

RESPONSE TO REVIEWER (1)

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Furthermore, vitrectomy and posterior lensectomy procedures were lack of strong references as primary treatment for phacomorphic angle closure. Based on this case, we share our experience to give a new insight for readers that posterior approach could be an option with satisfying result in the treatment phacomorphic angle closure without wasting time to do laser iridotomy or trabeculectomy.

1 **Case Report**

2
3 **Posterior Approach in Management of Phacomorphic Angle Closure**

4
5 Andi Muhammad Ichsan^{a,b}, Geraldi Ayub Fujiwan Tombe^b,
6 Anastasia Vanny Launardo^b, Junely Vimala Jaury^b, Andi Pratiwi^{a,b}, Ririn Nislawati^a,
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9 ^aDepartment of Ophthalmology, Hasanuddin University, Makassar, Indonesia

10 ^bOphthalmology Unit, SILOAM Hospital, Makassar, Indonesia

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12 Short title : Posterior Approach in Management of Phacomorphic Angle Closure

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22
23 Number of Tables: 0 (none)

24 Number of Figures: 4 (four) figures.

25 Word count: 1,619 words.

26 Keywords: Posterior lensectomy, phacomorphic angle closure, anterior chamber depth.

27 **Abstract**

28

29 This paper aims to report a case of posterior lensectomy through 3-port pars plana vitrectomy in
30 management of phacomorphic angle closure. A 67-year-old male came to the outpatient
31 department with headache and decreased vision on his left eye for the last three days. Visual
32 acuity was 2/60 with very high intraocular pressure (IOP). A complete ophthalmologic
33 examination revealed as a phacomorphic angle closure. Serial managements were performed
34 including mannitol 20% intravenously, laser peripheral iridotomy (LPI) and trabeculectomy,
35 however the anterior chamber (AC) depth became more shallow and the IOP remained high.
36 Lens extraction as definitive therapy could not be done due to adhesion of iris and anterior lens
37 capsule to corneal endothelium, thus posterior lensectomy through 3-port pars plana vitrectomy
38 and phacofragmatome were performed. The patient then undergone secondary intraocular lens
39 (IOL) implantation once the corneal thickness was normal and sufficient AC depth. A significant
40 improvement of visual acuity, normal IOP and AC depth were achieved after the management of
41 posterior approach. As a conclusion, this posterior approach should be considered as a prime
42 management in the case of phacomorphic angle closure with unprofound AC depth and fragile
43 cornea.

44

45 Keywords: Posterior lensectomy, phacomorphic angle closure, AC depth, central corneal
46 thickness.

47 **Introduction**

48 Phacomorphic angle closure also known as phacomorphic glaucoma is a lens-induced
49 secondary angle-closure glaucoma that may occur as a result of intumescent cataract formation.
50 Narrowing of the angle can occur slowly with formation of the bulging lens by pushing the iris
51 forward leading to obstruction of aqueous flow between the pupil and the anterior capsule of the
52 lens. Initial treatment of this pathologic condition is aimed at rapidly reducing IOP to prevent
53 further damage to the optic nerve, to clear cornea, and to prevent synechiae formation. **The**
54 **reduction of IOP is necessary to prepare the patient for laser iridotomy, which relieves the**
55 **pupillary block and restore the aqueous flow.**[1] Longer duration of **increased** IOP correlated with
56 progression of glaucoma. [2–4]

57 Related factors for phacomorphic angle closure are older age, shallow AC, thicker and
58 anteriorly positioned of the lens, shorter axial length, and high hyperopic status. Lens-induced
59 glaucoma may not only cause a huge and acute rise of IOP but it can pose challenges
60 intraoperatively. [4,5]

61 The definitive treatment of phacomorphic angle closure is cataract extraction, but it has
62 difficulties due to anatomical problems such as corneal edema, shallow AC, sluggish pupil, and
63 weak zonule. High vitreous pressure in such eyes can results in radial tear of capsulorhexis, iris
64 prolapse, zonular dialysis or posterior capsule rupture with subsequent vitreous loss, nucleus drop
65 into vitreous cavity, and even in the worst case **may result in** suprachoroidal haemorrhage.
66 Corneal endothelial cell loss is a main concern which can lead to severe visual loss due to
67 permanent corneal edema. [3,4]

68 In a very rare occasion due to insufficient AC depth, an anterior approach of cataract
69 extraction is **cannot be safely performed**. Herein, we report a different approach of posterior
70 lensectomy through 3-port pars plana vitrectomy in managing phacomorphic angle closure.

71 This work has been reported in line with the improved SCARE checklist (Supplementary
72 Material 1). The SCARE guidelines were published in 2016 and then modified in 2018 to provide a
73 structure for surgical reports. [6]

74

75 **Case Presentation**

76 A 67-year-old male came to the outpatient department with painful decreased vision on
77 his left eye for the last three days. There was no history of trauma, but he had history of diabetic
78 and hypertensive on controlled treatment. Ophthalmology examinations revealed visual acuity
79 was 20/20 and 2/60 in right and left eye respectively. The IOP (measured by Topcon Medical
80 Systems CT-80 non-contact computerized tonometer) and other structures in the right eye were

81 normal with pseudophakic status, while an extremely high IOP (higher than 60 mmHg) was found
82 in the left eye. An anterior segment examination in the left eye showed ciliary injections, corneal
83 edema, shallow anterior chamber (Van Herick Grade I), sluggish irregular pupil, thickened and
84 forward displacement of the lens. Anterior segment optical coherence tomography (AS-OCT) in
85 the left eye exhibited narrowed iridocorneal angle (shown in Fig. 1.a-b).

86 Initial therapy consisted of combination of β -blocker and Corticosteroid topicals, and
87 Carbonic anhydrase inhibitor orally, which addressed the acute nature of the angle closure and
88 successfully lowered the IOP to 55 mmHg with visual acuity 20/60. However, the IOP rose again
89 and the visual acuity dropped to 1/60 in three days later. Intravenous mannitol 20% was given
90 immediately after ensuring normal renal function, then followed by laser peripheral iridotomy
91 (shown in Fig. 1.c). A filtering trabeculectomy was performed within 5 days, and successfully
92 lowered the IOP to 19 mmHg, improved visual acuity to 20/60, well-functioning bleb (shown in
93 Fig. 1.d), minimal corneal edema, and deepened anterior chamber. Lens extraction through
94 phacoemulsification and implantation of IOL were scheduled, unfortunately, the anterior
95 chamber was noted to be extremely shallowed in the following week after trabeculectomy. On
96 AS-OCT revealed lenticulo-irido-endothelial touch (shown in Fig.2) and thickened CCT to 814 μm ,
97 the intraocular pressure was more than 60 mmHg. This pathologic condition led to inability to
98 accomplish phacoemulsification for cataract extraction, so a posterior approach should be
99 considered as one of safe and reliable management.

100 The following day, posterior lensectomy through 3-port pars plana vitrectomy was
101 performed under general anesthesia by vitreo-retinal surgeon (shown in Fig.3). The surgical
102 technique involved making 3-port sclerotomy 4 mm from the cornea-scleral limbal, core and
103 complete vitrectomy resulted a lower IOP allowed for constructed a main port through clear
104 corneal incision, reformed the AC depth and released the lenticulo-irido-endothelial adhesion by
105 ophthalmic viscosurgical devices (OVDs). Posterior lensectomy was done once AC depth has a
106 sufficient space to avoid friction between lens and corneal endothelium. Careful attention while
107 doing lensectomy manipulation to avoid further zonular dehiscence that was seen from 10 to 12
108 o'clock. Harder-fragments of nucleus was intentionally dropped into the vitreous cavity and then
109 removed completely by using phaco-fragmentome. A significant corneal clarity and deepened AC
110 were obviously seen intraoperative. The eye was left aphakic with adequate anterior capsule
111 support for further secondary IOL implantation in the sulcus when CCT reach normal limit (shown
112 in Fig.4).

113 On the latest ophthalmology examination showed a remarkable improvement of visual
114 acuity was 20/50, with IOP was 18 mmHg, clear cornea, normal AC depth (Van Herick Grade IV),

115 and central IOL position. Based on Indiana Bleb Appearance Grading Scale (IBAGS) system,
116 showed flat bleb and from the OCT revealed scleral fibrotic. Subjectively, the patient also stated
117 that there was a significant improvement after surgery both of visual acuity and any relevant
118 symptoms without any glaucoma medications.

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120 Discussion

121 A proper management of phacomorphic angle closure is urgent, very challenging and
122 requires deep consideration in many critical circumstances. [2,7] The glaucomatous eye may
123 possess shallow anterior chamber, sluggish pupil, floppy iris syndrome, zonular instability which
124 potentially increased the surgical risks during cataract extraction. [3,7,8] The strategies of surgery
125 are either glaucoma or cataract surgery first, or one setting glaucoma-cataract surgery. Especially
126 for cataract extraction, the option can be anterior or posterior approach.

127 The risk of rapidly progressive glaucoma and medically uncontrolled disease may warrant
128 a priority surgical intervention.[3,7,8] Established studies mentioned that definitive treatment of
129 phacomorphic angle closure is cataract extraction. [2–4] The decision in performing lens
130 extraction should be individualized based upon several factors other than the effect of IOP. These
131 factors include patient's characteristics, surgeon's skills and preferences, status of glaucoma
132 control, and density of cataract. Patient's characteristic is related to general health, ocular and
133 systemic comorbidities, compliance to glaucoma treatment, visual needs and prognosis. (2,3,9)
134 In this case the patient had diabetic and hypertensive as systemic comorbidities. Anti-glaucoma
135 medication only affected short term in reducing IOP, as well as LPI and trabeculectomy. All of
136 those treatments were failed to reformed adequate AC depth for phacoemulsification procedure.
137 The close proximity of phaco tip during nucleus emulsification may increased the risk for corneal
138 endothelial cell loss.

139 Another important factors to be considered is the surgeon's skill and preferences. Most
140 ophthalmologists are able to do a relatively safe cataract surgery, whereas a few of them can cope
141 with turbulences after glaucoma surgical intervention. Some surgeons may wish to perform easier
142 procedure that offers certain amount of lowering IOP, less risk, short recovery and faster visual
143 rehabilitation. Cataract extraction in phacomorphic angle closure had unpredictable difficulties
144 intraoperatively. The crowded AC disturbs the surgical manipulation of phacoemulsification in
145 such eyes. The peripheral iridocorneal apposition makes it difficult to proper construct a clear
146 corneal incision. The shallow AC puts the cornea under higher risk of damage by ultrasound waves
147 and/or mechanical contact of the surgical instruments. Additionally, corneal edema and pupillary
148 abnormalities may increase the difficulty of capsulorhexis. Consequently, clear cornea

149 phacoemulsification was considered to be fraught with higher risk of intra and post-operative
150 complications. In such instance, pars plana vitrectomy combine with posterior lensectomy may
151 be a relatively safer manipulation. [10,11] Performing vitrectomy to remove the vitreous is
152 considered as the only promising way to successfully deepen anterior chamber. In this case,
153 posterior lensectomy through 3-port pars-plana vitrectomy were performed by vitreo-retinal
154 surgeon (AMI) due to extremely shallow AC depth, higher positive vitreous pressure, and
155 thickened of CCT.

156 Implantation of IOL after the first procedure depends on intactness of the lens capsule
157 and stability of the zonules. Calculation of IOL power may be affected by corneal curvature, AC
158 depth, and axial length which positively correlated with changes in IOP after trabeculectomy.
159 [8,10,12] Three weeks after posterior lensectomy with regards of stable zonular support, the
160 secondary IOL was implanted in the sulcus through clear corneal incision.

161 As a conclusion, posterior lensectomy through 3-port pars plana vitrectomy approach in
162 management of phacomorphic angle closure should be considered and highly recommended
163 when anterior chamber is inadequate to perform cataract extraction anteriorly.

164 **Statements**

165 **Acknowledgement**

166 The author would like to thank and appreciate the team of nurses and staff of Hasanuddin Uni-
167 versity Hospital and Siloam Hospital who have been involved in the
168 preparation, treatment and operation of this patient.

169

170 **Statement of Ethics**

171 Written informed consent was obtained from the patient for publication of this case report and
172 accompanying any images.

173

174 **Conflict of Interest Statement**

175 The authors state there is no conflict of interest in writing this article.

176

177 **Funding Sources**

178 This manuscript did not receive any funding.

179

180 **Author Contributions**

181 **AMI:** conception or design of the work, doing the medical operation, analysis and interpretation
182 of data for the work and drafting the work. **GAFT, AVL, RN, JVJ:** doing the medical operation as a
183 team, caring for patients, doing follow up after surgery, drafting the work. **AP, NM, ICI:** Drafting
184 the work and revising it critically for important intellectual content.

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211 **Figure Legends**

“Fig. 1. a” Anterior segment optical coherence tomography (AS-OCT) in the left eye exhibited narrowed iridocorneal angle due to forward displacement of the lens and iris.

“Fig.1. b” Anterior lens capsule adhered to the posterior iris.

“Fig.1. c” A small hole connected posterior chamber to anterior chamber as indicated by blue arrow.

“Fig.1. d” Filtering bleb after trabeculectomy surgery as pointed by red arrow.

“Fig. 2” One week after trabeculectomy, AS-OCT showed extremely shallow anterior chamber depth with lenticulo-irido-endothelial adhesion.

“Fig. 3. a” 3-port pars plana vitrectomy was performed by vitreo-retinal surgeon (AMI).

“Fig. 3. b” Posterior lensectomy was done once AC depth has a sufficient space to avoid friction between lens and corneal endothelium

“Fig. 4. a” On the first day after surgery, AS-OCT revealed thickened CCT to 814 μ m.

“Fig. 4. b” After three weeks, AS-OCT showed normal AC depth after posterior lensectomy through 3-port pars plana vitrectomy and thickened CCT decrease to 600 μ m.

Authors' responses:

1. Manuscript guideline

Thank you for submitting your manuscript to Case Reports in Ophthalmology. Please, have a look at our template here: https://www.karger.com/Journal/Files/CaseReport_unstruc_num and follow the instructions. Thank you for your attention.

2. Ethical statement

Statement of Ethics is incomplete: As detailed on our author guidelines studies involving human subjects must have been performed with the approval of an appropriate ethics committee and with appropriate participants' informed consent in compliance with the Helsinki Declaration. In the ethics statement, please specify the name of the ethics committee or other relevant authority who approved the study protocol and provide the reference number where appropriate.

Please consider the following template addition to your ethics statement:

"This study protocol was reviewed and approved by [insert committee name and affiliation], approval number [XXX]."

- If ethics approval was not required in accordance with local or national guidelines, or if the study has been granted an exemption from requiring ethics approval, please state this in the ethics statement section of the manuscript and include the name of the ethics committee who made that decision.

Please consider the following template addition to your ethics statement:

"This study protocol was reviewed and the need for approval was waived by [insert committee name and affiliation]."

3. Submission statement

Please upload a hand-signed Submission Statement, signed by all authors, available for download here: <https://www.karger.com/Journal/Files/SubmissionStatementCOP>

AUTHORS' RESPONSE

Date: 12 April 2021

Dear Editor,

Case Reports in Ophthalmology

Thank you very much for your advices to our previous manuscript. In order to make improvements to these suggestions, here we attach the following answers to fulfill the editor's and reviewers' recommendation (from three consecutive emails: 9 March, 26 March and 9 April 2021).

We submit a revised version and have already supply the following items:

1. Marked-up version with line numbering and all changes visible (Highlighted in yellow).
2. Clean copy without visible track changes and no line numbering.
3. Point-by-point reply to all queries raised by the reviewers (page, line, and paragraph).
4. All figures
5. Supplementary materials: SCARE checklist, informed consent letter, ethics approval letter, and Enago's grammar editing letter.
6. Response to reviewer letter (1) and (2).

If you have any other comments, please do not hesitate to contact us.
Thank you.

Sincerely,

Andi Muhammad Ichsan

Email date : 9 March 2021

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Email date : 24 March 2021

- Please, have a look at our template and follow the instructions.

Comment :

We have rechecked the writing structure based on the guidelines and also we have fixed and resubmitted it to the journal website.

- Please reupload all Figures/tables in the latest revision.

Comment :

We have reuploaded the latest version of all Figures to the journal website.

- **Statement of Ethics is incomplete: As detailed on our author guidelines studies involving human subjects must have been performed with the approval of an appropriate ethics committee and with appropriate participants' informed consent in compliance with the Helsinki Declaration. In the ethics statement, please specify the name of the ethics committee or other relevant authority who approved the study protocol and provide the reference number where appropriate.**

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Please consider the following template addition to your ethics statement:

"This study protocol was reviewed and the need for approval was waived by [insert committee name and affiliation]."

Comment :

We have added the information regarding committee name, affiliation and ethical license number that given to this manuscript.

"This study protocol was reviewed and approved by the Ethics Committee of Medical Research, Faculty of Medicine, Hasanuddin University. Approval number: 208 / UN4.6.4.5.31 / PP36 / 2021.

(Page 7, paragraph 2, line 166-168).

- Please upload a hand-signed Submission Statement, signed by all authors, available for download here: <https://www.karger.com/Journal/Files/SubmissionStatementCOP>

Comment :

We have reuploaded the latest version of our submission statement to the journal website (hand signed by all authors based on Karger guidelines).

Email date : 9 April 2021

Thank you for submitting your manuscript to Case Reports in Ophthalmology. Please, have a look at our template here: https://www.karger.com/Journal/Files/CaseReport_unstruc_num and follow the instructions. Thank you for your attention.

Comment :

We have rechecked the writing structure based on the guidelines and follow the instructions, also we have fixed and resubmitted it to the journal website.

Also, after an initial check we noted the following is missing or needs to be corrected from your manuscript file:

- **Response to reviewers: Please provide the proper response to reviewer file. All Reviewer comments/critics need to be addressed in the response to reviewer letter and the page and line number of the addressings should also be provided.**

Comment:

To fulfill all reviewer comments and critics, we have answered point by point and provided the page and line number in response to reviewer letter.

RESPONSE TO REVIEWER (1)

Reviewer 1 report: Line 110 "The most recent ophthalmology examination revealed remarkable improvement in visual acuity of 20/50, with an IOP of 18 mmHg, clear cornea, normal AC depth (Van Herick Grade IV) and central IOL position."

Please add the time of last examination to determine follow up of the case report.

Comment :

(Page ?, paragraph ?, line ?).

RESPONSE TO REVIEWER (2)

Reviewer 2 report:

Grammar Amendments needed

1. Line 30 - Correct the grammar- "was" not needed

Comment :

ok

(Page ?, paragraph ?, line ?).

2. Line 41/42 - what is unprofound AC depth.

Comment :

ok

(Page ?, paragraph ?, line ?).

3. Line 45 - Define intumescent cataract. An intumescent cataract will not have a vision of 20/60. The submitted images do not reveal intumescent cataract.

Comment :

ok

(Page ?, paragraph ?, line ?).

4. Line 47/48 - Please modify -"obstruction of aqueous flow between the pupil and anterior capsule".

Comment :

ok

(Page ?, paragraph ?, line ?).

5. Line 59 - instead of sluggish pupil nondilating pupil may be more appropriate

Comment :

ok

(Page ?, paragraph ?, line ?).

6. What is the IOP and gonioscopic angle status of the right eye? A note on the management of the right eye will be nice to add.

Comment :

ok

(Page ?, paragraph ?, line ?).

7. Line 88 - Was the trabeculectomy performed with the aid of antimetabolites?

Comment :

-

(Page ?, paragraph ?, line ?).

8. Line 92/93/94 - What were the differential diagnosis entertained when the status post filter AC was found to be flat with high IOP?

Comment :

ok

(Page ?, paragraph ?, line ?).

8. What was the gauge of the vitrectomy ? Was it 23 G? Was the 67 year old nucleus amenable to the lensectomy with the vitrector?

Comment :

ok

(Page ?, paragraph ?, line ?).

9. Line 120

Comment :

(Page ?, paragraph ?, line ?).

10 Line 121

Comment :

(Page ?, paragraph ?, line ?).

11. Line 122

Comment :

(Page ?, paragraph ?, line ?).

12. Line 133

Comment :

(Page ?, paragraph ?, line ?).

13. Though the introduction refers to cataract intumescence being the cause of phacomorphic glaucoma the case report deals with a non-intumescent cataract (as apparent in the attached figures). Hence it appears to be only a case of PACG. A prep vision of 20/60 (after medical control of IOP) is also not compatible with the presence of an intumescent cataract.

Comment :

(Page ?, paragraph ?, line ?).

14.

- The case report appears to make a pitch for a routine pars plana approach to manage cataracts in a PACG/shallow AC situation when a much simpler and more effective anterior approach is available.
- There is no mention about the gauge of the vitrectomy cutter (23G/20G?). Pars plana lensectomy and phaco fragmentation requires a well-trained specialist who may not be readily available in parts of the world where phacomorphic glaucoma due to intumescent cataract is more common. In hard cataract situations pars plana lensectomy may be ineffective and phaco fragmentation may have to be resorted to.
- It often becomes a blind procedure and the 2-clock hour zonular dialysis mentioned appears to be iatrogenic. Hence this technique as such ought not to be recommended as technique of first choice.
- The detailed status of the fellow eye has not been described. It is always important to know the fellow eye status and management strategy in angle closure disease.
- How hard was the nucleus in the left eye needs a mention? There ought to be suggested differential diagnosis for the post trab flat AC with raised IOP. Malignant glaucoma may have to be ruled out in this setting.
- There is no description of the type of IOL that was implanted as a secondary procedure.
- There should be an explanation why there was no visual recovery beyond 20/50 after secondary IOL implantation.
- Language correction is also called for in areas mentioned in the comments to authors section.

Comment :

(Page ?, paragraph ?, line ?).

AUTHOR'S RESPONSE

Date: 19 March 2021

Dear Editor,

Case Reports in Ophthalmology

Thank you very much for your advices to our previous manuscript. In order to make improvements to these suggestions, here we attach the following answers to fulfill the editor's and reviewers' recommendation.

We submit a revised version and have already supply the following items:

1. Marked-up version with line numbering and all changes visible (Highlighted in yellow).
2. Clean copy without visible track changes and no line numbering.
3. Point-by-point reply to all queries raised by the reviewers (page, line, paragraph, etc.).

There is no change in our manuscript title.

If you have any other comments, please do not hesitate to contact us.
Thank you.

Sincerely,

Andi Muhammad Ichsan

Reviewer 1 report:

Line 54: "...to prepare the patient for laser iridotomy, which relieves the pupillary block". Could the author add a reference as to the relevance of this in the setting of phacomorphic angle closure?

Comment :

We couldn't find a relevant reference of laser iridotomy to relieve the pupillary block in phacomorphic angle closure. However, we found a reference related to laser iridotomy which eliminating pupillary block in angle closure glaucoma. As far as we concern, phacomorphic angle closure has similar pathologic condition with angle closure glaucoma.

Based on reviewer's comment, we have cited a reference by Nolan WP, Foster PJ, Devereux JG, Uranchimeg D, Johnson GJ, Baasanhu J. YAG laser iridotomy treatment for primary angle closure in east Asian eyes. Br J Ophthalmol. 2000;84(11):1255-9. (Page 3, paragraph 1, line 49). This reference mentioned in the introduction part, "Iridotomy acts by eliminating relative pupil block which is one mechanism underlying the development of angle closure", and another statement in the discussion part, "As pupil block is eliminated by an iridotomy, ciliolenticular block or peripheral iris crowding are presumed to play a part in these pressure raises".

Line 55: "Longer duration of increase IOP" should be "Longer duration of increased IOP".

Comment :

We have changed the sentence, "Longer duration of increase IOP" into "Longer duration of increased IOP". (Page 3, paragraph 1, line 50).

Line 65: "may resulted as suprachoroidal haemorrhage" should be "may result in suprachoroidal haemorrhage".

Comment :

We have changed the sentence, "may resulted as suprachoroidal haemorrhage" into "may result in suprachoroidal haemorrhage". (Page 3, paragraph 1, line 60).

Line 69: "is unable to be safely performed" should be "cannot be safely performed".

Comment :

We have changed the sentence, "is unable to be safely performed" into "cannot be safely performed". (Page 3, paragraph 4, line 64).

Language editing is advised for the entire manuscript.

Comment :

We have done an extensive language editing by ENAGO through this link: <https://www.karger.com/Resources/Authors>.

Line 80: "while an extremely high IOP was found in the left eye". How much pressure was measured?

Comment :

The IOP was measured by Topcon Medical Systems CT-80 non-contact computerized tonometer. The result was "error", means that IOP was greater than 60 mmHg. (Page 4, paragraph 1, line 76-77).

Line 95: "AS-OCT revealed lenticulo-irido-endothelial touch (shown in Fig.2) and thickened CCT to 814 µm." What was the pressure at this point?

Comment :

The IOP was measured by Topcon Medical Systems CT-80 non-contact computerized tonometer. The result was "error", means that IOP was more than 60 mmHg. (Page 4, paragraph 2, line 91-92).

Line 111: "latest ophthalmology examination" What was the state of the filtering bleb then? Was the patient on any medications?

Comment :

On the latest ophthalmology examination, based on Indiana Bleb Appearance Grading Scale (IBAGS) system, showed flat bleb and from the OCT revealed scleral fibrotic. Subjectively, the patient also stated that there was a significant improvement after surgery both of visual acuity and any relevant symptoms without any glaucoma medications. (Page 5, paragraph 2, line 110-113).

Line 138: "Cataract extraction in phacomorphic angle closure had uneventful prediction of intraoperative complications." This sentence needs to be rephrased.

Comment :

The sentence of "Cataract extraction in phacomorphic angle closure had uneventful prediction of intraoperative complications" Has been rephrased into "Cataract extraction in phacomorphic angle closure had unpredictable difficulties intraoperatively". (Page 6, paragraph 1, line 139-140).

Reviewer 2 report:

Dear Authors, I appreciate your work and I agree with the posterior approach indication for treatment of angle closure diseases due to phacomorphic angle closure. The only doubt I have is the appropriateness of having performed a trabeculectomy to lower the ocular pressure instead of immediately surgery on the lens avoiding having a malignant glaucoma from complete closure of the angle and wasting time for lowering intraocular pressure. Can you explain your surgical decision please?

Comment :

Thank you for your appreciation and your advice. Our consideration of having trabeculectomy instead of directly performed vitrectomy and posterior lensectomy was to regain normal anatomical structures of the anterior segment and then continue cataract extraction with conventional anterior approach phacoemulsification as the primary treatment for phacomorphic angle closure. Unfortunately, the result was failed to meet the normal condition.

Furthermore, vitrectomy and posterior lensectomy procedures were lack of strong references as primary treatment for phacomorphic angle closure. Based on this case, we share our experience to give a new insight for readers that posterior approach could be an option with satisfying result in the treatment phacomorphic angle closure without wasting time to do laser iridotomy or trabeculectomy.

Dear
Dr. Marta Raposo Barrero
Editorial Office, Case Reports in Ophthalmology

Thank you very much for your kind advices on our manuscript. Here we sent you the authors' answer regarding to the manuscript revision:

- **Please, have a look at our template and follow the instructions.**

Comment :

We have rechecked the writing structure based on the guidelines and also we have fixed and resubmitted it to the journal website.

- **Please reupload all Figures/tables in the latest revision.**

Comment :

We have re-uploaded the latest version of all Figures to the journal website.

- **Statement of Ethics is incomplete: As detailed on our author guidelines studies involving human subjects must have been performed with the approval of an appropriate ethics committee and with appropriate participants' informed consent in compliance with the Helsinki Declaration. In the ethics statement, please specify the name of the ethics committee or other relevant authority who approved the study protocol and provide the reference number where appropriate.**

Please consider the following template addition to your ethics statement:

"This study protocol was reviewed and approved by [insert committee name and affiliation], approval number [XXX]."

- If ethics approval was not required in accordance with local or national guidelines, or if the study has been granted an exemption from requiring ethics approval, please state this in the ethics statement section of the manuscript and include the name of the ethics committee who made that decision.

Please consider the following template addition to your ethics statement:

"This study protocol was reviewed and the need for approval was waived by [insert committee name and affiliation]."

Comment :

We have added the information regarding committee name, affiliation and ethical license number that given to this manuscript.

" This study protocol was reviewed and the need for approval was waived by the Ethics Committee of Medical Research, Faculty of Medicine, Hasanuddin University. Approval number: 208/UN4.6.4.5.31 /PP36/2021.

- **Please upload a hand-signed Submission Statement, signed by all authors, available for download here: <https://www.karger.com/Journal/Files/SubmissionStatementCOP>**

Comment :

We have reuploaded the latest version of our submission statement to the journal website (hand-signed by all authors based on Karger guidelines).

If you have any other comment, please do not hesitate to inform us. Thank you.

Sincerely,
Andi Muhammad Ichsan

SCARE Checklist			
Topic	Item	Checklist item description	Page Number
Title	1	The words "case report" should appear in the title. The title should also describe the area of focus (e.g. presentation, diagnosis, surgical technique or device or outcome).	1
Key Words	2	3 to 6 key words that identify areas covered in this case report (include "case report" as one of the keywords).	2
Abstract	3a	Introduction — Describe what is unique or educational about the case (i.e. what does this work add to the surgical literature, and why is this important?).	2
	3b	Presenting complaint and investigations – describe the patient's main concerns and important clinical findings.	
	3c	The main diagnoses, therapeutics interventions, and outcomes.	
	3d	Conclusion — Describe the main lessons to "take-away" from this case study	
Introduction	4	Background – summarise what is unique or educational about the case. Give reference to the relevant surgical literature and current standard of care. The background should be referenced, and 1–2 paragraphs in length.	3
Patient Information	5a	Demographic details – include de-identified demographic details on patient age, sex, ethnicity, occupation. Where possible, include other useful pertinent information e.g. body mass index and hand dominance.	4-5
	5b	Presentation – describe the patient's presenting complaint (symptoms). Describe the patient's mode of presentation (brought in by ambulance or walked into Emergency room or referred by family physician).	
	5c	Past medical and surgical history, and relevant outcomes from interventions	
	5d	Other histories – Describe the patient's pharmacological history including allergies, psychosocial history (Drug, smoking, and if relevant, accommodation, walking aids), family history including relevant genetic information.	
Clinical Findings	6	Describe the relevant physical examination and other significant clinical findings. Include clinical photographs where relevant and where consent has been given.	4
Timeline	7	Inclusion of data which allows readers to establish the sequence and order of events in the patient's history and presentation (using a table or figure if this helps). Delay from presentation to intervention should be reported.	4
Diagnostic Assessment	8a	Diagnostic methods – describe all investigations taken to arrive at methods: physical exam, laboratory testing, radiological imaging, histopathology.	4-5
	8b	Diagnostic challenges – describe what was challenging about the diagnoses, where applicable, for example access, financial, cultural.	
	8c	Diagnostic reasoning – Describe the differential diagnoses and why they were considered.	
	8d	Prognostic characteristics when applicable (e.g. tumour staging or for certain genetic conditions). Include relevant radiological or histopathological images in this section.	
Therapeutic Intervention	9a	Pre-intervention considerations – if there were patient-specific optimisation measures taken prior to surgery or other intervention these should be included e.g. treating hypothermia/hypovolaemia/hypotension in a burns patient, Intensive care unit treatment for sepsis, dealing with anticoagulation/other medications, etc.	4-5
	9b	Interventions – describe the type(s) of intervention(s) deployed (pharmacologic, surgical, physiotherapy, psychological, preventive). Describe the reasoning behind this treatment offered. Describe any concurrent treatments (antibiotics, analgesia, anti-emetics, nil by mouth, Venous thrombo-embolism prophylaxis, etc). Medical devices should have manufacturer and model specifically mentioned.	
	9c	Intervention details – describe what was done and how. For surgery include details on; anaesthesia, patient position, use of tourniquet and other relevant equipment, prep used, sutures, devices, surgical stage (1 or 2 stage, etc). For pharmacological therapies include information on the formulation, dosage, strength, route, duration, etc. Include intra-operative photographs and/or video or relevant histopathology in this section. Degree of novelty for a surgical technique/device should be mentioned e.g. "first in human".	
	9d	Who performed the procedure - operator experience (position on the learning curve for the technique if established, specialisation and prior relevant training). For example, "junior resident with 3 years of specialised training"	
	9e	Changes – if there were any changes in the interventions, describe these details with the rationale.	
Follow-up and Outcomes	10a	Follow-up – describe 1) When the patients was followed up. 2) Where. 3) How (imaging, tests, scans, clinical examination, phone call), and 4) whether there were any specific post-operative instructions. Future surveillance requirements - e.g. imaging surveillance of endovascular aneurysm repair or clinical exam/ultrasound of regional lymph nodes for skin cancer.	5
	10b	Outcomes - Clinician assessed and (when appropriate) patient-reported outcomes (e.g. questionnaire details). Relevant photographs/radiological images should be provided e.g. 12 month follow-up.	
	10c	Intervention adherence/compliance - where relevant how well patient adhered to and tolerated their treatment. For example, post-operative advice (heavy lifting for abdominal surgery) or tolerance of chemotherapy and pharmacological agents	
	10d	Complications and adverse events – all complications and adverse or unanticipated events should be described in detail and ideally categorised in accordance with the Clavien-Dindo Classification. How they were prevented, diagnosed and managed. Blood loss, operative time, wound complications, re-exploration/revision surgery, 30-day post-op and long-term morbidity/mortality may need to be specified. If there were no complications or adverse outcomes this should also be included.	
Discussion	11a	Strengths – describes the strengths of this case	5-6
	11b	Weaknesses and limitations in your approach to this case. For new techniques or implants - contraindications and alternatives, potential risks and possible complications if applied to a larger population. If relevant, has the case been reported to the relevant national agency or pharmaceutical company (e.g. an adverse reaction to a device)	
	11c	Discussion of the relevant literature, implications for clinical practice guidelines and any relevant hypothesis generation.	
	11d	The rationale for your conclusions.	
	11e	The primary "take-away" lessons from this case report.	
Patient Perspective	12	When appropriate the patient should share their perspective on the treatments they received.	5
Informed Consent	13	Did the patient give informed consent for publication? Please provide if requested by the journal/editor. If not given by the patient, explain why e.g. death of patient and consent provided by next of kin or if patient/family untraceable then document efforts to trace them and who within the hospital is acting as a guarantor of the case report.	7
Additional Information	14	Conflicts of Interest, sources of funding, institutional review board or ethical committee approval where required	7