

Case Report

A BLINDING NEEDLE

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ARTICLE INFO

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Received:
April 2022
Accepted for publication:
May 2022

Keywords:

TCM;
acupuncture ocular infection;
pan-ophthalmitis.

ABSTRACT

Acupuncture, a practice rooted in traditional complementary medicine (TCM), involves the insertion of thin needles into the skin. It has been proposed as an adjunct treatment for optic nerve and retinal diseases. However, there have been documented cases of ocular infections, including cellulitis and endophthalmitis, associated with acupuncture. In this report, we present a case of pan-ophthalmitis, an infection affecting the entire eyeball, that occurred following acupuncture treatment. The purpose of this report is to highlight the risks associated with TCM treatments, which are often overlooked or insufficiently communicated to patients. Tragically, the outcome for this patient was blindness, emphasizing the importance of informed decision-making when considering acupuncture as a treatment option.

CASE REPORT

A 76-year-old gentleman with underlying chronic obstructive pulmonary disease presented to our Ophthalmology Clinic for follow-up on bilateral advanced glaucoma, which was being managed with triple antiglaucoma medications, and allergic conjunctivitis. The patient is clinically blind in his left eye due to decompensated cornea caused by left herpetic keratitis. He has a history of multiple eye surgeries, including bilateral trabeculectomy with mitomycin C, bilateral cataract extraction with intra-ocular lens implantation, and left (OS) trans-scleral cyclophotocoagulation.

The patient visited our clinic complaining of right eye (OD) pain with discharge persisting for 8 days. He also experienced reduced vision and periorbital swelling. No fever was reported. Upon further inquiry, the patient revealed that a week prior to the onset of symptoms, he had undergone traditional acupuncture. He mentioned that four needles were inserted in his right periorbital area during the procedure. The symptoms began on the same day as the acupuncture session. The following day, the patient returned to the acupuncturist, who then provided unlabeled antiseptic eyedrops, as depicted in Figure 1. However, the symptoms continued to worsen. Due to fear and lack of transportation, the patient did not seek medical treatment until the eighth day following the acupuncture session.

Upon examination, the vision of the right eye was limited to perceiving light only, while there was no perception of light in the left eye. The right eyelids appeared swollen, and the conjunctiva was congested. Examination of the right cornea revealed corneal melting with thinning and descemetocoele, as shown in Figures 2 and 3. A negative Seidel's test was obtained. The anterior chamber was not visible due to the hazy cornea caused by decompensation. Evaluation of the extraocular muscles showed a general reduction in ocular movements, with adduction at 0, elevation and depression at -1, and abduction at -2. No fundus view was attainable.

Examinations of the left eye were consistent with previous findings of advanced glaucoma. The anterior segment displayed features of a decompensated cornea, as depicted in Figure 4. Fundus examination revealed a pale, fully cupped disc. Based on these findings, the patient was diagnosed with infective panophthalmitis in the right eye and was subsequently admitted for further management.

Ultrasonography of the right eye revealed the presence of large loculations in the vitreous, as depicted in Figures 5 and 6. Subsequently, vitreous tapping was performed, and the culture results indicated the growth of *Pseudomonas aeruginosa*, as shown in Figure 7. Other investigations did not reveal any significant findings.



Figure 1 : Unlabelled topical eyedrop given to patient upon discharge from acupuncture.

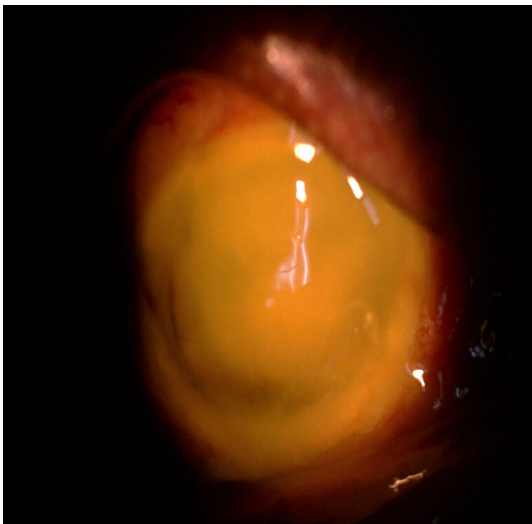


Figure 2: Anterior segment photograph of the right eye; diffuse keratitis with dense infiltrates.

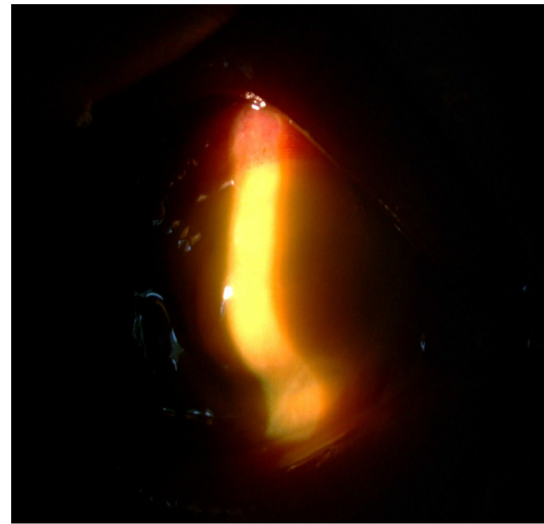


Figure 3: Severe thinning in the inferior cornea with descemetocoele seen at the central cornea of the right eye.

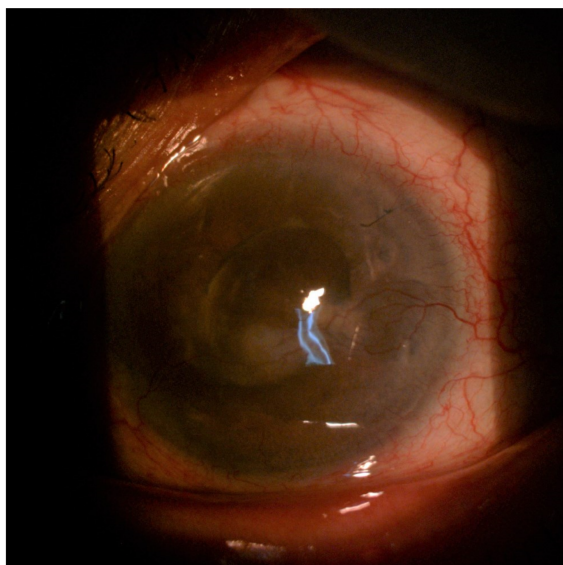


Figure 4 : Anterior Segment examination of the left eye; decompensated cornea, otherwise no signs of infection.

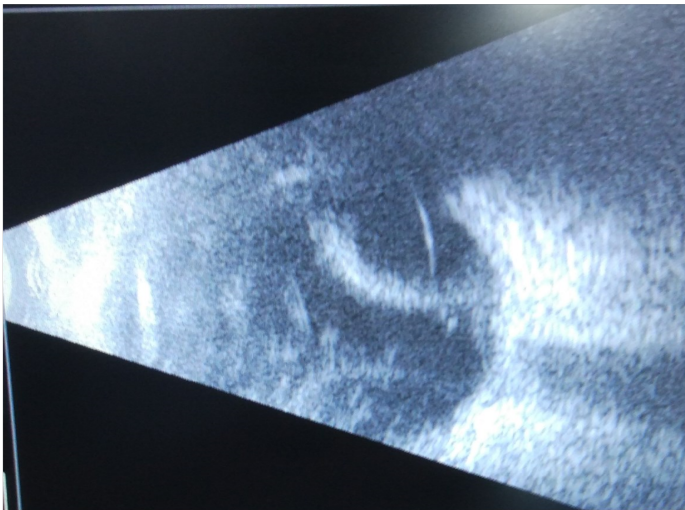


Figure 5: Ultrasonography of the right eye; loculations in the vitreous with dense vitritis.

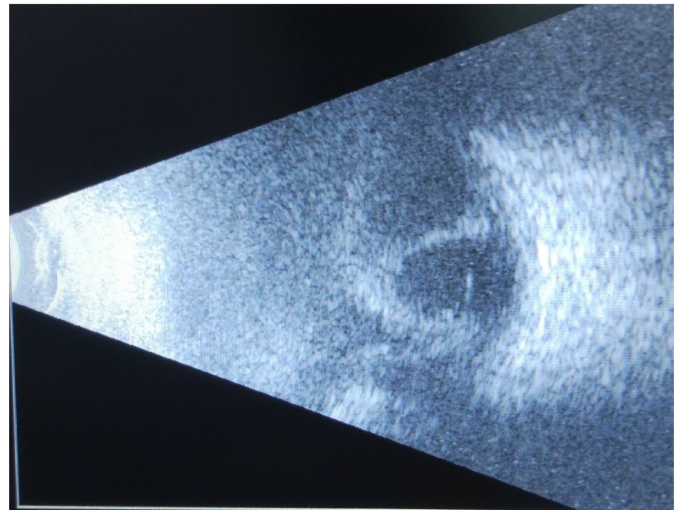


Figure 6: Ultrasonography of the right eye; loculations in vitreous.

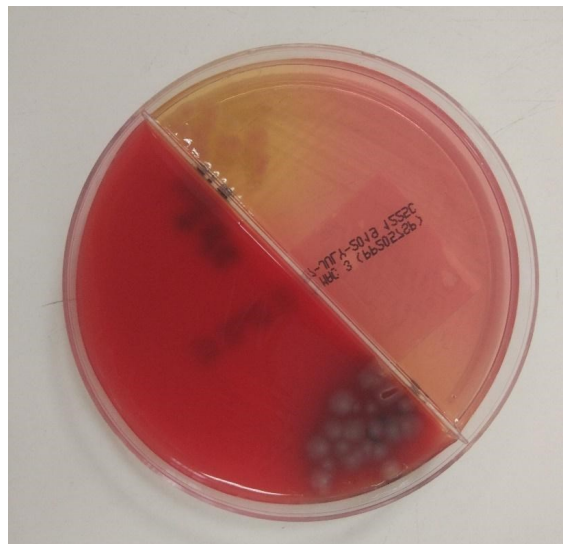


Figure 7: Bacterial culture from vitreous tap specimen revealed *Pseudomonas sp.*

Following the diagnosis, the patient was managed as an in-patient. Multiple intravitreal injections of ceftazidime (2mg/0.1ml) and vancomycin (1mg/0.1ml) were administered. Additionally, intensive medical treatment was initiated, consisting of ceftazidime (5%) and gentamicin (0.9%) eye drops, along with systemic ciprofloxacin. The patient received intravenous ciprofloxacin at a dosage of 750mg twice daily for a duration of two weeks.

Despite the aggressive treatment administered over a period of 10 days, the patient's eye condition continued to worsen, necessitating the decision to proceed with evisceration.

DISCUSSION

The morbidity experienced by this patient may be attributed to a lack of understanding regarding the importance of sterility and infection control within the traditional complementary medicine (TCM)

community. Although efforts were made to discharge the patient with antiseptic eye drops, it is crucial to emphasize that the efficacy of antiseptic eye drops relies on a sterile preparation. In this case, the preparation and storage of the mentioned eye drops raised concerns about their sterility. It is worth noting that the documented and reported possibility of gram-negative bacterial colonization of Povidone Iodine is known among the medical fraternity but may not be common knowledge within the TCM community [3].

Furthermore, it is important to highlight that despite the exploration and trial of acupuncture for glaucoma, there is currently no evidence supporting its efficacy in the treatment of glaucoma [4].

In 2010, Woo PCY published an article in BMJ discussing infections associated with acupuncture [2]. The study revealed a high prevalence of skeletal muscular and skin infections among acupuncture recipients. Additionally, LEE SY, in

2002, also documented cases of endophthalmitis related to acupuncture, with *Staphylococcus aureus* being commonly implicated [1].

In Malaysia, the government is currently taking steps towards the registration and licensing of Traditional Complementary Medical (TCM) practitioners. As part of this process, an investigation body has been established to address and investigate any complaints reported against TCM practitioners.

CONCLUSION

Establishing investigation bodies to address complaints and regulate the practice of TCM is an important step in safeguarding patient well-being. Overall, this case serves as a reminder for healthcare professionals, patients, and the TCM community to prioritize patient safety, adhere to proper infection control practices, and rely on evidence-based treatments in order to minimize risks and optimize patient outcomes.

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