Vulvar myiasis: A rare case report

Savita Singhal, Parul Bhugra

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Case Report: We present a case of vulvar myiasis affecting a 72-year-old female. The patient was investigated for any predisposing factor. The larvae were removed after application of turpentine oil.

Conclusion: Genital myiasis is very uncommon. Awareness of the disease and careful examination of the lesion is important for making correct diagnosis.

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CASE REPORT

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Keywords: Infestation, Larvae, Myiasis, Vulvar

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INTRODUCTION

Human myiasis is caused by fly larvae capable of penetrating body orifices as well as healthy or necrotic tissues. Myiasis is more common in rural areas. In the urban areas, the disease is usually found among people with poor hygienic habits and low education level. Although human myiasis occurs rarely, it probably occurs at a higher rate than is currently thought. A careful examination is needed to identify vulvar myiasis as it can be confused with many common diseases such as insect bite, cellulitis, etc.

CASE REPORT

A 72-year-old female presented in the gynecology outpatient department of our institute with the chief complaint of pain over the genital area for five days. The pain was severe, intermittent, throbbing in nature, associated with a crawling sensation and discharge from the genital area. The discharge was blood stained and foul-smelling. General physical and systemic examination revealed no abnormalities. On local examination, there was ulcer of size approximately 5x3 cm, irregular in shape, involving right labia majora, labia minora and vagina (Figure 1). Floor of the ulcer was covered with foul smelling slough with numerous maggots. Maggots were also filling the vagina. On palpation, the surrounding area was tender, edge and base of the ulcer was indurated. Inguinal lymph nodes were enlarged and showed the signs of acute lymphadenitis. The patient was admitted for investigations and treatment. The patient was found to be HIV and VDRL non-reactive. Her blood sugar level was within normal limits. The culture from the swab taken from the vulva and vagina showed mixed flora and no sexually transmitted organisms were identified. Histopathological examination of the biopsy specimen from the ulcer edge showed no evidence of malignancy. The treatment was started with antibiotics and analgesics. The larvae were removed manually with the help of forceps after application of turpentine oil and the lesion was cleaned thoroughly. Daily antiseptic

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Figure 1: Vulvar myiasis.

dressing and turpentine oil application continued for the presence of any deeply burrowed larvae. The patient was discharged after four days of hospital stay on antibiotics and analgesics.

DISCUSSION

Myiasis is a zoonosis resulting from an infestation by the larvae of flying dipterous insects. There are two forms of myiasis: obligate, in which the larvae feed themselves on living tissues and facultative myiasis, where the larvae opportunistically take advantages of wounds or degenerative necrotic conditions [1]. Depending on the body parts involved, myiasis can be classified as mucocutaneous, ophthalmic, nasal, nasopharyngeal, intestinal or urinary tract myiasis.

The incidence of myiasis is probably underestimated as it occurs principally in rural areas where cases are usually not registered. Greenberg identified, four risk factors for infestation by larvae (i) helpless or debilitated person (ii) bleeding or odors of decomposition present (iii) summer season and (iv) neglect in nursing care [2]. Acquired immunodeficiency and the habit of some populations of sitting on the ground, for example, during certain religious rites are other predisposing factors [3]. The larvae can enter through intact skin or a wound. Myiasis may also be caused by the deposition of the ova on the wounds, clothes or by the ingestion of eggs of obligatory myiasis producing flies [4].

The disease occurs mostly on uncovered parts of the body. Infestation is very rarely seen in the vulvar area. The possible modes of vulvar infestation has been suggested to be through (i) fomites, especially with the washed undergarments being dried in the open sunlight on which flies may lay their eggs (ii) due to deposition of the ova on the genital region because flies were attracted by the odor caused by a lack of proper hygiene or by the foul smell

caused by multiple infections and the patient did not wear undergarment while sleeping, after sexual intercourse or because the use of undergarment is uncomfortable because of already present genital infection [5, 6].

Mucocutaneous myiasis is of three types, furuncular myiasis, traumatic myiasis and creeping myiasis. In the furunculoid form, over a period of several days a painful furuncle develops in which the larvae is present. The lesion has a central punctum, which discharges serosanguineous fluid. The lesions may be accompanied by lymphangitis and regional lymphadenopathy. Traumatic or wound myiasis may be seen in neglected ulcers or wounds. The larvae (maggots) can be seen, often in large numbers in the suppurating tissues. In creeping myiasis, an itching pink papule develops, followed by a tortuous line that extends by 1 to 30 cm a day [4, 7].

Mucocutaneous myiasis can be misdiagnosed as adenopathy, cellulitis, skin abscess, insect bite and subcutaneous cysts [8].

The aim of the treatment is to remove the larvae and treat any secondary bacterial infection. In wound myiasis, the larvae can be removed mechanically with forceps and preferably, destroyed to prevent them from pupating. When larvae are burrowed onto deeper tissues, they can be made to come out by application of gauze soaked in turpentine oil. Furuncular myiasis may be treated by occlusion of the opening of the furuncle with animal fat, paraffin, mineral oil or petrolatum. After this maggots can be removed with the aid of surgical tweezers and the nodule may be gently expressed. Sometimes, surgical incision may be required to extract the larvae. If a surgical approach is used, the incision should avoid lacerating the larvae, as the retained larval parts may precipitates a foreign body reaction. In a creeping eruption, the larvae can be extracted with a needle [6, 9].

CONCLUSION

The location of myiasis at genital region is a very rare occurrence. Knowledge of the characteristic clinical findings and the close inspection of lesions are key to diagnosing myiasis. Pain, swelling and redness can easily be mistaken for sexually transmitted infections. With the correct diagnosis, unnecessary antibiotics and surgical procedures can be avoided.

Author Contributions

Savita Singhal – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Parul Bhugra – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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