

Peer Review File

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Reviewer A

Title is incorrect

We don't know if endophthalmitis was caused by foreign body or poorly repaired corneal wound

It was not chronic uveitis. She had acute presentation in September 2019

Abstract: Line 19-20. Was it an inflammatory response, or endophthalmitis? From the title and discussion, it seems that it was acute endophthalmitis.

Reply1: According to your suggestion, we changed the title to "**A Case of Infectious Endophthalmitis Misdiagnosed as Uveitis**". We speculated that endophthalmitis may be caused by poor repair of corneoscleral wound, and the pathology of the removed anterior chamber exudate was suppurative inflammation. At the beginning, the reason for uveitis was that the expert group showed chronic inflammatory changes according to the patient's eye manifestations and the removal of corneoscleral granuloma, and the anterior chamber exudates, corneoscleral granuloma, iridectomy specimens showed negative bacterial and fungal culture.

Change in the text: title

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Line 21. Change "aseptic endophthalmitis" to "noninfectious uveitis". Differentiation between infectious and noninfectious inflammatory reaction is not always possible.

Reply2: Modified.

Change in the text: Line 16-17

Case report

I am not sure if antibiotic ointment in the anterior chamber was linked to endophthalmitis. The patient had a leaky wound that could have allowed pathogens to enter the eye.

Line 43. What was the nature of the injury? "Nail" How? Was it a nail and hammer? Usually, in those cases metal fragments are sterile due to heat generated from impact with a hammer.

Reply3: Modified. It's a nail and hammer. It's nails and hammers that pop into the eye. Intraoperative foreign bodies in the iris were not wrapped and organized, and postoperative pathological results showed chronic inflammatory reaction.

Change in the text: Line 34

Line 45. CT scan showed no intraocular foreign body.

Line 46. What drugs were injected in the anterior chamber? Any cultures sent from the anterior chamber?

Reply4: Cefuroxime sodium was injected into the anterior chamber without culture.

Change in the text:Line 37

Line 51. Eleven days after repair. Was “White granuloma” in the anterior chamber or only on the cornea, like infectious keratitis. Was it cultured?

Reply5:From UBM at 7-8 o'clock, we can see that white granuloma exists in the limbus of cornea, where the anterior iris adheres to the cornea. It is mentioned that there is no obvious inflammatory reaction in the anterior chamber. At the same time, iris foreign bodies can be seen. The diagnosis of keratitis was not considered.

Change in the text:Line 42

Line 53-55. The authors are referring to two separate entities, ophthalmic ointment (at 1 O'clock) and residual foreign body (7 O'clock). Please give a separate sentence for each.

Figure 1 C. Please mark the “speckled strong echo” with an arrow. “Shallow detachment of the ciliary body and anterior choroid are not visible in the image and should be removed from the legend.

Reply6:Modified.Marked spot hyperechoic, superficial detachment of ciliary body and anterior choroid removed . Change in the text:Line 44,Line219

Line 59. (one month after initial repair). No uveitis or inflammation noted until and even on this point. What was her vision ? I don't think the authors are correct in calling this “chronic uveitis.”

Reply7:The patient had no reaction before redness, eye pain and vision loss, and there was no obvious inflammatory reaction in the eyes. According to the ocular signs and anterior chamber reaction, the clinical group tends to consider uveitis caused by eye ointment. Diagnosis modified

Change in the text:

Line 67. “ red eye, eye pain, and vision loss for one day” is an acute presentation. It is not sterile inflammation. This case should have been treated as acute endophthalmitis on September 16.

Line 76. “Visible fibrinous exudates” indicate an infectious process.

Line 77. Replace light reflection with absence of red reflex. (same thing in legend)

Reply8: Conjunctival congestion has been described

Change in the text:Line 64

Line 78. “Unclear fundus” should be replaced with “no fundus details were visible.”

Reply9: Modified

Change in the text:Line 67-68

Line 81. B scan ultrasonography showed vitreous opacities (not visible dense light spots)

Reply10: Modified

Change in the text:Line 70

Line 87. Surgical intervention was not done until September 19th. Delay of treatment by three days in a case of acute infectious endophthalmitis is not acceptable.

Reply11: Yes, we intervened on the third day. Before the operation, we received systemic and local hypotension therapy, subconjunctival injection of tobramycin, dexamethasone, systemic levofloxacin and ceferlian antibiotics.

Change in the text:Line 74

Line 88. What is lens bite resection? Was it a lensectomy?

Reply12: Thanks , modified.

Change in the text:Line 78

Line 90. Why gas-liquid exchange? Why not intravitreal antibiotics or antifungals?

Reply13: At that time, according to the treatment of uveitis, vitrectomy and conventional gas-liquid exchange were carried out without intravitreal injection.

Change in the text:Line 78

Line 95. Any culture results? Did you obtain cultures from the anterior chamber and vitreous?

Reply14: Filamentous fungi were found in the aqueous humor of the patient. This result was reported on September 27, which may be due to the long time of fungal culture rather than the aqueous humor extracted on September 27. The misunderstanding has been corrected.

Change in the text:Line 86-87 , 92-93

Line 97. What hormonal treatment for endophthalmitis?

Reply15: Tobramycin, dexamethasone eye drops, eye ointment and levofloxacin eye drops were used locally. Systemic use of levofloxacin and ceferlian antibiotic anti infection treatment, dexamethasone intravenous drip for three days, after discharge oral methylprednisolone 40 mg for six days.

Change in the text:Line 74

Line 100. (September 27) Fungal culture came back positive 8 days after being obtained. That is unusual. The patient never received antifungal therapy. Recovery from fungal endophthalmitis caused by a filamentous fungus without any antifungal therapy is also unusual. Was it a contaminant? Did the same thing grow from the vitreous? Were fungal hyphae seen on the resected iris specimen on histopathological examination? Any cultures obtained from limbal granuloma?

Reply16: In fact, we have also encountered cases of improvement after filamentous fungal surgery without antifungal treatment. The reason for improvement may be that the focus is removed and vitrectomy and vitreous lavage are performed. The exudate of anterior chamber, granuloma of corneosclera and iridectomy specimens were negative for bacteria and fungi.

Change in the text:Line 85-86

Limbal granuloma was noted 11 days after the initial repair. It is unlikely that it was caused by a filamentous fungus. Otherwise, in the absence of antifungal therapy, it would have been expected to grow and destroy the eye.

Reply17: That's why we think about uveitis.

Discussion

Line 113. "Intraocular inflammation appeared more than two months after surgery." So, there is no chronic endophthalmitis here. What happened on September 16 was an acute event.

Reply18: Thank you for your comments. We have revised the diagnosis.

Change in the text:Line 111

Line 168. The statement is incorrect. Many cases of endophthalmitis do not have hypopyon (correct term compared to empyema) but vitritis. According to EVS, 20% cases of post-cataract surgery endophthalmitis didn't have a hypopyon. Vitreous inflammation is the hallmark of endophthalmitis. Hypopyon can be sterile in cases of bacterial keratitis.

Reply19: Thank you for your comments. We have revised the relevant expressions in this article.

Change in the text:Line 154-157

Line 176-179 are irrelevant as those tests were not performed on this patient.

Reply20: The section has been deleted

Line 189. There is no need to use eye ointment after anterior segment surgery.

Reply21: Clinically, the eyes need to be covered for a short time after anterior surgery, such as cataract surgery and corneoscleral wound repair. At this time, we will use eye ointment.

It is very hard to recommend this paper for publication.

Reply22: Thank you very much for your comments, hope to continue to exchange and learn.

Reviewer B

There are a few questions that I would like the author to clarify:

1. The suspected foreign body left within the eye is highly suspicious of a metallic substance (from the hyperechoic UBM scan and history of the trauma), and your team doesn't remove it due to the size and difficult to remove. If the team planned to remove it in an earlier stage can we prevent this endophthalmitis?

-the reason your team think this is more likely to be uveitis. However, how do you explain the hyperechoic UBM

-I think this is an important take-home message for readers: to remove metallic foreign body regardless of their size

Reply 1:

1. Postoperative pathological examination showed anterior chamber exudates, purulent inflammation of the resected iris, and chronic inflammation of the corneal limbus tissue.

Bacterial and fungal staining results of the pathological smears of the exudates,iris and corneal limbus tissue were negative.

2. The cases patient was suspected of having uveitis in the right eye rather than infective endophthalmitis for three reasons. First, the intraocular inflammation appeared more than two months after surgery to repair foreign body injury and there was no empyema in the anterior chamber or proliferation of fungi or bacteria in the vitreous cavity. Second, UBM showed no obvious inflammatory exudation in the anterior chamber of the right eye at 7 o'clock, and the fibrous exudate in the anterior chamber was located at 4–5 o'clock, which suggested uveitis caused by eye ointment. Third, the eye ointment dissolved progressively, blocking the trabecular meshwork, resulting in aggravation of the chronic inflammatory response and progressively increasing intraocular pressure. Thus, infectious endophthalmitis was misdiagnosed as uveitis. (Line 104-115)

3. Considering that the small size foreign bodys are moving,hidding and invisible under a microscope,it is difficult to remove during surgery.As well the operation may destruct structures of iris , corneal and anterior chamber without obvious inflammation , and even the risk of foreign body falling into vitreous. The clinical team thus decided to continue close observation after consultation. (new applied)

4. It is not clear whether the removal of foreign bodies will cause serious inflammatory reaction. Last time, it was discussed that the high-speed metal foreign bodies should be sterile. At present, there is no obvious inflammatory reaction in the eye.

Thank you for your question , it causes us to think more and improve the expression of the article.Hope further communication, also hope the article can be accepted .

Changes in the text: Ling 56-61

2. Any intravitreal antibiotic injection is given?

-it was not stated in the report (Line 84-86)

Reply 2: There is no intravitreal antibiotic injection given.

Changes in the text: Line 85-86

3. What is the hormonal therapy that your team prescribed for the patient? (line 99)

Reply 3: Methylprednisolone 80 mg intravenous drip for 6 days.

Changes in the text: Line 93

4. Kindly attach a CARE Checklist for your case report.

Reply 4: Please check in the attachment. Thank you.

5. Kindly amend the arrow in figure 2B.

Reply 5: Modified

6. If authors are able to draw a table to distinguish sterile postoperative endophthalmitis and infective uveitis/endophthalmitis, it will be easier for the reader to grasp the important information.

Reply 6: Because there is no consensus support, it is difficult to consult different literature and retrospective analysis, and it is difficult to list identification forms. I hope to continue communication later, thank you.