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ORIGINAL ARTICLE

Clinical etiology of myiasis in ENT: a reterograde period - interval study

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Summary

Myiasis in ENT, once a deadly disease still presents as a significant outdoor problem, though advances in management including supportive therapy has led to early healing with significant reduction in bed occupancy rate. **Aims**: To assess the clinico etiology, relationship of myiasis to habit and habitat of patients and to assess the changes in age, seasonal, socioeconomic incidence , nasal bacterial flora and usefulness of certain commonly done tests with reference to a gap of 25 years. **Materials & methods:** The presenting study was conducted on 80 patients selected over a period of two time intervals ; first 40 cases were chosen from 1979 to 1980 and next 40 over 2003 to 2004. Cases were studied in a retrograde manner and data tabulated. **Results & Conclusions:** Atrophic turbinates was the commonest pathological finding in nose in 30% of cases . Significant change seen was in the age group 51 and above with a rise of 30%. Mode during 2003-04 was 60 years. Incidence of palatal perforation dropped from 17.88 to 2.5% . Klebsiella emerged as a significant contributor to the nasal microbial flora. VDRL and split skin smear showed poor etiological association for the diseases.

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INTRODUCTION

Nostalgia - Myiasis in ENT can be traced back to ancient Hindu mythological works , in those days it was supposed to be due to commision of sins and the wrath of saintly persons on them. In new world Soares 'd' Souza 1587 reported just one case of cutaneous myiasis.

The tem myiasis is of recent origin and Rev F.W. Hope coined the term in 1840 (Previously it was called scholechiasis). Stecle in 1897 proposed that the presence of fly in nasal spaces causes myiasis.

Castellani and Chalmer's in 1919 described the condition of nasal myiasis, known as Peenash in India, due to chrysomia (formerly pycnosoma).

Classification of Myiasis

Bishop et al. 1926 classified the maggots as tissue destroying, subdermal, i nfesting gastrointestinal/ urogenital tract, ear nose & throat and blood sucking types.

Present classification (Sahay et al , 1958)

(a) Specific - obligate parasite where maggot is unable to complete its life cycle without appropriate host.

(b) Semi specific - Species are adaptable to environment, pH, temperature.

(c) Accidental - Invasion of facultative parasites.

Once a deadly disease , advances in management including supportive therapy has led to the early healing with significant reduction in the hospital stay. A disease of the people belonging to low socioeconomic strata previously stated to be prevalent during a period post rains is now fast becoming a perennial disease. Earlier it was treated with crystalline penicillin and removal of maggots . Crystalline penicillin was used on a rationale based on the reports that Staphylococcus aureus was the most common cultured organism from nasal cavities in affected patients . The patients were subjected to tests to identify the causes of atrophic rhinitis such as syphilis and leprosy.

The aim of this study is to assess the clinico-etiology, the relation of myiasis to habit and habitual of patients with special reference to changing trends.

Surgical Maggots:

Observed since was the certain infected wounds exposed to maggots healed rapidly (Baer - 1931).

Lingstone Prince (1932) pointed out on the therapeutic role of maggots in long standing cases of CSOM.

All though extremely rare in the western world this disease is not infrequent in the dry, warm, tropical climate seem in south-east Asian region.

MATERIALS AND METHODS

A retrospective study was conducted on 80 patients from department of ENT, Gandhi Medical College and Associated Hamidia Hospital, Bhopal for associated work out. Ethical committee approval was sought and the permission order no. 851076/mc/7/07 dated 16.04.07 is quoted.

Patients were divided into 2 groups.
Group I - Dated 1979-1980 - 40 patients
Group II - 2003-2004 - 40 patients.

The patients in this study were then categorized according to

- Age
- Sex
- Presenting complaints
- Finding on initial examination
- Regional distribution
- Seasonal variation
- Occupation, Socioeconomic variation, literacy.
- Bacteriological study of nasal cavity / Secretion.

The following pattern of examination and investigation was adopted for each case in present study.

History of Presenting Illness:

1. History regarding - Nasal disease, epistaxis, pain, swelling of nose, passing worms from nose.

2. History of discharge, bleeding pain and passing worms from ears.

3. Any history of passing worms from mouth, difficulty in swallowing toothache, swelling of gums, ulcer in mouth, vomiting.

4. Tracheostomy wound condition.

History of Past Illness:

Any history which could be a predisposing factor for myiasis in ENT such as crust formation in nose / ozaena, loss of smell, bleeding, foul smelling discharge from ear.

Personal History:

Detailed inquiry about social status, condition of surrounding, sanitation.

Clinical Examination:

(a) General examination : A brief general examination was conducted to assess the nutritional status and built of patient, degree of dehydration, anemia or any associated disease.

(b) Systemic examination : Examination of CNS Respiratory system, CVS with regard of any abnormality.

(c) ENT Examination

Ears :

(a) External ear (Pinna) was examined for any deformity, swelling, infected wound, presence of maggots.

(b) EAC - Discharge - Purulent / mucopurulent / maggots / bleeding.