

Wound myiasis resulting from a neglected insect bite wound.

Anil Suryabanshi¹, Binita Timilsina¹, and Namrata Khadka¹

¹Tribhuvan University Institute of Medicine

September 20, 2022

Abstract

Infestation of maggots in humans is rare because human is an accidental hosts for many dipterous larval species. We present a case of wound myiasis in a homeless person that resulted from a neglected minor insect bite wound.

Wound Myiasis resulting from a neglected insect bite wound

Abstract

Infestation of maggots in humans is rare because human is an accidental host for many dipterous larval species. We present a case of wound myiasis in a homeless person that resulted from a neglected minor insect bite wound.

Keywords

Debridement, Maggot infestation, Wound myiasis.

Case Presentation

A 51-year-old man was brought to the emergency department, by a social activist, with a chronic wound on the left side of his trunk for 3 months. He was complaining of a moving sensation and dull pain at the wound site. Further inquiry revealed that the wound was caused by an insect bite that occurred three months earlier but neglected it. He had no significant past or family history; however, he was homeless for two years. On inspection, a 10 × 7 cm size wound with multiple openings was present in the left trunk above and behind the iliac crest. The wound was covered with unhealthy tissue and multiple maggots with active movements were noted (Fig. 1 and video). On palpation, the wound was tender and the base was indurated. His vital signs and systemic examination were normal.

Due to the poor visibility, attempts to remove the maggots with forceps were unsuccessful. Therefore, a piece of gauze soaked in turpentine oil was used to suffocate the maggots. After 30 minutes, the dead maggots were removed (approximately 50 in number) and the unhealthy tissue was debrided under local anesthesia. Further, the wound was cleaned with povidone-iodine, and hemostasis was achieved with an adrenaline-soaked gauze because of bleeding from granulation tissue. After that, the patient was discharged under the care of a social activist with instructions to take oral antibiotics regularly and a wound dressing at scheduled intervals.

Myiasis, a rare condition, is an infestation of vertebrates by dipterous larvae (maggot). Wound myiasis- a form of cutaneous myiasis- is particularly rarer because it typically requires a large and necrotic wound to deposit eggs, but even minor scratches can cause complications, as in this case, which began with an insect bite.^{1, 2}Old age, mental illness, low socioeconomic status, poor hygiene, and diabetes are other risk factors for maggot infestation in addition to open wounds.³ Manual removal of the maggots, either with or without suffocation, is the definitive treatment. However, depending on the severity of the lesion, many wound myiasis

requires further therapies, such as debriding of necrotic tissue, antiseptic cleansing, dressing, and systemic antibiotics.¹

AUTHOR CONTRIBUTIONS

AS managed the case and collected information. AS and BT prepared, reviewed and edited the original manuscript. NK, BT, and AS finalized the manuscript.

ACKNOWLEDGEMENTS

None

CONFLICT OF INTEREST

None

DATA AVAILABILITY STATEMENT

All required data are present on the article itself.

ETHICAL APPROVAL

Only observational data used.

CONSENT

Written informed consent was obtained from the patients to publish this report in accordance with the journal's patient consent policy.

References:

1. Francesconi, F. and O. Lupi, *Myiasis*. Clinical microbiology reviews, 2012. **25** (1): p. 79-105.
2. Solomon, M., T. Lachish, and E. Schwartz, *Cutaneous myiasis*. Current infectious disease reports, 2016. **18** (9): p. 1-7.
3. Singh, A. and Z. Singh, *Incidence of myiasis among humans—a review*. Parasitology Research, 2015. **114** (9): p. 3183-3199.

