedure

Patients were divided into two groups: the combined surgery group: forty-five eyes underwent combined surgeries of PHACO, vitrectomy, retinal photocoagulation and IOL implantation; the consecutive surgery group: thirty-nine eyes underwent surgeries of PHACO and IOL implantation firstly, and surgeries of vitrectomy and retinal photocoagulation were performed 2 to 25 days later. The mean time interval between two surgeries was 5.26±3.90 days on average in consecutive surgery group.

All surgeries were performed by the first three authors of this article. The incision of PHACO was about 3 mm long on the superior limbus. After continuous circular capsulorhexis (CCC) with diameter of 5.5 mm to 6 mm and bimanual PHACO, hydrophobic acrylic ester foldable IOLs were implanted in the capsular bag. The procedure of posterior segment operation included posterior vitreous detachment (PVD), vitrectomy, proliferative membrane peeling and excision, and PRP with more than 1000 laser spots. Photocoagulation around retina break was performed to treat iatrogenic retinal breaks.10% to 20% C3F8 or silicon oil were used as a vitreous cavity filler in some patients. In case of combined surgery group, IOLs were implanted right after the completion of vitrectomy and PRP. Compound tropicamide guttae ophthalmicae and Tobradex had been used for 2 weeks after surgeries in both groups.

### Data processing

Patients after surgery were all followed up for six weeks at least. Removal of silicone oil was arranged at three to six months after surgery according to the recovery of the patients. The BCVA, IOP, anterior segment inflammation responses were compared between two groups at postoperative day 3, week 2 or week 6 separately. The score criteria of postoperative inflammation response of anterior segment were shown in table 1. The postoperative anterior segment inflammation was graded as no response (total score 0), mild (total score 1-6), moderate (total score 7-12) and severe (total score 13-18) based on clinical features, including the corneal edema and Descemet's membrane striae, aqueous flare, iris synechiae and exudation in anterior chamber and pupil area.

Table 1. The score criteria of postoperative inflammation response of anterior segment

| Corneal edema area/total corneal area (%) | |
|---|---|
| Score | Scoring criteria |
| 0 | 0 |
| 1 | ≤33.33% |
| 2 | 33.33%-66.67% |
| 3 | ≥66.67% |
| Descemet's membrane striae area/total corneal area（%） | |
| Score | Scoring criteria |
| 0 | 0 |
| 1 | ≤33.33% |
| 2 | 33.33%-66.67% |
| 3 | ≥66.67% |
| Aqueous flare | |
| Score | Scoring criteria |
| 0 | None |
| 1 | Mild |
| 2 | Moderate（the details of iris and lens can be recognized） |
| 3 | Severe（the details of iris and lens can hardly be recognized） |
| Iris synechiae | |
| Score | Scoring criteria |
| 0 | None |
| 1 | Several punctate iris synechiae |
| 2 | Continuous iris synechiae, the cumulative synechiae is less than 45 degrees |
| 3 | Continuous iris synechiae, the cumulative synechiae is more than 45 degrees |
| Exudation in anterior chamber | |
| Score | Scoring criteria |
| 0 | None |
| 1 | A small amount of flocculent exudation |
| 2 | Large amount of flocculent exudation or filamentous exudation |

| | |
|---|---|
| 3 | Membranous exudation |
| Exudation in pupil area | |
| Score | Scoring criteria |
| 0 | None |
| 1 | A small amount of flocculent exudation |
| 2 | Large amount of flocculent exudation or filamentous exudation |
| 3 | Membranous exudation |

The postoperative BCVA, IOP, anterior segment inflammation responses, and surgical complications were compared between two groups. Statistical analyses were performed using SPSS 17.0. Chi-square test and Fisher exact test were used to compare the data between two groups. A p-value of < 0.05 was considered to be statistically significant.

# Results

### Patient demographic data

Table 2. Patients demographics and preoperative data

| | Consecutive surgery group (n=39) | Combined surgery group (n=45) | p value |
|---|---|---|---|
| Age, years | | | |
| Mean ± SD | 69.05±6.08 | 67.58±7.94 | 0.3484 |
| Gender | | | |
| Male, n (%) | 21(53.85%) | 25(55.56%) | 0.8753 |
| Female, n (%) | 18(46.15%) | 20(44.44%) | |
| Symptom duration, days | | | |
| Mean ± SD | 90.38±36.98 | 86.33±32.00 | 0.5918 |
| DM history, years | | | |
| Mean ± SD | 13.15±5.77 | 12.69±6.18 | 0.7239 |
| IOP preoperative, mmHg | | | |
| Mean ± SD | 15.79±3.04 | 16.73±2.86 | 0.1513 |

The age, gender, symptom duration, diabetes history, IOP or BCVA of the patients before surgery had no significant difference between the two groups. To prevent recurrent retinal detachments, C3F8 or silicone oil was used to fill the vitreous cavity in some of the patients. In combined surgery group, vitreous cavity was filled with C3F8 in 10 eyes and with silicone oil in 15 eyes. In consecutive surgery group, vitreous cavity was filled with

C3F8 in 8 eyes and with silicone oil in 11 eyes. There were no statistical differences between two groups in percentage on C3F8 (χ2=0.0363, P=0.8490) and silicone oil (χ2=0.2571, P=0.6121) filling.

### The BCVA

Table 3. The preoperative and 6-week postoperative BCVA in two groups

| | Preoperative BCVA | | | 6-wk postoperative BCVA | | |
|---|---|---|---|---|---|---|
| | ≥0.02 | 0.02-0.3 | ≤0.3 | ≥0.02 | 0.02-0.3 | ≤0.3 |
| Consecutive group | 28 | 8 | 3 | 12 | 19 | 8 |
| Combined group | 33 | 10 | 2 | 18 | 17 | 10 |
| χ2 | 0.0249 | 0.0363 | 0.0273 | 0.7754 | 1.0211 | 0.0363 |
| p value | 0.8747 | 0.849 | 0.8689 | 0.3786 | 0.3123 | 0.849 |

Table 4. The changes of 6-week postoperative BCVA compared to the preoperative BCVA

| | patients with improved BCVA | patients with no BCVA change | patients with decreased BCVA |
|---|---|---|---|
| Consecutive group | 22 | 8 | 9 |
| Combined group | 20 | 12 | 13 |
| χ2 | 1.1966 | 0.4362 | 0.3651 |
| P value | 0.274 | 0.509 | 0.5457 |

As shown in table 4, The 6-week postoperative BCVA was improved in 22 eyes in consecutive surgery group and 20 eyes in combined surgery group. We found no statistical difference between the two groups in BCVA improvement (P>0.05).

### Postoperative inflammatory response in anterior segment

Table 5. The postoperative inflammation response in anterior segment in two groups

| Inflammatory grades | Postoperative day 3 | | | Postoperative week 2 | | |
|---|---|---|---|---|---|---|
| | Consecutive group | Combined group | P value | Consecutive group | Combined group | P value |
| No response | 4 | 0 | P=0.0426 （P＜0.05） | 28 | 10 | χ2=20.7252 (P= 0.0000) |
| Mild | 17 | 4 | χ2=11.6308 (P=0.0006) | 8 | 20 | χ2=5.3846 (P=0.0203) |
| Moderate | 15 | 29 | χ2=5.6548 (P=0.0174) | 3 | 12 | χ2=3.916 (P=0.0478) |
| Severe | 3 | 12 | χ2=3.916 (P=0.0478) | 0 | 3 | P=0.2448 (P＞0.05) |

We observed that more eyes had inflammatory responses at postoperative day 3 or week 2 in combined surgery group than in consecutive surgery group. 91.1% patients (41 eyes) developed moderate or serious inflammation in combined surgery group at postoperative day 3 compared with 46.2% patients (18 eyes) in consecutive surgery group. In addition, there are still 71.1% patients (32 eyes) with mild or moderate inflammation in combined surgery group at postoperative week 6 compared with 28.2% patients (11 eyes) in consecutive surgery group ($P<0.05$).

### Postoperative IOP

Table 6. The number of eyes with elevated IOP (25 mmHg or higher) after surgery in two groups

| Postoperative | day 3 | week 2 | week 6 |
|---|---|---|---|
| Consecutive group | 7 | 4 | 2 |
| Combination group | 20 | 14 | 9 |
| χ2 | 6.7246 | 4.2299 | 2.8597 |
| P value | 0.0095 | 0.0397 | 0.0909 |

The IOP increased in 20 eyes (44.4%) in combined surgery group and 7 eyes (17.9%) in consecutive surgery group 3 days after surgery. Significantly higher occurrence of elevated IOP at postoperative day 3 and week 2 were observed in combined surgery group than in consecutive surgery group ($P < 0.05$). The postoperative IOP at week 6 between two groups had no statistical significance ($P > 0.05$).

### Other intraoperative and postoperative complications

No severe complications, such as infective endophthalmitis or explosive suprachoroidal hemorrhage, occurred in all eyes. IOL were implanted into lens capsule bag and there was no tear of lens capsule bag in all surgeries. We also noted that IOL dislocated out of the capsular bag in four eyes in the consecutive surgery group during the vitrectomy due to the pressing around the base vitreous, and no serious consequences occurred after IOL was

returned. In combined surgery group, three eyes filled with silicone oil had IOL clamping at postoperative week 6, which were corrected by silicone oil removing surgery.

Mydriasis in eight eyes in combined surgery group and six eyes in consecutive surgery group before PHACO were not efficient. In combined surgery group, seventeen eyes had pupil constriction after PHACO and mydriasis drugs (10 eyes) and iris retractor (7 eyes) were used to enlarge the pupil in order to perform vitrectomy. Furthermore, ten eyes had different extents of posterior synechia at postoperative week 6, resulting in difficulty in dilating pupils when the retina needed to be checked postoperatively; As for consecutive surgery group, four eyes had pupil constriction before vitrectomy and iris retractor were used.

The presence of posterior synechia was found in 10 eyes (22.2%) in combined group and one eye (2.6%) in consecutive group 6 weeks after surgery. Our study showed that the probability of pupil synechia at postoperative week 6 was much higher in combined surgery group than that in consecutive surgery group ($\chi^2$=5.4723, P=0.0193,P<0.05).

# Discussion

The incidence of type 2 diabetes has dramatically increased over recent decades, and has become a leading public health challenge in China[5]. The prevalence of diabetic retinopathy (DR) and sight-threatening diabetic retinopathy (STDR) in diabetes patients was 27.9% and 12.6% respectively across China[6]. PDR is characterized by neovascularization on retina or optic disk, which lead to hemorrhage, edema, proliferation and TRD. PDR can invade to anterior segment to cause neovascular glaucoma (NVG). The risk of vision loss with PDR is significantly higher than non-proliferative diabetic retinopathy (NPDR).

In underdeveloped areas in north China, especially in rural areas, due to the incomplete healthcare system and lack of health knowledge, DR patients are reluctant to go to hospital until serious complications which interrupt their normal life appeared. So, patients included in our study are PDR patients with severe cataract who had severe vision loss, and never received any treatment before. Our study aimed to observe the outcome of different surgery strategies on such kind of patients. None of the patients included in our study received intravitreal injection of anti-VEGF drugs.

Our data showed that postoperative vision between consecutive surgery group and combined surgery group had no statistical difference, which is consistent with previous Treume's research data ADDIN EN.CITE [7] . Scharwey's study also showed that the vision prognosis and postoperative complications of patients were closely associated with the severity of vitreous retinopathy, and had nothing to do with the surgery strategy [8].

Our research revealed that moderate or severe inflammation responses in anterior segment occurred in much more patients in combined surgery group than in consecutive group at postoperative day 3. In addition, there are still much more patients with mild or moderate inflammation in combined group at postoperative week 6 than in consecutive group. The primary cause was the severe uveitis resulted from vitrectomy and PRP during PDR surgery which could be aggravated by longer time and more steps in combined surgery.

Reports showed that the probability of pupil synechia, pigment deposition and membrane formation on anterior surface of IOL were higher in cataract, vitrectomy and PRP combination surgery. In addition, severe cases could have postoperative iris neovascularization and neovascular glaucoma ADDIN EN.CITE [9-11] . Consistently, our

study also observed higher occurrence of the pupil synechia 6 weeks after surgery in combination group than in consecutive group, which is associated with anterior segment inflammation caused by the disruption of the blood-aqueous barrier and postoperative facing-down position[12].

It was reported that the incidence of elevated IOP in early stage after vitrectomy varied from 8.4% to 83.3% in patients ADDIN EN.CITE [13, 14] . There have different academic views about whether combination surgery would increase the risk of elevated IOP after vitreous surgery ADDIN EN.CITE [15] . Recent research showed that the IOP in the early postoperative period in both single vitrectomy and combined surgery were higher than the preoperative value, and greater IOP rise was observed in combined surgery, which suggested that cataract extraction was the only risk factor for IOP spike[16]. Consistently, our results showed that IOP elevation occurred in significantly more patients in combined surgery group 3 days or 2 weeks after surgery than in consecutive surgery group. The early IOP elevation after vitrectomy and cataract extraction are influenced by many factors, including individual status such as ages, gender, IOP, underlying myopia or DM, past surgery history, and surgical factors such as intraocular filling substance, photocoagulation, surgery strategy and surgery complications[17].

The mechanism of IOP elevation after vitrectomy includes inflammatory response, ciliary body edema, pupil block, intraocular hemorrhage, intraocular gas expanding, complications with silicone oil and glucocoticoid respond. Moreover, patients with PDR had always received retina photocoagulation during surgery, which influenced choroid venous return, aggravated ciliary swell and forward spin, leading to IOP elevation by pushing peripheral iris and closing anterior angel[18]. Therefore, IOP changes in patients after vitrectomy, especially after combined surgery, should be closely observed and preventive drugs to lower IOP should be used if necessary in order to avoid postoperative vision damage.

In our consecutive surgery group, IOL dislocated out of the capsular bag in foureyes in the vitrectomy due to the pressing around the base vitreous, and no serious consequences after IOL return. Therefore, in vitrectomy, pay attention to moderate pressing around the base vitreous and implant IOL with stronger supporting lens haptics, larger optical area in vitrectomy in order to avoid anterior segment complications occurring. In our combined surgery group, three eyes with silicone oil filled had IOL clamping at postoperative week 6 which had relationship with larger diameter circular capsulorhexis, apparent inflammation requiring mydriasis treatment and postoperative face-to-ground position. The IOL clamping problem in these eyes were solved when silicone oil was removed.

In conclusion, our study showed that there was no significant difference in BCVA between consecutive surgery group and combined surgery group and no severe complications, such as infective endophthalmitis or explosive suprachoroidal hemorrhage, occurred in all eyes. Both surgery strategies are safe and effective. However, the combined surgery group had more serious postoperative anterior chamber inflammation and a higher occurrence of early postoperative IOP elevation than the consecutive surgery group. Therefore, postoperative treatment of anti-inflammatory such as mydriatic and local glucocorticoid should be strengthened._Our study not only compared the difference outcome between two surgery strategies on terminal PDR patients but also provide detail instruction information for the choice of the surgery strategies. Our data suggested that, for PDR patients with severe cataract who had never accepted any treatment before, the consecutive surgery is a priority for surgery choice.

# Declarations

### Ethics approval and consent to participate

The study was approved by the Research Ethics Committee of the second affiliated hospital of Dalian medical university (Dalian, China). The data were analyzed anonymously. All participants were informed about possible complications and provided written informed consent prior to surgery.

### Availability of data and materials

Not applicable

### Authors' contributions

Fei Liu designed the study and did all data analysis of the project; Fei Liu, Yan Teng and Yan Shao performed all the surgeries in this study; Ximei Chen helped the statistical analysis; Miao Zhao and Tianwei Shi helped the editing of the manuscript.

### Competing interests

The authors declare that they have no competing interests.

## Abbreviations

PDR, proliferative diabetic retinopathy

VH, vitreous hemorrhage

TRD, tractional retinal detachment

PHACO, phacoemulsification

IOL, intraocular lens

PRP, panretinal photocoagulation

DM, diabetes mellitus

CCC, continuous circular capsulorhexis

DR, diabetic retinopathy

STDR, sight-threatening diabetic retinopathy

NVG, neovascular glaucoma

NPDR, non-proliferative diabetic retinopathy

PVD, posterior vitreous detachment

VEGF, Vascular endothelial growth factor

# References


1. Smiddy WE, Feuer W: **Incidence of cataract extraction after diabetic vitrectomy**. *Retina* 2004, **24**(4):574-581.

2. Demetriades AM, Gottsch JD, Thomsen R, Azab A, Stark WJ, Campochiaro PA, de Juan E, Jr., Haller JA: **Combined phacoemulsification, intraocular lens implantation, and vitrectomy for eyes with coexisting cataract and vitreoretinal pathology**. *Am J Ophthalmol* 2003, **135**(3):291-296.

3. Yang Y, Zhang J, Yan H: **Comparison of combined and sequential surgery for proliferative diabetic retinopathy: a single surgeon study**. *PLoS One* 2014, **9**(9):e108933.

4. Blankenship GW: **The lens influence on diabetic vitrectomy results. Report of a prospective randomized study**. *Arch Ophthalmol* 1980, **98**(12):2196-2198.

5. Hu C, Jia W: **Diabetes in China: Epidemiology and Genetic Risk Factors and Their Clinical Utility in Personalized Medication**. *Diabetes* 2018, **67**(1):3-11.

6. Zhang G, Chen H, Chen W, Zhang M: **Prevalence and risk factors for diabetic retinopathy in China: a multi-hospital-based cross-sectional study**. *Br J Ophthalmol* 2017, **101**(12):1591-1595.

7. Treumer F, Bunse A, Rudolf M, Roider J: **Pars plana vitrectomy, phacoemulsification and intraocular lens implantation. Comparison of clinical complications in a combined versus two-step surgical approach**. *Graefes Arch Clin Exp Ophthalmol* 2006, **244**(7):808-815.

8. Scharwey K, Pavlovic S, Jacobi KW: **Combined clear corneal phacoemulsification, vitreoretinal surgery, and intraocular lens implantation**. *J Cataract Refract Surg* 1999, **25**(5):693-698.

9. Shinoda K, O'Hira A, Ishida S, Hoshide M, Ogawa LS, Ozawa Y, Nagasaki K, Inoue M, Katsura H: **Posterior synechia of the iris after combined pars plana vitrectomy, phacoemulsification, and intraocular lens implantation**. *Jpn J Ophthalmol* 2001, **45**(3):276-280.

10. Smiddy WE, Stark WJ, Michels RG, Maumenee AE, Terry AC, Glaser BM: **Cataract extraction after vitrectomy**. *Ophthalmology* 1987, **94**(5):483-487.

11. Saunders DC, Brown A, Jones NP: **Extracapsular cataract extraction after vitrectomy**. *J Cataract Refract Surg* 1996, **22**(2):218-221.

12. Laurell CG, Zetterstrom C: **Inflammation and blood-aqueous barrier disruption**. *J Cataract Refract Surg* 2000, **26**(3):306-307.

13. Anderson NG, Fineman MS, Brown GC: **Incidence of intraocular pressure spike and other adverse events after vitreoretinal surgery**. *Ophthalmology* 2006, **113**(1):42-47.

14. Muether PS, Hoerster R, Kirchhof B, Fauser S: **Course of intraocular pressure after vitreoretinal surgery: is early postoperative intraocular pressure elevation predictable?** *Retina* 2011, **31**(8):1545-1552.

15. Wong R, Gupta B, Williamson TH, Laidlaw DA: **Day 1 postoperative intraocular pressure spike in vitreoretinal surgery (VDOP1)**. *Acta Ophthalmol* 2011, **89**(4):365-368.

16. Yang HK, Woo SJ, Park KH, Park KH: **Intraocular pressure changes after vitrectomy with and without combined phacoemulsification and intraocular lens implantation**. *Korean J Ophthalmol* 2010, **24**(6):341-346.

17. Chen PP, Thompson JT: **Risk factors for elevated intraocular pressure after the use of intraocular gases in vitreoretinal surgery**. *Ophthalmic Surg Lasers* 1997, **28**(1):37-42.

18. Han DP, Lewis H, Lambrou FH, Jr., Mieler WF, Hartz A: **Mechanisms of intraocular pressure elevation after pars plana vitrectomy**. *Ophthalmology* 1989, **96**(9):1357-1362.