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A Case Series on Neglected Scalp Swelling with Maggot Infestation: Clinical Profile and Management Strategies

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Abstract

Background & Methods:

Neglected scalp wounds are at risk for developing myiasis, especially in patients with poor hygiene or chronic illness. This retrospective observational study includes 10 patients with maggot-infested scalp swellings managed over 2 years at a K D Medical collage (tertiary care center). Data on demographics, clinical features, imaging, treatment, and outcomes were analyzed.

Results:

All patients (7 males, 3 females) presented with visible maggots and foul-smelling scalp wounds. Mean age was 45.6 years. Contributing factors included neurological impairment (3), malignancy (2), and poor hygiene (8). All underwent mechanical maggot removal; 6 required surgical debridement. Recovery was complete in 8 cases, 1 had partial recovery, and 1 patient died.

Conclusion:

Early diagnosis and prompt management of scalp myiasis are essential to avoid complications. Public health measures to improve hygiene can reduce the burden of such preventable conditions.

Keywords: neglected scalp swelling, maggots, poor hygiene, myiasis,a case series

INTRODUCTION

Scalp myiasis refers to infestation by dipterous larvae, primarily affecting individuals with neglected scalp wounds. Predisposing factors include poor hygiene, neurological conditions, malignancy, and immunosuppression. Early clinical suspicion and rapid intervention are critical for reducing morbidity and mortality associated with this condition.

Aim

To document the clinical presentation, diagnosis, and management outcomes in 10 cases of neglected scalp swellings with maggot infestation.

Materials and Methods

This retrospective case series includes 10 patients treated for scalp myiasis from January 2023 to December 2024. Data was collected from hospital records including demographic details, clinical presentation, risk factors, treatment modalities, and outcomes. Informed consent was obtained.

Inclusion Criteria:

- Diagnosed scalp myiasis
- Visible maggot infestation

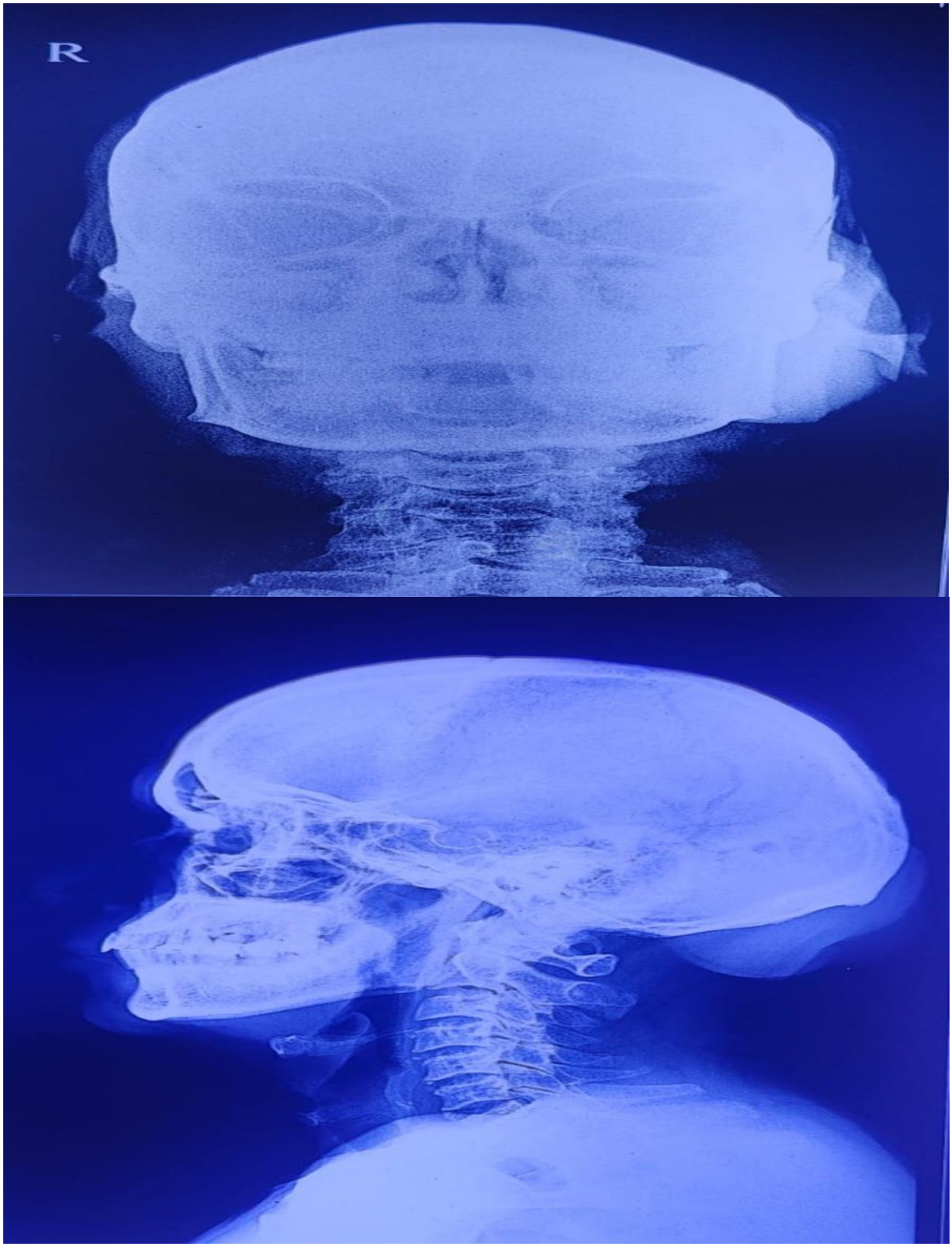
Exclusion Criteria:

- Other body site myiasis
- Incomplete data

Results

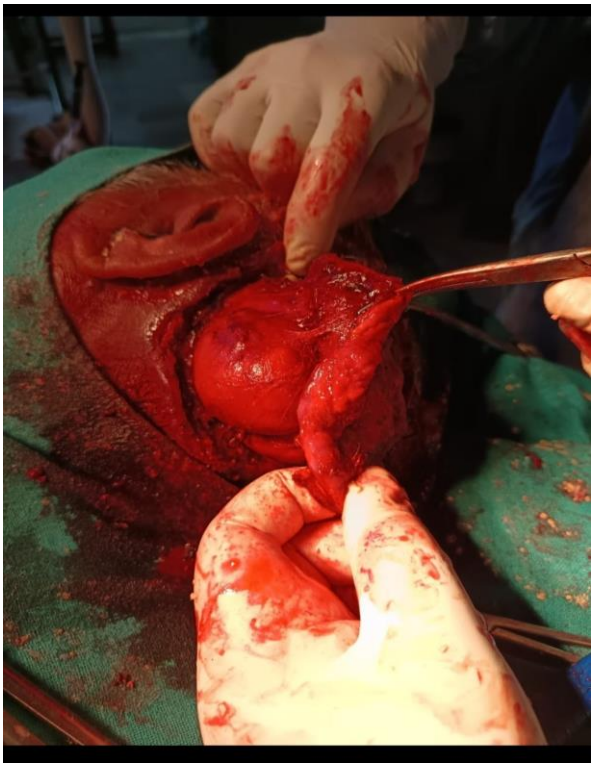
Table 1: Clinical and Treatment Details of Patients

Case	Age		Gender	Predisposing Factor	Symptoms	Treatment Given	Outcome
1	60		Male	Poor hygiene	Foul-smelling wound, maggots	Debridement + antibiotics	Recovered
2	35		Female	Malignancy	Pain, maggots	Debridement + Ivermectin	Recovered
3	72		Male	Neurological impairment	Discharge, fever	Mechanical removal + antibiotics	Recovered
4	50		Male	Poor hygiene	Scalp swelling	Debridement	Recovered
5	42		Female	Immunosuppression	Maggots visible	Ivermectin + debridement	Partial recovery
6	28		Male	Poor hygiene	Fever, pus discharge	Antibiotics + removal	Recovered
7	66		Male	Neurological impairment	Neurological signs	Surgical + medical	Died
8	15		Male	Poor hygiene	Maggots visible	Irrigation + antibiotics	Recovered
9	89		Female	Poor hygiene	Headache, wound	Mechanical removal	Recovered
10	48		Male	Malignancy	Swelling with maggots	Debridement + ivermectin	Recovered



XRAYS OF ONE OF THE PATIENT

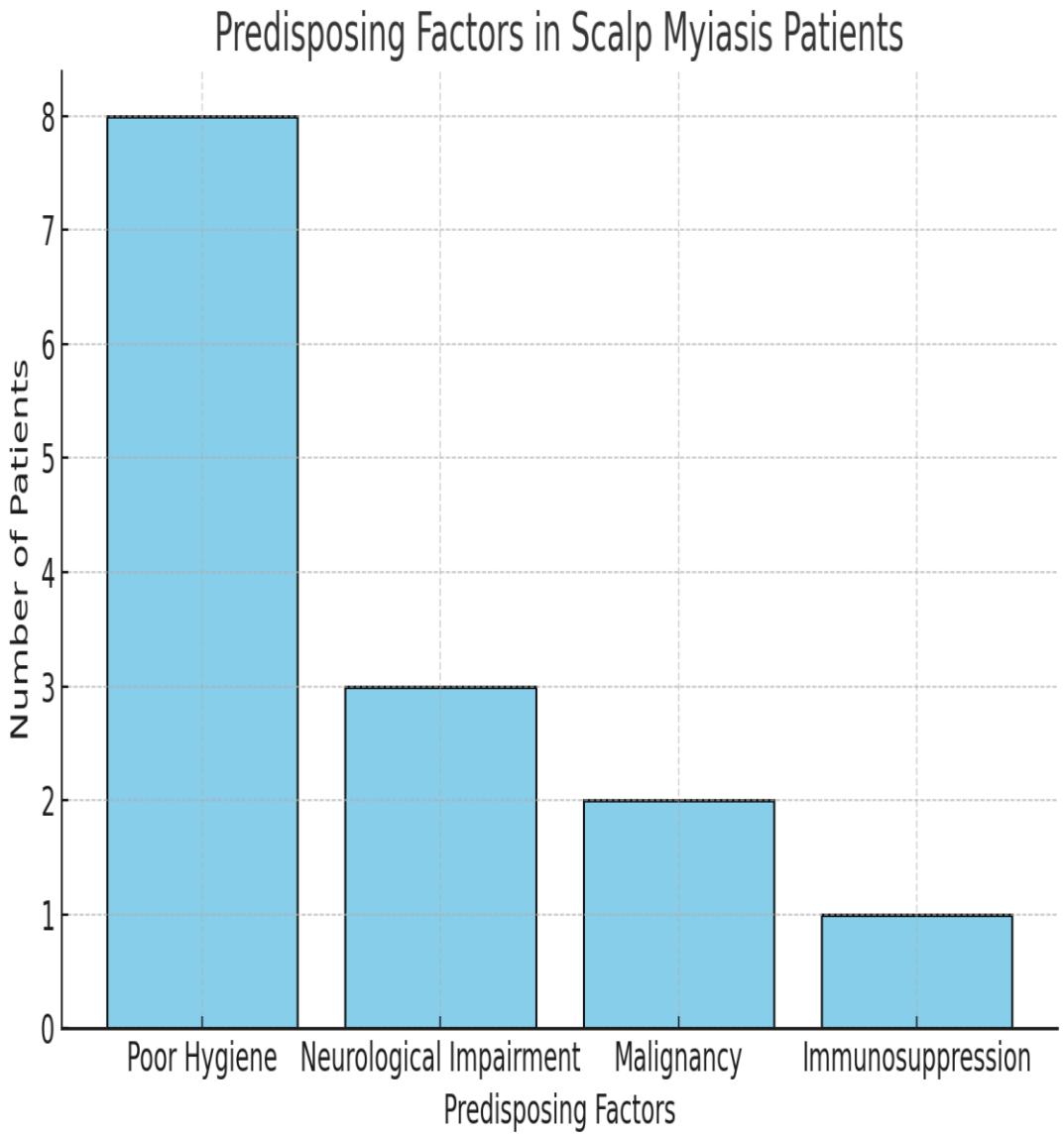
PRE OP IMAGE OF ONE OF THE PATIENT



INTRA-OP IMAGE

POST-OP IMAGE

Figure 1: Bar chart showing distribution of predisposing factors among



patients.

Discussion

Scalp myiasis, although rare, continues to be a clinical challenge in patients with neglected wounds and poor hygienic conditions. The pathogenesis involves the deposition of fly eggs in necrotic or ulcerated scalp tissue, which hatch into larvae and feed on the host tissue. Risk factors such as neurological impairment, malignancy, immunosuppression, and extreme age predispose patients to infestation.

The majority of our cases had underlying conditions that made them susceptible to developing myiasis. Mechanical removal of larvae combined with surgical debridement and systemic antibiotics formed the cornerstone of management. In severe infestations, oral ivermectin proved beneficial in facilitating larval expulsion.

Our findings are consistent with previous studies that emphasize early identification, removal of larvae, and wound care as effective strategies. A single mortality in our series underlines the severity of this condition when neglected or complicated by systemic illness.

Conclusion

Neglected scalp swellings with maggot infestation represent a preventable health condition predominantly affecting vulnerable populations. Early diagnosis and appropriate management including debridement, larval removal, and antibiotic therapy yield favorable outcomes. Public awareness, improved hygiene, and timely medical intervention are crucial to prevent complications. Mortality can occur if diagnosis and treatment are delayed, especially in immunocompromised or debilitated patients.

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