

Case study

A case of umbilical myiasis in a neonate

ABSTRACT

Myiasis rarely occurs in human beings. We report the case of umbilical myiasis in a neonate staying in a rural area. It can be life-threatening as the larvae may migrate to deeper tissues of the abdomen or may cause omphalitis and sepsis. The maggots were identified to be of *Chrysomya megacephala*. The child was successfully treated, and there was no sequel on follow-up.

Keywords: myiasis, neonate, umbilical, flies infestation

1. INTRODUCTION

Myiasis is the infestation by fly larvae. It usually occurs in animals. Umbilical myiasis is a rare occurrence in neonates, and few cases have been reported. It happens because of unhygienic cord practices. The condition should be treated in time as it can lead to complications like omphalitis and septicemia. Treatment is the removal of the maggots and treating associated infections.

2. PRESENTATION OF CASE

An eight-day-old male neonate from a rural area presented to us with the chief complaints of a foul-smelling discharge from the umbilicus and something coming out around the umbilical region. He was born at term by normal delivery and had a birth weight of 2800 gm. The perinatal period was uneventful, and the baby was discharged after 48 hours of life. Mother was advised not to apply anything to the umbilical cord. Still, there was a history of ghee's application to the umbilical cord immediately after the baby reached home by the grandmother.

The baby was irritable on presentation. He was hemodynamically stable, anterior fontanel was normal. Foul-smelling purulent discharge from the umbilicus and periumbilical redness was present. Multiple maggots were seen coming out of the periumbilical area. The septic screen was negative. An ultrasound scan of the umbilical area showed numerous maggots. Blood culture was sterile, and culture from the umbilical swab revealed *Staphylococcus aureus* growth sensitive to routine antibiotics. The local area was cleaned; we used turpentine to repel maggots. They were then removed with forceps and sent to a public health expert who identified them as larvae of *Chrysomya megacephala*. Intravenous ampicillin and gentamycin was given for seven days. The baby recovered completely and was discharged. On discharge, parents and grandmother were counselled regarding cord care and the importance of keeping adequate sanitation in the home and surrounding areas. There was no sequel on follow up.



Figure 1,2, Maggots coming out from the periumbilical region

3 DISCUSSION

Myiasis was first used by Hope to define the diseases caused by an infestation of dipterous larvae. It is derived from the Greek word *μύια* (*myia*), which means fly. (1) These larvae feed on the host's live or necrotic tissue. (2) .It is more common in animals as compared to human beings. Myiasis occurs in tropical and subtropic areas because moisture and heat aggravate maggots' growth in poor hygienic conditions. Cases have been reported in neonates that involved the ear, nasopharynx, vagina, skin, and intestine. (3)(4)(5)(6) (7). Few cases of umbilical myiasis have been published in the literature. (8) It is a type of cutaneous myiasis. Larval forms of *Cochliomyia hominivorax*, *Chrysomya megacephala*, *Musca domestica*, *Cordylobia anthropophaga*, *Sarcophagidae* family flies have been implicated(9) (10)(11)(12) (13). Poor umbilical hygiene, hot and humid climate predispose to this condition. The female flies lay the eggs on the umbilicus, which hatch into larvae that transfer to pupa. They penetrate the surrounding skin and cause inflammation. It may even cause a secondary infection.

Treatment of the disease consists of excising the gangrenous umbilical cord, cleaning the local area with antiseptics, killing the larvae by suffocating them, and then subsequent removal and treatment of the associated local or systemic infection. (14). These larvae can be repelled with turpentine or ether. (8)(11). The condition needs to be identified in time as it may lead to life-threatening complications like omphalitis and septicemia.

4 CONCLUSION

This article stresses the importance of keeping good umbilical hygiene and the importance of managing umbilical myiasis in time to prevent life-threatening complications.

CONSENT

All authors declare that 'written informed consent was obtained from the patient (or other approved parties) for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

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