

Myiasis: A Boon or a Bane?

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ABSTRACT

Myiasis is known to man since ages and has always been considered bane due to its prevalence in unhygienic conditions. But nowadays it is considered as a boon as it is being tried in treatment of nonhealing wounds.

Keywords: Myiasis, Nonhealing wounds, Episiotomy.

How to cite this article: Kulkarni S, Joshi S, Bhalerao A, Chopde Y, Somalwar S. Myiasis: A Boon or a Bane? J South Asian Feder Obst Gynae 2012;4(2):116-117.

Source of support: Nil

Conflict of interest: None declared

INTRODUCTION

Myiasis is infestation of dipterous larvae in various body wounds and orifices. It is very common and is mainly attributed to unhygienic practices or wound exposure.¹ Maggots in wounds and natural orifices like nose, ear, etc. is commonly seen, but myiasis of episiotomy wound has not been reported yet, presenting one such case.

A 27-year-old married woman, resident of Saunsar village, educated till 9th class reported on day 21 of postnatal period. She underwent a vaginal delivery 3 weeks back and was presented with complaints of pain and irritation in perineal region since 15 days. She was booked antenatal case at rural hospital. Her immediate postnatal period was uneventful. At home she used home-made pads, made of cloth, which were reused after washing and drying in shade. Also, open air defecation was practiced by her. On examination, the left mediolateral episiotomy wound was gaping. Surrounding edema and excoriation was seen and 4 to 5 maggots were seen in the wound. On speculum examination, 4 to 5 maggots were seen in the vagina (Fig. 1). Visible maggots were picked up with nontoothed forceps and collected in 10% formalin and 75% alcohol (Fig. 2). There was minimal vaginal discharge which was not foul smelling. On rectal examination the rectal mucosa was free.

The wound was cleaned with betadine and hydrogen peroxide, and a pack soaked with Turpentine oil was kept in vagina, which also covered the wound, for 15 to 20 minutes, after which approximately 30 to 40 maggots appeared in vagina, which were removed. Meanwhile, her investigations were sent for HIV and HBsAg to rule out immunocompromised state. Pelvic ultrasound was done that appeared normal. Antibiotics were started empirically. The woman was symptomatically relieved. The collected maggots were sent to Department of Zoology of Nagpur University. Episiotomy wound was allowed to heal with secondary intention. The species was then identified as *Chrysomya bezziana*. The patient remained in the hospital for 7 days. She was then discharged with advice on personal hygiene to avoid reinfestation.

DISCUSSION

Myiasis is infestation by a fly larvae (diptera) in vertebrates. Commonly called 'maggots', are larval form of these flies. Infestation mainly occurs by exposure of wound to the flies (direct laying of eggs), by biting. The fly species that burrow into the healthy skin or tissues are called biontophages and are responsible for the cutaneous forms of this condition, i.e. furunculoid myiasis.¹

C. bezziana is different from other fly species because tissue infestation can occur in the absence of necrotic tissue. The *C. bezziana* maggots may cause serious and permanent tissue damage. Extremely infested wounds can lead to death if not treated.³ Myiasis is more common in lower socioeconomic strata and low educational status population probably due to ignorance about hygiene.¹ Subjects with immunocompromised states like syphilis, HIV,^{1,4} HCV,⁴ HPV,⁴ HBsAg, condyloma



Fig. 1: Day 21 episiotomy wound with granulation tissue, with a maggots seen at the perianal region



Fig. 2: Maggots collected in 10% formalin and 75% alcohol

acuminata^{1,4} are more prone to have myiasis. Tropical areas and developing countries with high temperatures favor myiasis as the adult insect has a flying period limited to hottest month of the year (June to September) and its egg laying activities occur during the hottest hours of the day.⁵ Presence of bleeding and odors of decomposition is one of the important predisposing factors, as these maggots feed on dead as well as fresh tissue and are attracted by blood and pus.^{2,6}

Poor hygiene like living on streets,⁴ open air defecation practices, using home-made sanitary pads, made of cloth and which are reused after using by washing and drying in shades or open air-attracts the flies.⁷

Now the contradictory part, that though myiasis has been a stigma in above mentioned case but written records have documented that maggots have been boon for unhealing wounds since antiquity. Maggot therapy is a type of biotherapy involving introduction of live, disinfected maggots into non-healing skin and soft tissue wounds of human or animal for the purpose of cleaning out necrotic tissue within a wound and disinfection.

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