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CASE REPORT

HELMENTHOSPORIUM – KERATITIS: CASE REPORT

Vepa Meenakshi[1], T. Jyothirmayi[2], Sunil Kumar Naik[3], Mahathi[4]

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ABSTRACT: The incidence of fungal keratitis has shown a dramatic increase in the recent years. This was a patient who following fall of insect presented with pain, redness and watering in right eye. Examination revealed an 4x5mm oval ulcer with slough. Laboratory evaluation showed Helminthosporium sp., Though Helminthosporium sp., of fungus rarely cause disease in humans it should be kept in mind in immunocompromised individuals and patients using the over the counter drugs.

KEYWORDS: Corneal ulcer-Helmenthosporium.

INTRODUCTION: The incidence of fungal keratitis has shown a dramatic increase in the recent years. In fact in countries like ours, fungi have nearly replaced bacteria as the most common cause of infectious suppurative keratitis. This increase is thought to be due to a combination of various factors, namely increased clinical suspiscion, advances in diagnostic techniques and paradoxically, the advancement in the field of antibacterial therapy, which has proportionately reduced the incidence of bacterial keratitis. Morbidity in fungal infections tends to be greater than that in bacterial keratitis, because the diagnosis is often delayed and the available drugs are not effective.[1]

Diagnosis and treatment of keratomycosis has become a challenge to ophthalmologists because of its resistance to treatment and difficulty in obtaining drug sensitivity.[2,3] This present case report is to report a case of fungal keratitis caused by a rare species of fungus: Helminthosporium.

CASE REPORT: A 50 year old male came to our tertiary care institute with the complaints of foreign body sensation since 4 days and pain, redness and watering since 3 days in right eye following fall of insect in his eye. Since 2 days the patient was using Betnesol-n eyedrops 5 times/ day (Betamethasone) which he got from a medical store.

Examination revealed edematous eyelids with conjunctival congestion and circumciliary congestion. Cornea showed an oval ulcer of 4x5mm in the paracentral region of cornea on the temporal side. The ulcer is grayish white in colored with feathery margins with slough on the floor and ulcer extends into deep stroma. Satellite lesions were present (Figure 1) Vascularisation was seen for about 2mm from 5 to 6 o clock position with reduced corneal sensations. Anterior chamber was normal in depth with normal iris, pupil and lens. Left eye was normal. Visual acuity was 6/12 with Ph 6/9 in right eye and 6/9 in left eye.

Fluorescein stain was positive in right eye. Corneal scrappings showed negative gram stain but a positive 10% KOH mount in which septate hyphae. Conidiophores are brown, erect and parallel walled. Conidia are multicellular large, solitary, club shaped and pale brown in color located along the sides of conidiophores with their wider end towards conidiophores (Figure 2). Culture done on Sabourads dextrose agar showed a rapid rate of growth with grayish white coloured wooly colonies all suggestive of Helminthosporium species (Figure 3).

The patient was treated with Natamycin 5% eye drops 8 times per day, Atropine 1% eye drops per day and oral ketoconazole 150mg two times per day. The patient responded well to the treatment and he improved.

DISCUSSION: Fungal keratitis is common in India due to the tropical climate and a large agrarian population that is at risk with an incidence of approximately 33.4%.[4] The most common organism isolated from fungal corneal ulcers is Aspergillus species followed by Fusarium sp., Candida sp., Curvularia sp.,[5,6,7] Coming to Helminthospora sp., it is rarely isolated in laboratory and is of no reported pathogenesity in immunocompetent individuals.[8] However it is reported to cause immune reaction leading to asthma in immunocompetent individuals.[9] However it is isolated in a few cases who are immunosuppressed.[10,11]

In the present patient who seems to be immunocompetent Helminthospora which might be probably due to the use of steroid eyedrops by the patient. This highlights the importance of providing awareness to the public about the use of over the counter drugs and also the meticulous care that needs to be taken in laboratory evaluation.

Conclusion:

Helminthospora sp., of fungi though rarely causes infections in immunocompetent individuals, but it should be kept in mind that it can cause potential threat to eye in seemingly immunocompetent individuals who have other risk factors like use of over the counter drugs.

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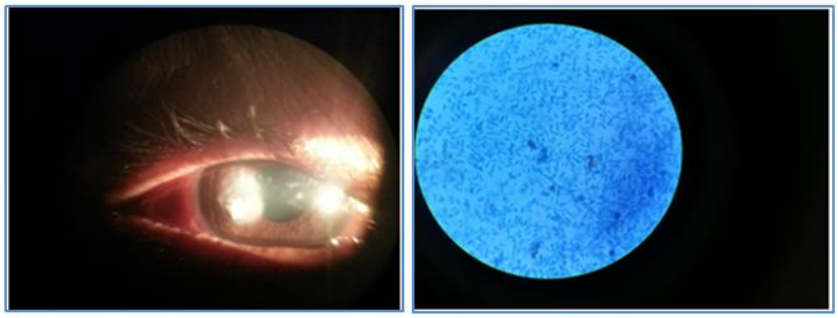

Fig. 1 & 2: Fungal keratitis H/P showing Helmenthospora

Fig. 3: Sabourads Agar showing Fungal growth

AUTHORS:

1. Vepa Meenakshi
2. T. Jyothirmayi
3. Sunil Kumar Naik
4. Mahathi

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Ophthalmology, Andhra Medical College, R.S.P.R. Govt. Regional Eye Hospital, Visakhapatnam, A. P.
2. Assistant Professor, Department of Ophthalmology, AMC, Government REH, Visakhapatnam, A. P.
3. Post Graduate, Department of Ophthalmology, Andhra Medical College, Visakhapatnam.
4. Post Graduate, Department of Ophthalmology, Andhra Medical College, Visakhapatnam.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Vepa Meenakshi,
Flat No. 101, 'B' Block,
Golden Homes Apartments,
Resapuvani Palem,
Visakhapatnam – 530013.
E-mail: meenakshivepa@gmail.com

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