A CLINICO-ETIOLOGICAL STUDY OF AURAL MYIASIS

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ABSTRACT

"Myiasis" is derived from the Greek word "myia" which means "fly". Myiasis is defined as infestation by diphterianlarvaethat feed on dead, necrotic or immunocompromised living host tissue. It may affect the skin, body cavities and internal organs.18cases of oral myiasis associated with ear were included in my study. After removal of maggots, the tissues seems to recover with no complications and with no need of further treatment.

Key Words: Myiasis , Parasitic infestation

INTRODUCTION

"Myiasis" is derived from the Greek word "myia" which means "fly". Myiasis is defined as infestation bydiphterianlarvaethat feed on dead, necrotic or immunocompromised living host tissue. It may affect the skin, body cavities and internal organs [1] [2]. Human myiasis is found among the elderly and abandoned individuals, as well as in patients of geriatric hospitals and mental institutions presenting poor hygienic habits [3]. Myiasis occurs in the skin and mucosa and causative agent is maggot from the families of Cuterbridae, Hypodermatidae and a few Calliphoridae and Sacrophagidae species (Gomezet al, 2003) [4]. Based on degree of dependence on the host, myiasis is classified as: (1) 'obligatory myiasis' where fly larvae are completely parasitic and dependupon the host for completion of their life cycle, and (2) 'facultative myiasis' in which the fly larvae are free living and only acquired adaptation themselves to parasitic dependence to a host.

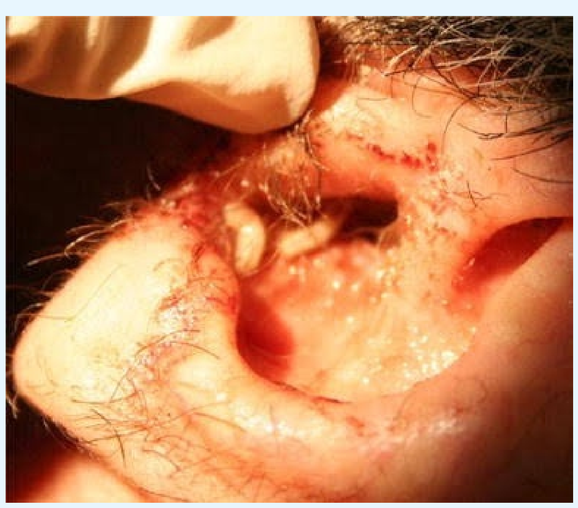
METHOD

The study was conducted in the department of otorhinolaryngology , Sir T Hospital Bhavnagar. It is a retrospective observational study including eighteen cases of myiasis associated with ear.

All the patients with maggots in relation to ear were included in the study after taking proper informed and written consent. Patients who didn't give consent for study were excluded.

The patients in this study were categorised by following parameters : age, gender, address, socio-economical class and occupation, systemic comorbidities, site of myiasis, local comorbidities, mental status, hospital stay, complication and numbers of maggots removed.

A brief general examination was conducted to assess the nutritional status and built of patient, degree of dehydration, anaemia or any CNS examination done with complicated cases. A detailed ENT examination was carried out and any abnormality was noted down. Complete haemogram, blood sugar level, liver and kidney function test and urine routine microscopy, X-ray mastoid schuller's view were carried out. In aural myiasis turpentine oil soaked wick kept in external auditory canal and maggots were removed with Tilley's forceps. After removal of maggots antibiotic drops were instilled and regular aural toileting done under microscopic vision. All patients were treated with systemic antibiotic and intravenous fluids. After removing the maggots, they were disposed off after putting them in boiling water.



RESULT

In our study out of 18 patients 8(44.4%) were male patients and 10(55.5%) were female patients.

Age varies between 3 years to 80 years with slightly higher distribution.

There were 10 (55.55%) cases residing in urban slum area , 5 (27.77%) cases were from rural slum area and 3 (16.66%) cases were from well urbanized areas.

17 (94.44%) cases were from lower socio economical class, whereas only 1 (5.5%) belonged to upper socio economical class. 8 (44.44%) patients were mentally retarded.

It was noted that average maggot load was 43.3 per patient. Highest numbers of maggots (approximately 150) were reported with left sided perichondritis secondary to malignant lesion over it.

Systemic comorbidities which correlated were uncontrolled diabetes (5.5%), immunocompromised status (11.11%) [11]. Whereas 77.77% presented with anaemia.

In aural myiasis the main symptoms included passage of worms (77.77%), ear discharge (50%) and pain in the ear (55.5%)

Examination revealed maggots in all cases, perforation of TM (50%), blood-stained discharge (50%), otitis externa (22.2%) and ulcer over pinna (11.11%) , pre auricular ulcerative lesion found in (5.5%) , post auricular ulceration and maggots was found in (5.5%).

We have observed that myiasis commonly encountered during period of October to December.

CONCLUSION

Aural myiasis is commonly affecting geriatrics and paediatrics. Slightly higher predilection was found in female. In general, people residing in slum area having higher chances of getting infested due to poor personal hygiene ,over crowding , illiteracy , animal contact , poor sanitation . Flies were attracted by foul smelling discharge and lays eggs. As per observation the most common local risk factor in aural myiasis is chronic otitis media. As such death due to aural myiasis is very rare. Treatment part consist frequent manual and endoscopic removal of maggots , with topical and systemic antibiotic cover , mosquito netting during sleeping.

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