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OPHTHALMOLOGY
Case Report

An Unusual Case of Ocular Aspergillosis after Evisceration: A Case Report

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Case Report

An 89 year old man presented to our department with right ocular pain, 2 months after undergoing an emergency evisceration at another institution. The patient had no history of any systemic illnesses. He recalled possible foreign body trauma whilst gardening a few days prior to the eye pain.

On examination, the eviscerated conjunctivo-scleral shell had a large central gape, and appeared not to have been sutured. There was a small area of crystalline creamy growth lying inferiorly within the exposed scleral shell (Figure 1).

Figure 1: *Right scleral shell with growth of Aspergillus.*

Swabs of this area grew Aspergillus Niger within 24 hours; sensitive to Amphotericin & Voriconazole There was no growth from the conformer.

A CT scan of the orbits showed patchy thickened sclera, with no radiological features to suggest orbital or sinus involvement (Figure 2).

After Microbiology consultation, the patient underwent an emergency scleral biopsy & debridement, which were sent for culture. The scleral shell was washed with amphotericin B after the debridement & patient commenced on 400 mg Oral Voriconazole, twice/day for 2 months. There was complete resolution of ocular pain & initial clinical signs, at one week postoperatively.

Two weeks after debridement, the patient re presented as an emergency, complaining of severe ocular pain. The sclera had patchy pigmented areas, which appeared necrotic without the presence of any discharge or growth. As the scleral biopsies had grown scanty Aspergillus Flavus, the patient underwent an emergency enucleation of the scleral remnant with an Amphotericin-B eye socket wash. Histology of the sclera showed very mild patchy chronic inflammatory infiltrate with no specific features to suggest a fungal infection and fungal organisms were not readily identified with special stains.

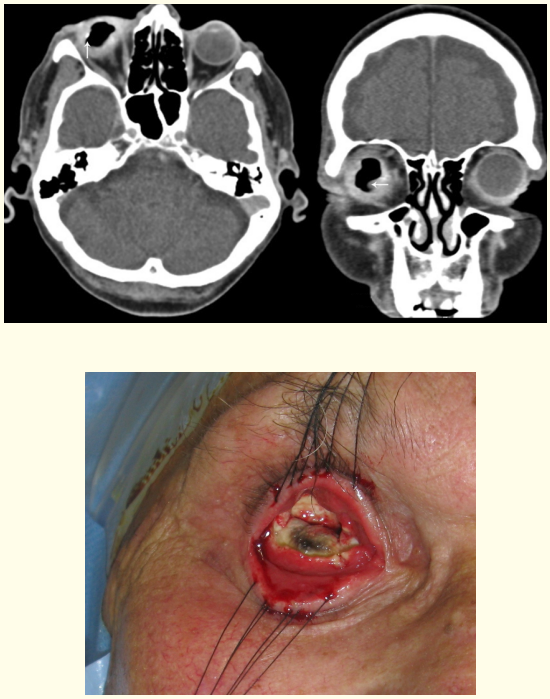

Figure 2: *CT scan of the orbits, showing patchy thickened right sclera (arrows).*

Two months after this procedure, the oral Voriconazole was reduced to 200 mg twice/day for 4 months. After a completing a 6 month course of oral Voriconazole, the patient remained symptom free with a healthy socket. As there were no clinical signs of recurrence, he was successfully fitted with an artificial eye.

Discussion

Aspergillus is a ubiquitous airborne fungus that can cause infection of the sinuses and mastoid with extension to contiguous orbital and intracranial compartments [1]. Orbital Aspergillosis is a rare condition and in both its invasive and non-invasive forms affects mainly the immunocompromised patients [1,2]. The presentation is usually with vague symptoms initially which progress to facial and ocular pain, proptosis, diplopia and loss of vision.

Our case shows an exogenous mechanism of ocular Aspergillosis, in an immune competent individual, with the potential to spread contiguously.

Our patient presented with severe ocular pain, which has been reported in literature as a salient clinical feature of Aspergillosis of the orbit and sinuses [1-4].

Examination showed signs of severe inflammation, discharge and the fungus growth within the scleral shell, with its typical creamy yellow appearance. The patient was found to have no involvement of the nose or sinuses of any form of invasive Aspergillosis and we believe that the scleral infection was exogenous.

The source of the fungus was most likely from the environment. Careful questioning did reveal the patient had rubbed his eyes whilst gardening.

As with the other reported cases of orbital aspergillosis in immunocompetent patients [1,2], our patient responded very well to debridement and oral voriconazole.

Evisceration and enucleation have their specific indications and each procedure has certain advantages over the other. Traditionally evisceration is the ideal procedure for management of endophthalmitis, in which sclera is preserved. Enucleation in contrast is a more invasive procedure requiring longer rehabilitation, with a potential for relatively poor prosthetic motility and cosmesis and is thus reserved for severe eye trauma, malignant ocular tumours, painful blind eye and panophthalmitis.

In Summary, our case is unusual, as it reports exogenous Aspergillosis infection in an immunocompetent patient within an eviscerated scleral shell. A traditional method to promote drainage after evisceration for acute infections, involves leaving sclera, tenons & conjunctiva unsutured. This may inadvertently provide a moist, warm environment, ideal conditions for opportunistic fungal infections. We would like to highlight the importance of closing tenons and conjunctival wound after an evisceration and the need for patient education regarding post operative wound hygiene.

Conflict of Interest

The authors certify have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs).

Patient Consent

The patient has consented to the submission of the paper to the journal.

Bibliography

1. Ederies A., *et al*. "Aspergillosis of the Petrous Apex and Meckel's Cave". *Skull Base* 20.3 (2010): 189-192.
2. Sivak-Callcott JA., *et al*. "Localised invasive sino-orbital aspergillosis: characteristic features". *British Journal of Ophthalmology* 88.5 (2004): 681–687.
3. Green WR., *et al*. "Aspergillosis of the orbit". *Archives of ophthalmology* 82.3 (1969): 302-313.
4. Levin LA., *et al*. "The spectrum of orbital aspergillosis: a clinicopathological review". *Survey Ophthalmology* 41.2 (1996): 142-154.

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