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ADVANCES IN SOCIAL HUMANITIES RESEARCH

Exudative Retinal Ablation Performed by Vitrectomy Surgery at Pasar Rebo Hospital

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Abstract

Retinal detachment is characterized by the separation of the neurosensory retina from the underlying retinal pigment epithelium and can result in significant visual impairment. This case report describes a 59-year-old man who presented to Pasar Rebo Hospital with a three-day history of sudden-onset blurred vision and a curtain-like visual field defect in his left eye. His medical history included myopia and previous cataract surgery. Initial visual acuity in the left eye was 1/300, and fundus photography revealed retinal elevation involving the macula. Pars plana vitrectomy was performed six days after presentation, involving irrigation and aspiration, laser photocoagulation surrounding the identified retinal breaks and throughout the peripheral retina, and silicone oil tamponade. On postoperative day 15, visual acuity in the left eye improved to 4/60 without correction and 6/40 with correction, while intraocular pressure increased to 26 mmHg, requiring treatment with timolol and acetazolamide. The case demonstrated short-term anatomical retinal reattachment and visual improvement, accompanied by postoperative ocular hypertension requiring continued monitoring. Although the initial diagnosis classified the detachment as exudative, the intraoperative identification of retinal breaks and the previously documented possibility of lattice degeneration raised uncertainty regarding the underlying mechanism, including a potential rhegmatogenous component. The available clinical records did not establish an underlying cause of retinal exudation or provide comprehensive retinal imaging to support the initial classification. This report emphasizes the importance of accurate retinal detachment classification, comprehensive intraoperative documentation, and continued postoperative monitoring following silicone oil tamponade.

INTRODUCTION

Retinal detachment is the separation of the neurosensory retina from the underlying retinal pigment epithelium (RPE), accompanied by the accumulation of fluid in the subretinal space. Retinal attachment is maintained by several physiological mechanisms, including the RPE fluid transport system and the hydrostatic and oncotic pressure gradients across the retina and choroid. Disruption of these mechanisms can contribute to retinal detachment. Based on its underlying pathophysiology, retinal detachment is classified into three types: rhegmatogenous, tractional, and exudative (serous). Rhegmatogenous retinal detachment occurs when a full-thickness retinal break allows liquefied vitreous fluid to enter the subretinal space, whereas tractional retinal detachment results from vitreoretinal traction, often caused by contracting fibrovascular membranes, without a primary retinal break. Exudative retinal detachment develops when subretinal fluid accumulates in the absence of

retinal breaks or significant vitreoretinal traction, typically due to vascular abnormalities, inflammation, or neoplasms that increase fluid leakage or overwhelm the fluid transport capacity of the RPE (J. Y. Ge et al., 2024; Indonesia, 2022; Ozbek et al., 2024; Ratra et al., 2023; Xiong et al., 2025).

Rhegmatogenous retinal detachment is the most common of the three types. A meta-analysis of 33 studies from 21 countries estimated its annual incidence at 12.17 cases per 100,000 population, with a reported increase of 5.4 cases per 100,000 population across successive decades. The highest incidence occurred among individuals aged 60–70 years, with a male predominance, while a secondary peak was observed among individuals aged 20–30 years, particularly those with high myopia. In contrast, exudative retinal detachment was the least common type, accounting for only 2.35% of 2,040 eyes with retinal detachment evaluated at a tertiary referral center. The mean age of patients in that series was 37.5 years, while patients with inflammatory exudative retinal detachment had a reported mean age of 35.7 years, suggesting that this condition may also affect relatively younger populations (Assaf, 2026; Ludwig et al., 2023; Maltsev et al., 2023; Morano et al., 2023; Widjaja et al., 2022; Wilson et al., 2024).

In Indonesia, the Ministry of Health cited findings from the Rapid Assessment of Avoidable Blindness (RAAB) survey, which estimated that approximately 3% of individuals aged 50 years and older were blind, corresponding to approximately 1.6 million people, while an estimated 5–6 million people experienced visual impairment. Cataracts remained the leading cause of blindness, followed by uncorrected refractive errors, glaucoma, and diabetic retinopathy. Although comprehensive national epidemiological data on retinal detachment remain unavailable, approximately 17,500–25,000 new cases have been estimated to occur annually. A study conducted in Surabaya reported a mean patient age of 46 years, with males accounting for 59.2% of cases. Furthermore, 70.8% of patients presented with macula-off retinal detachment, and 81.1% had an initial visual acuity below 3/60.6 Data from Pasar Rebo Hospital in 2025 indicated that 63 patients underwent vitrectomy, with the largest age groups being 51–61 years (33.3%) and 40–50 years (23.8%). Male patients accounted for 60.3% of cases, and retinal detachment was the most common indication for surgery (Cristescu et al., 2023; Huang et al., 2024; Natarajan et al., 2024; Warren et al., 2023; Xiang et al., 2023).

Accurate differentiation among retinal detachment mechanisms is essential because retinal elevation alone does not establish whether subretinal fluid accumulation results from vascular leakage, vitreoretinal traction, or a retinal break. Diagnostic documentation should therefore include detailed peripheral retinal findings, the presence or absence of retinal breaks, and relevant ancillary examinations to assess macular involvement and potential ocular or systemic causes. When the underlying mechanism remains uncertain, clinical reporting should clearly distinguish the initial working diagnosis from findings subsequently confirmed during surgery (Fung et al., 2024; L. Ge et al., 2024; Zubricky & Platt, 2022).

The etiologies of exudative retinal detachment include vascular and choroidal disorders, such as central serous chorioretinopathy, hypertensive choroidopathy, and Coats' disease; inflammatory conditions, including Vogt–Koyanagi–Harada syndrome, sarcoidosis, and tuberculosis; and intraocular neoplasms, such as choroidal melanoma and choroidal metastases. In a series involving 48 eyes with persistent exudative retinal detachment, Coats' disease was the most common underlying cause (37.5%), followed by choroidal hemangioma (12.5%) and nanophthalmos (10.4%). Management primarily focuses on treating the underlying condition, while surgical intervention may

be considered in selected cases involving persistent subretinal fluid that threatens the posterior pole or fails to respond to appropriate medical treatment. In the reported series, vitrectomy was associated with ocular preservation in 91.7% of eyes, although the recurrence rate reached 29.2%, indicating that some patients required additional surgical interventions. Vitrectomy was also reported to achieve sustained retinal attachment in 83.3% of eyes with inflammatory exudative retinal detachment that had not responded adequately to medical therapy.

An important clinical and reporting challenge arises when retinal detachment is initially classified as exudative, but intraoperative findings reveal retinal breaks requiring laser photocoagulation. Such discrepancies introduce uncertainty regarding the underlying pathophysiological mechanism and limit the extent to which surgical outcomes can be attributed to a particular type of retinal detachment. This case report therefore provides a focused description of short-term anatomical and visual outcomes following surgical intervention while emphasizing the importance of transparent diagnostic documentation and careful interpretation of intraoperative findings. The clinical priority was to preserve visual function while monitoring potential postoperative complications, particularly elevated intraocular pressure associated with intraocular tamponade.

Pars plana vitrectomy (PPV) is an established surgical procedure for various vitreoretinal disorders, with the selection of surgical techniques depending on the location and extent of retinal detachment, lens status, and the patient's ability to maintain the required postoperative positioning. Silicone oil tamponade may be selected in specific clinical circumstances, particularly when prolonged internal retinal support is required. However, its use may be associated with refractive changes, silicone oil emulsification, elevated intraocular pressure, and the potential need for subsequent surgery to remove the oil. Given the limited epidemiological data on retinal detachment in Indonesia and the substantial proportion of patients presenting with advanced disease, this case report describes the clinical presentation, diagnostic assessment, surgical management, and short-term postoperative outcomes of a male patient initially diagnosed with exudative retinal detachment in the left eye who underwent PPV with silicone oil tamponade at Pasar Rebo Hospital.

METHOD

This study employed a descriptive clinical case report design involving a 59-year-old man with left-eye retinal detachment who underwent pars plana vitrectomy (PPV) at Pasar Rebo Hospital. The case was selected based on the availability of documented clinical findings, surgical procedures, and early postoperative outcomes. The study focused on describing the patient's clinical course, surgical management, and diagnostic considerations rather than evaluating treatment effectiveness in a broader population.

Clinical data were obtained from the patient's medical history, ophthalmological examinations, visual acuity and intraocular pressure measurements, fundus photographs, operative records, and postoperative assessments conducted through day 15. The surgical procedure involved PPV, irrigation and aspiration, laser photocoagulation of identified retinal breaks, and silicone oil tamponade. Preoperative and postoperative findings were compared descriptively to assess anatomical retinal reattachment, visual acuity improvement, and changes in intraocular pressure. Available clinical photographs were used to support the presentation of the findings.

Data were organized chronologically and analyzed descriptively with reference to established retinal detachment mechanisms and relevant clinical literature. Particular attention was given to the

discrepancy between the initial diagnosis of exudative retinal detachment and the intraoperative identification of retinal breaks, which raised the possibility of a rhegmatogenous component. The underlying detachment mechanism could not be conclusively determined because of incomplete ancillary imaging and diagnostic documentation. Documentation of patient consent for case publication also required verification before manuscript submission.

RESULTS AND DISCUSSION

A 59-year-old man came to the eye polyclinic with complaints of sudden blurred vision in the left eye since 3 days earlier. Complaints arise when the patient is active, in the form of blurring in half of the field of vision from the center to the top like there is a floating curtain so that the patient has to look up to be able to see the left eye openly from the center down. The patient does not complain of dark vision, pain, dizziness, shadows such as floating threads, dark spots, double vision, or flashes of light, while the right eye has no complaints.

The patient wore glasses from the age of 17 with a spherical size of −2.50 diopters (D) and a cylinder of 2.00 D in both eyes. The size did not increase until before the complaint appeared. Three years earlier, the patient had been hit by glass that hit his glasses so that the left corner of the glasses hit the left upper eyelid, but the incident did not cause any complaints. The accident history was denied. Two years earlier, the patient underwent cataract surgery and after that the vision of the left eye improved so that the patient no longer wore glasses even though the right eye was still −2.00 D. History of hypertension, diabetes mellitus, stroke, heart disease, and allergies was denied. Similar complaints in the family were also denied, but almost all family members on the mother's side had high myopia. The patient smoked from the age of 17 as many as two to four cigarettes per day, but has now stopped.

Patients appeared moderately ill with mentis compote awareness, blood pressure 135/82 mmHg, pulse 85 times/minute, breathing rate 20 times/minute, and oxygen saturation of 100%. Generalist status was examined within normal limits. Sharp vision of the right eye was 1/60 and became 6/20 with spherical correction −9.50 D, cylindrical −2.00 D, axis 90° without improvement with pinhole, while sharp vision of the left eye was 1/300 with good light projection. Intraocular pressure (TIO) of the right eye was 20 mmHg and the left eye was 15 mmHg. The movement of both eyeballs was good in all directions with orthophoric position. Conjunctival injections are found in both eyes, while supercilia, palpebra, tarsal conjunctiva, cornea, front eye chamber, iris, and pupil are within normal limits. The lenses of both eyes appear clear with positive shadow tests in the right eye and negative in the left eye.

The results of preoperative laboratory examinations including haematology, hemostasis, clinical chemistry, and immunology were generally within normal limits. Photographs of the left eye fundus show retinal elevation with changes in retinal reflexes, especially in the peripheral retina, while the boundaries and details of the optic nerve papillae are difficult to be optimally assessed and bleeding and exudate are not clearly visible (Figure 1). The patient was diagnosed with retinal ablation in the left eye and planned to undergo a vitrectomy. Preoperative therapy was given in the form of artificial tear drops (povidone) and diclofenac sodium eye drops, each four times a day in the left eye.

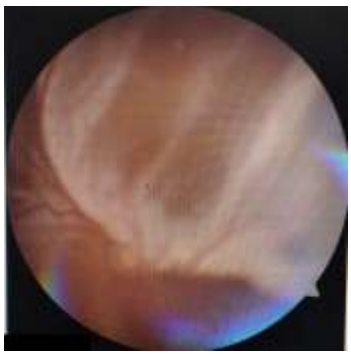


Figure 1. Preoperative photo of the left eye fundus shows retinal elevation with changes in retinal reflexes, especially in the peripheral retina. Where the macula has been lifted

Source: Clinical image included in the original case-report manuscript.

Left eye vitrectomy is performed 6 days later under general anesthesia. After asepsis and antisepsis of the surgical area as well as the installation of eye drape and blepharostat, the trocar is installed at three locations, then a vitrectomy is performed until the vitreus is clean. Retinal tears are identified, then irrigation and aspiration are performed to reattach the retina. Laser photocoagulation is performed around the tear and on the peripheral retina 360°, then a polydimethylsiloxyxane silicone oil tamponade for intraocular use is given until the eyeball is formed. The surgery is concluded with trocar removal and suturing using Vicryl 8-0 thread. Before the action, the macula appears to be detached, while after the action the retina has returned to its position (Figure 2. and Figure 3.). Postoperatively, patients are required to maintain a prone position for 2 weeks.

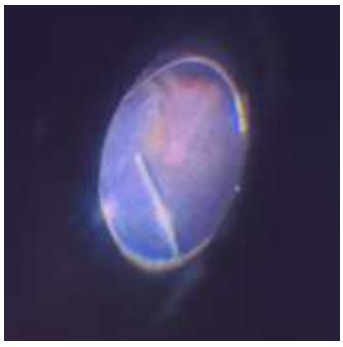


Figure 2. A picture of the left eye before the action with the macula appearing to be detached.

Source: Clinical image included in the original case-report manuscript.



Figure 3. An image of the left eye after the action with the retina that has returned to its position.

Source: Clinical image included in the original case-report manuscript.

At the 15th postoperative day control, the patient stated that his vision had improved. Sharp vision of the left eye was 4/60 and became 6/40 with a spherical correction of +3.50 D, cylindrical −1.25 D, axis of 90° without improvement with pinholes, while the sharpness of vision of the right eye did not change. The TIO of the right eye was 24 mmHg and the left eye was 26 mmHg. The patient then received timolole 0.5% eye drops twice daily, sodium hyaluronic eye drops three times a day, as well as potassium iodide and sodium iodide eye drops four times a day in the left eye, plus acetazolamide tablets three times a day.

Discussion

The patients in this report are 59-year-old men with retinal ablation in the left eye, in accordance with the tendency of retinal ablation which is more common in men. Vitrectomy data at Pasar Rebo Hospital throughout 2025 also shows that 60.3% of patients are male with the highest age group of 51 to 61 years, a range that includes the age of these patients, while the left eye is slightly more often treated than the right eye. Studies in Surabaya showed a similar pattern with a proportion of 59.2% of men at an average age of 46,3 years. The causes of ablation differ according to the type, namely retinal tear in the regmatogenosa type, fibrovascular tissue pull in the traction type, and vascular, inflammatory, or neoplasm diseases in the exudative type. Because ablation in these patients is considered to be an exudative type, tracing the underlying disease is an important part of the management in addition to surgery.

Exudative retinal ablation occurs when fluid collects in the subretinal space without tearing or traction. 1 In healthy eyes, subretinal fluid is continuously pumped out by the retinal pigment epithelium so that new ablation occurs when the amount of fluid exceeds the pumping capacity. This condition can be triggered by vascular, inflammatory, or neoplasms of the retina, retinal pigment epithelium, and choroid. Coats disease, choroid hemangioma, and nanophthalmos are the most common causes of persistent exudative retinal ablation series, while Vogt-Koyanagi-Harada syndrome, tuberculosis, pars planitis, and sympathetic ophthalmias are common in inflammatory groups.

The diagnosis of retinal ablation is clinically established through an examination of the fundus with dilated pupils, ideally using an indirecreccal ophthalmoscope accompanied by sclera depression to assess the peripheral retina, the area of the ablation, and the status of the macula. 1 The distinction between the types of ablation rests on the presence or absence of retinal tears, while in the exudative type the subretinal fluid can move according to the position of the head. This patient presents with a sharp decrease in sudden vision and visual defects such as blinds without flashes of light or drifting shadows, even though both of these symptoms are typical complaints of regmatogenonous retinal detachment. The fundus photograph shows retinal elevation with changes in the retinal reflex without clear bleeding and exudate, while supporting examinations that can direct the cause of the exudation, such as optical coherence tomography, B-scan ultrasound, and fluorescent angiography, are not recorded. The medical record lists the initial diagnosis of retinal detachment due to lattice degeneration and the surgery report mentions the identification of tears that are then surrounded by laser photocoagulation, two things that are more consistent with the type of regmatogenose so that the determination of the type of ablation in this case requires more complete documentation.

Patients have myopia from a young age and a history of cataract surgery, two conditions that are known to increase the risk of regmatogenous retinal detachment. 9,10 Lattice degeneration that is the initial diagnosis is a peripheral retinal lesion with retinal thinning and strong vitreous attachment

at the edges so that it is easy to cause tearing. This lesion is found in about 10% of the population and can be the basis for up to 40% of regmatogenonous retinal ablation cases. However, neither the lattice lesion nor the tear characteristics were described in the funduscopy results and surgery reports so the etiological basis was not documented. 11 In exudative retinal ablation, the search was directed to the underlying systemic and ocular diseases, while the preoperative laboratory examination of this patient was within normal limits so the cause could not be ascertained from the available data.

Exudative retinal ablation is primarily directed at the underlying disease, while surgical procedures are considered when the subretinal fluid settles and threatens the posterior pole. 3 Vitrectomy in this condition retains the eyeball in 91.7% of the eye although recurrence occurs in 29.2% of the eye. 3 Vitrectomy performed early in exudative ablation due to inflammation is also considered to help maintain the structure and function of vision. 4 In these patients, a vitrectomy was performed through three sclerotomy, followed by irrigation-aspiration to reattach the retina, laser photocoagulation around the tear and 360° peripheral retina, and tamponade, which is generally in line with the standard procedure of pars plana vitrectomy. 1 However, prophylactic 360° laser photocoagulation is generally not recommended without specific indications, and studies in 467 pseudophachian eyes found no difference in anatomical success with a single operation between 360° laser and focal retinopathy.

Silicone oil is considered as a tamponade in recurrent ablation, proliferative vitreoretinopathy, retinectomy, or patients who are unable to maintain a prone position. 12 Metaanalysis on uncomplicated ablation associates gas use with better final vision sharpness with an equivalent primary attachment rate. 14 The reason for selecting silicone oil is not recorded in the medical record, but patients have several risk factors for proliferative vitreoretinopathy, namely older age, smoking history, detached macula, and longer duration of symptoms. 15 The refractive index of silicone oil (1.405) was higher than the vitreous refractive index (1.336) resulting in hypertopic shifting, and the refraction of the patient's left eye becoming spherical +3.50 D, corresponding to the range of +1.75 D to +5.00 D reported in pseudophachial eyes. 16 An increase in TIO posttamponade of silicone oil was reported in 2.2% to 56% of cases and was largely controllable with medication so that the administration of timolol and acetazolamide to these patients was in accordance with the theory. 17

The 2-week face-down instruction was in line with the recommendation of a tight position of 1 to 2 weeks in one of the studies although a prone position of at least 7 days on silicone oil tamponade was associated with a lower rate of recurrent ablation. 12,18 The Cochrane Review considered the evidence of a face-down position to be very low certainty and noted the possibility of an increase in TIO in this position. 19 As long as silicone oil is in the eye, TIO needs to be closely monitored and oil expenditure planned at 3 to 6 months to prevent retinal toxicity. 1,17 Retinal ablation is also prevalent in the productive age group, with an average of 46.3 years in Indonesia and 37.5 years in exudative retinal ablation, so that vision loss can interfere with the patient's work and socioeconomic conditions. 3,6 Therefore, early symptom recognition, prompt referral to vitreoretine facilities, and finding the cause of exudation are important parts for visual function to be maintained. 6

CONCLUSION

This case report described a 59-year-old man who presented with severe visual impairment in the left eye and retinal elevation involving the macula. Following pars plana vitrectomy (PPV), laser photocoagulation, and silicone oil tamponade, postoperative findings indicated anatomical retinal

reattachment and improvement in left-eye visual acuity from 1/300 preoperatively to 4/60 without correction and 6/40 with correction by postoperative day 15. However, intraocular pressure increased to 26 mmHg, requiring treatment with timolol and acetazolamide. Although the short-term anatomical and functional outcomes were favorable, the initial classification of the retinal detachment as exudative remained uncertain because retinal breaks were identified intraoperatively and the available diagnostic records did not adequately establish the underlying etiology.

Continued clinical follow-up is recommended to monitor retinal attachment, intraocular pressure, and visual recovery, as well as to determine the appropriate timing of silicone oil removal. Further clarification of the initial peripheral retinal findings and the diagnostic basis for classifying the detachment is also warranted. Future case reports should provide comprehensive diagnostic documentation, relevant retinal imaging, detailed intraoperative findings, longer-term postoperative outcomes, and verified patient consent for publication. Given the single-patient design and limited follow-up period, these findings cannot establish comparative surgical effectiveness or be generalized to patients with other types of retinal detachment.

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CONFLICT OF INTEREST

The author states that this research was conducted without any commercial or financial relationship that can be interpreted as a potential conflict of interest.

AUTHOR CONTRIBUTION

The author fully contributes to the formulation of the main idea idea, collects library data, analyzes and interprets the primary text of the figure, and prepares the manuscript. All authors have agreed on the final version of the manuscript.

GENERATIVE ARTIFICIAL INTELLIGENCE USAGE STATEMENT

The author states that generative artificial intelligence (AI) was used in the preparation of this manuscript. The author acknowledges the use of generative AI to help improve language clarity and improve the grammatical structure of the manuscript. The use is done in compliance with the applicable ethical guidelines regarding the use and disclosure of generative AI in scientific research. Each author has made substantial intellectual contributions to this work. The entire manuscript content has been carefully reviewed to ensure its accuracy, and the author is solely responsible for the integrity and final content of the manuscript.

REFERENCES

Assaf, S. S. (2026). *Overview of patient characteristics undergoing vitrectomy surgery at RSUD Pasar Rebo in 2025*. RSUD Pasar Rebo.

Cristescu, I. E., Ivanova, T., Moussa, G., Ziaei, H., Ferrara, M., & Lippera, M. (2023). The impact of 360-laser barricade on outcomes of vitrectomy for pseudophakic retinal detachment; the Manchester Pseudophakic Retinal Detachment Study. *Eye*, *37*(15), 3221–3227. https://doi.org/10.1038/s41433-023-02495-y

Fung, T. H., Yim, T. W., Lois, N., Wright, D. M., Liu, S. H., & Williamson, T. (2024). Face-down positioning or posturing after pars plana vitrectomy for macula-involving rhegmatogenous retinal detachments. *Cochrane Database of Systematic Reviews*, *2024*(3), CD015514.

https://doi.org/10.1002/14651858.CD015514.pub2

Ge, J. Y., Teo, Z. L., Chee, M. L., Tham, Y. C., Rim, T. H., & Cheng, C. Y. (2024). International incidence and temporal trends for rhegmatogenous retinal detachment: a systematic review and meta-analysis. *Survey of Ophthalmology*, *69*(3), 330–336. https://doi.org/10.1016/j.survophthal.2023.11.005

Ge, L., Su, N., Fan, W., & Yuan, S. (2024). Risk factors and management of intraocular pressure elevation after vitrectomy combined with silicone oil tamponade. *International Journal of General Medicine*, *17*, 447–456. https://doi.org/10.2147/IJGM.S446617

Huang, R. S., Mihalache, A., Lau, T. H. A., Popovic, M. M., Kertes, P. J., & Muni, R. H. (2024). Pars plana vitrectomy with silicone oil or gas tamponade for uncomplicated retinal detachment: a systematic review and meta-analysis. *American Journal of Ophthalmology*, *266*, 144–155. https://doi.org/10.1016/j.ajo.2024.05.008

Indonesia, K. K. R. (2022). *Begini strategi pengentasan gangguan penglihatan*. Kementerian Kesehatan Republik Indonesia. https://kemkes.go.id/id/begini-strategi-pengentasan-gangguan-penglihatan

Ludwig, C. A., Vail, D., Al-Moujahed, A., Callaway, N. F., Saroj, N., & Moshfeghi, A. (2023). Epidemiology of rhegmatogenous retinal detachment in commercially insured myopes in the United States. *Scientific Reports*, *13*(1), 9430. https://doi.org/10.1038/s41598-023-35520-x

Maltsev, D. S., Kulikov, A. N., Shaimova, V. A., Burnasheva, M. A., & Vasiliev, A. S. (2023). Spotlight on lattice degeneration imaging techniques. *Clinical Ophthalmology*, *17*, 2383–2395. https://doi.org/10.2147/OPTH.S405200

Morano, M. J., Khan, M. A., Zhang, Q., Halfpenny, C. P., Wisner, D. M., & Sharpe, J. (2023). Incidence and risk factors for retinal detachment and retinal tear after cataract surgery: IRIS Registry (Intelligent Research in Sight) analysis. *Ophthalmology Science*, *3*(4), 100314. https://doi.org/10.1016/j.xops.2023.100314

Natarajan, R., Mohamed, A., Parameswarappa, D. C., Rani, P. K., Bagga, D. K., & Durai, C. V. R. (2024). Refractive outcomes following silicone oil tamponade in vitreoretinal surgery. *Oman Journal of Ophthalmology*, *17*(1), 25–31. https://doi.org/10.4103/ojo.ojo_274_22

Ozbek, M., Aydin, R., & Artunay, O. (2024). Management of persistent exudative retinal detachment: exploring etiology and surgical outcomes. *BMC Ophthalmology*, *24*(1), 493. https://doi.org/10.1186/s12886-024-03764-4

Ratra, D., Pradhana, D., & Dutta Majumder, P. (2023). Surgical management for treatment-resistant cases of inflammatory exudative retinal detachment: mission impossible? *Indian Journal of Ophthalmology*, *71*(6), 2543–2547. https://doi.org/10.4103/IJO.IJO_2575_22

Warren, A., Wang, D. W., & Lim, J. I. (2023). Rhegmatogenous retinal detachment surgery: a review. *Clinical & Experimental Ophthalmology*, *51*(3), 271–279. https://doi.org/10.1111/ceo.14205

Widjaja, S. A., Hiratsuka, Y., Ono, K., Firmansjah, M., Sasono, W., & Murakami, A. (2022). The impact of travel distance to delayed presentation and follow-up attendance of retinal detachment cases in Surabaya, Indonesia. *Juntendo Iji Zasshi*, *68*(1), 36–43. https://doi.org/10.14789/jmj.JMJ21-0024-OA

Wilson, D. I., Te Water Naude, A. D., & Snead, M. P. (2024). Refinements in the use of silicone oil as an intraocular tamponade. *Eye*, *38*(10), 1810–1815. https://doi.org/10.1038/s41433-024-03027-y

Xiang, J., Fan, J., & Wang, J. (2023). Risk factors for proliferative vitreoretinopathy after retinal detachment surgery: a systematic review and meta-analysis. *PLoS ONE*, *18*(10), e0292698. https://doi.org/10.1371/journal.pone.0292698

Xiong, J., Tran, T., Waldstein, S. M., & Fung, A. T. (2025). A review of rhegmatogenous retinal detachment: past, present and future. *Wiener Medizinische Wochenschrift*, *175*(7–8), 186–202. https://doi.org/10.1007/s10354-025-01085-9

Zubricky, R. D., & Platt, S. M. (2022). Comparison of face-down positioning durations following silicone oil tamponade. *Ophthalmic Surgery, Lasers and Imaging Retina*, *53*(5), 285–292. https://doi.org/10.3928/23258160-20220415-02