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Case Report

Vulvar myiasis: a rare case report

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ABSTRACT

Myiasis is the parasitic infestation of dipterous larvae (maggots) in humans and other vertebrate animals. Maggots are commonly seen on exposed body parts but it is very rare to find on covered body parts like external genitalia. Diagnosis and treatment are simple. We hereby present a rare case of vulvar myiasis in a young unmarried girl living in rural area in conditions of poor hygiene.

Keywords: External genitalia, Maggots, Myiasis

INTRODUCTION

Myiasis is the parasitic infestation of dipterous larvae (maggots) in humans and other vertebrate animals.[1] Maggots are seen on the exposed body parts with infected skin lesions in small neglected children very old patients, immuno-compromised, mentally retarded and bed-ridden patients. In young, healthy and mentally sound and active persons it is rare to see maggots and too rare to be seen in covered parts like genitals.

CASE REPORT

A 18 years old young unmarried girl presented to the gynaecology outdoor with a history of pain and swelling in the genitalia along with dropping of fly larva from vulva for the last 15 days. She lived in the rural area in conditions of poor hygiene and her non-hygienic toilet was outside the house. There was a history of normal regular menstrual cycle prior to the onset of this painful swelling of the genitalia. She used folded clothes instead of the readymade sanitary towels during her menstrual bleeding and used to hang the washed cloth on a cloth-line outdoors before reuse. There was no history of any trauma, insect bite or sexual activity. There was no history of any immune-suppressive or steroidal therapy, any chronic illness including tuberculosis and diabetes in the past or in the family.

Physical examination of the patient revealed a normal build with vitals in the normal range. General physical examination revealed that the patient was of sound physical and mental health. On local examination, right labia majora was tender, erythematous and swollen with six × four centimeters large ulcer extending from clitoris upto the fourchette. The ulcer base was necrotic and had multiple deep-burrowed tunnels from which creamy-white coloured larvae were seen crawling out (Figure 1). Left labia majora and minora were normal. Hymen was intact. No significant lymph-adenopathy was present. Laboratory investigations revealed haemoglobin - 9.2 gm% with normal total and differential leucocyte count, blood sugar - 94 gm%, urine complete examination-within normal limits, her serology for HIV and syphilis was negative. Her urine examination and sonography was negative for pregnancy. The patient was hospitalized and given broad spectrum antibiotics and other symptomatic treatment along with tetanus toxoid injection. Turpentine oil was applied on the ulcerative lesion and more maggots were seen coming out of the tunnels due to

asphyxiation and were removed using the non-toothed forceps. The wound was cleaned with antiseptic solution and same was repeated over the next few days. By day 5, maggots were completely absent and daily cleaning of the ulcer was done (Figure 2). Ulcer healed slowly in two weeks. The patient was discharged and advised regarding personal hygiene to avoid re-infestation.

Figure 1: Erythematous and ulcerative lesion in right labia majora with multiple deep-burrowed tunnels. Maggots are seen coming out after application of turpentine oil over the lesion with a syringe.

Figure 2: Clean ulcerative lesion with healthy granulation tissue after one week of treatment.

DISCUSSION

In Myiasis is a condition resulting from the invasion of tissues or organs of man or animals by the larvae of several species of flies. The distribution of myiasis is worldwide with more case being reported from tropical, subtropical and warm temperate areas. There are two forms of myiasis: obligate, in which the maggots feed themselves on living tissues, and facultative type, where the maggots opportunistically take advantage of wounds or degenerative necrotic conditions to incubate their larvae.[2] Myiasis can be classified according to the site of infestation.[3] Cutaneous is the most common form but nasopharyngeal, ophthalmic, intestinal and urogenital infestations have been reported.

Vulvar myiasis is a rare entity and constitutes only 0.7% of human infestations with few cases reported in published literature. We consider our patient as a case of myiasis as maggots have invaded the vulvar tissue. As poor hygiene is known to be associated with vulvar myiasis, washing and keeping the genital area clean may prevent the occurrence of this condition to a great extent. The possible source in the present case may be the eggs, which were transmitted to the vulva via the soiled clothes. The flies are attracted to the blood and body secretions and laid eggs when the undergarments were on the cloth-line. It is important to exclude the sexually transmitted diseases including HIV in these cases. Although Sherman[4] recommends maggots to be submitted for species identification, we could not do so due to lack of facility. The use of turpentine oil has been advocated in many cases of cutaneous myiasis world-wide, but none has mentioned its use in vulvar myiasis.[5]

The use of turpentine oil produced excellent result in our case. Use of petroleum jelly, paraffin oil or bees wax can also be used to asphyxiate the larvae and force it out. Surgical excision may be used if larvae is dead or if other methods have failed. Care should be taken not to rupture the maggots because they may cause secondary infections or trigger severe allergic reactions. Gomes and colleagues[6] reported a case of vulvar myiasis in an 18 years-old girl and Cilla et al.[7] described a case of vulvar myiasis in a diabetic 86 years old. Passos et al.[8] reported one case of vulvar myiasis in a 19 years old single female patient, with multiple sexual partners. Baidya[9] has reported a case of genital myiasis in woman with genital prolapse and malignancy.

CONCLUSION

Vulvar myiasis is a rare condition but should be considered in the differential diagnosis of genital lesions. The diagnosis and treatment is simple. This case highlights the need for thorough genital examination as a means of identifying less common disease. It also emphasizes the role of a doctor in educating the patients living in rural area about good personal hygiene.

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