

Neglect And Poor Hygiene: A Case Of Scalp Myiasis In A Child

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s affected by diverse communicable and non-communicable diseases, revealing varying prevalence rates among the participants over the study period.

Keywords: Cutaneous myiasis, dipterous larva, scalp abscess, scabies, poor hygiene.

1. INTRODUCTION

A 2 year old male child, born out of a non consanguineous marriage, with normal birth and development, belonging to lower socioeconomic class, was brought to the pediatric outpatient department of the tertiary care centre complaining of intense itching and foul smelling scalp for a week. The child was malnourished and was found to be living in unhygienic conditions.

At an outside hospital, he was found to have a boggy swelling on the scalp, on examination. Suspecting a scalp abscess, he was started on oral and local antibiotics.

Later the child was brought to our hospital, as the swelling was gradually increasing in size and was associated with foul smell. The child was vitally stable and had no signs of systemic involvement.

A local examination revealed swelling with erosion over the left parietal region of the scalp, associated with foul odour,

redness, swelling, pain and local raise of temperature. The patient was admitted to the pediatric ward and was started on oral Amoxicillin.

On evaluation, x ray scalp (Figure 1) was not suggestive of any bone erosion and ultrasonography of the swelling revealed a blind ending sinus tract of 4*3mm with a volume approximately measuring 0.3cc in the left parietal region, with a 2mm linear hyperechogenicity within the tract suggestive of a suspected intraluminal worm within, with surrounding inflammatory changes.



Figure 1: X-RAY OF SCALP

The child was also observed to have small red lesions, more in the flexure regions and in between the fingers associated with itching which was diagnosed to be scabies, and was started on permethrin ointment and oral ivermectin.

The hair over lesion was removed and it revealed larvae and maggots within the wound, and was diagnosed as furuncular myiasis (Figure 2).



Figure 2A- image showing multiple larvae within the wound.

2B and C- image showing extraction of larvae following treatment.

2D- image showing clean wound following treatment.

Thorough washes with turpentine oil and diluted hydrogen peroxide helped in removal of the larvae. The patient was discharged following removal of all the larvae and was counselled about the importance of maintaining local hygiene and prevention of recurrence.

2. DISCUSSION

In 1965, a German [entomologist](#), Fritz Zumpt described myiasis as, infestation of live vertebrates with dipterous larvae, feeding either on the ingested food, liquid body substances, dead or living tissue [1].

Myiasis can be classified based on the host and parasite relationship as obligatory myiasis, when living tissue is required for completing the life cycle, facultative myiasis, when it occurs in decaying organic substrates or, in a living host with necrotic wounds or ulcers. Accidental myiasis occurs randomly when a host ingests or accidentally comes in contact through the digestive tract or traumatic wounds, with free living larvae or eggs, causing infestation [2].

The classification based on site or anatomical location was first done by Bishopp which was then modified by James and by Zumpt, which included the following, bloodsucking or Sanguinivorous, cutaneous myiasis, cavitary myiasis which includes ophthalmomyiasis, aural myiasis, nasal myiasis and cerebral myiasis [3]. Of these, cutaneous myiasis is most common and is further classified into, migratory or creeping myiasis, furuncular myiasis, and traumatic or wound myiasis [4].

An Indian study conducted over a period of 6 years with 94 cases, showed an incidence of 37.9% among children with majority being aural cases (86.16%), 11.7% of nasal myiasis and 2.12% of ocular myiasis. Of these, 96.8% children belonged to rural areas, with September and October being the time of maximum incidence [5].

Furuncular myiasis is most commonly caused by *Dermatobia hominis* and *Cordylobia anthropophaga*. Presents with erythematous, papular or nodular lesions with pruritus and pain. It can also occur as ecchymotic, vesicular, erosive, ulcerative or bullous lesions. Clinical history and examination are main for the diagnosis [3].

Treatment includes, toxic substance application to the eggs or larva, by forcing the larva to emerge by producing localized hypoxia using liquid paraffin, turpentine oil, petrolatum, bacon and others, and by mechanical or surgical removal of maggots. The aim is to prevent secondary infection and complete removal of larva. Adequate sanitation and field control of flies are very important for prevention [3].

REFERENCES

- [1] Zumpt, F. 1965. *Myiasis in man and animals in the Old World*. London, Butterworths. 267 pp.
- [2] Kosta Y. Mumcuoglu, 64 - Human Lice, Bed Bugs, Sand Fleas, Myiasis, and Leeches, Editor(s): Jeremy Farrar, Patricia Garcia, Peter Hotez, Thomas Junghanss, Gagandeep Kang, David Lalloo, Nicholas White, Manson's Tropical Diseases (Twenty-Fourth Edition), Elsevier, 2024, Pages 840-853, ISBN 9780702079597, <https://doi.org/10.1016/B978-0-7020-7959-7.00064-6>. (<https://www.sciencedirect.com/science/article/pii/B9780702079597000646>)
- [3] Francesconi F, Lupi O. Myiasis. Clin Microbiol Rev. 2012 Jan;25(1):79-105. doi: 10.1128/CMR.00010-11. PMID: 22232372; PMCID: PMC3255963.
- [4] Robbins K, Khachemoune A. Cutaneous myiasis: a review of the common types of myiasis. Int J Dermatol. 2010 Oct;49(10):1092-8. doi: 10.1111/j.1365-4632.2010.04577.x. PMID: 20883399.
- [5] Singh I, Gathwala G, Yadav SP, Wig U, Jakhar KK. Myiasis in children: the Indian perspective. Int J Pediatr Otorhinolaryngol. 1993 Jan;25(1-3):127-31. doi: 10.1016/0165-5876(93)90045-5. PMID: 8436455.