

## Vulvar Myiasis: Atypical Presentation as Carcinoma Vulva

Savita Rani Singhal\*, Parul\*\*, S. K. Singhal\*\*\*

### Abstract

*Myiasis is a parasitic infestation, rarely seen in the vulval region with more cases being reported in tropical, subtropical and warm temperate climate. Cutaneous Myiasis can be misdiagnosed as cellulitis, leishmaniasis, sebaceous cysts, staphylococcal boil, insect bite or skin abscess. Knowledge of the characteristic clinical findings and the close inspection of skin lesions are key to diagnosing myiasis. We report a case of vulval maggots which was misdiagnosed as vulvar carcinoma and caused undue anxiety to the patient.*

### Introduction

Myiasis is a zoonosis resulting from an infestation of the skin, mucosa, orifices or natural cavities of human or animals by larvae of flying dipterous insects [1]. It is common in tropical and subtropical regions where the causative fly species are common. The predisposing factors for the development of myiasis are poor personal hygiene, dead necrotic tissue and foetid odour that attract the female fly to lay egg on it, immunodeficiency states, diabetes mellitus, promiscuous sex behavior, low education status and warm and humid climatic conditions that favor the flies [2, 3].

Cutaneous Myiasis can be often misdiagnosed as cellulitis, leishmaniasis, sebaceous cysts, staphylococcal boil, insect bite or skin abscess [4]. Knowledge of the characteristic clinical findings and the close inspection of skin lesions

are key to diagnostic of myiasis. With the correct diagnosis unnecessary antibiotics and surgical procedures can be avoided. We report a case of vulval maggots which was misdiagnosed as vulvar carcinoma and caused undue anxiety to the patient.

### Case Report

A 72-year-old, post-menopausal, sexually inactive female came to outpatient department with the complaints of boring pain and irritation over the vulva for 20 days. Patient consulted a private practitioner and was provisionally diagnosed as vulvar carcinoma. She was referred to our hospital, tertiary care center, for needful. On examination, the patient was very anxious, with stable vitals. Local examination revealed that left side of vulva was hard, indurated and lower part of left labia minora and left vaginal wall was eaten up. The wound was covered by foul smelling slough. Per speculum examination revealed presence of maggots deep in the vagina (Fig. 1). She was admitted and daily antiseptic cleaning with acriflavin glycerine and turpentine oil application was done. Maggots came out once turpentine oil was applied and were removed with forceps. She had intractable pain due to massive destruction of tissues by maggots, so she was also put on systemic antibiotics and analgesics. She also required off and on injectable analgesics due to intractable pain. Her condition improved a lot after 4-5 days. She had no other systematic disease. Her blood sugar levels were within normal limits. The patient was discharged after seven days in good condition. Except for the poor socioeconomic status and lack of cleanliness, no other predisposing factor was found. Patient was on regular follow up and at six months wound was completely healed.

\*Professor, \*\*Resident,  
Department of Obstetrics &  
Gynaecology, \*\*\*Senior  
Professor, Department of  
Anesthesia, Pt B D Sharma  
Post Graduate Institute of  
Medical Sciences, Rohtak,  
Haryana, 124001, India

**Savita Rani Singhal,**  
14/8FM, Medical Campus,  
Rohtak, 124001.  
Haryana, India.  
Email:  
savita06@gmail.com

**Fig. 1:** Showing eaten up labia minora and removed maggot seen lying on labia majora



### Discussion

Myiasis can be primary or secondary. Primary myiasis is caused by biophagus larvae that feed on living tissue while secondary myiasis, more common type, is due to necrobiophagus flies that feed on dead tissues [5]. Accidental or pseudomyiasis is a condition where myiasis occurs without tissue invasion as by ingestion of eggs of biophagus fly species [1, 2]. Myiasis is a benign disease but secondary bacterial infection and tetanus may complicate the disease. Larval migration into the brain through the fontanelles leading to fatal cerebral myiasis has been recorded [6].

Cutaneous Myiasis should be differentiated from cellulitis, leishmaniasis, sebaceous cysts, staphylococcal boil, insect bite or skin abscess [4]. Clinical findings and the close inspection of skin lesions for maggots click the diagnoses of disease.

It is common in tropical and subtropical regions where the causative fly species are common. The predisposing factors for the development of myiasis are poor personal hygiene, dead necrotic tissue and foetid odor that attract the female fly to lay egg on it, immunodeficiency states, diabetes mellitus, promiscuous sex behavior, low education status and warm and humid climatic conditions that favor the flies also predispose to the disease [2, 3].

The treatment is simple and it includes removal of larvae and treats any secondary bacterial infection with antibiotics. The larvae may be removed mechanically with forceps and preferably immobilized to prevent them to burrow into deeper

tissues. Occlusion of larvae spiracles in furuncular myiasis with animal fat, nail paint, bees wax, paraffin, butter or mineral oil asphyxiate the parasite and cause it to migrate out of skin. Sometimes surgical incision may be required to extract larva. If a surgical approach is used, the incision should avoid lacerating the larva, as the retained larval parts may precipitate a foreign body reaction.

Clinical presentation of maggots may be like as seen in the present case. In the present case the patient was misdiagnosed as vulval carcinoma due to menopausal age group, foul smelling discharge, eaten up and hard indurated vulva. Had the proper examination was done, maggots would have been seen at the first place of the reporting, and undue anxiety of the patient and attendant would have been avoided due to misdiagnosis.

### Conclusion

In the tropical areas and with poor socioeconomic status, any women coming with foul smelling discharge, pain, and eaten up vulval area, before jumping to diagnosis of carcinoma, the possibility of maggots should be kept in mind and proper examination should be done to rule out presence of maggots to avoid misdiagnosis leading to undue anxiety of the patient and the attendants.

### References

1. Benedito BD, Sabas CV, Eid GC. Genital myiasis in a woman with psychiatric disturbance. *Br J Obstet Gynaecol*, 2005; 112: 1000-1001.
2. Passos MR, Carvalho AV, Dutra AL. Vulvar myiasis. *Infect Dis Obstet Gynecol* 1998; 6: 69-71.
3. Farkas R, Kepes G. Traumatic myiasis of horses caused by *Wohlfahrtia magnifica*. *Acta Vet Hung*. 2001; 49: 311-8.
4. Brewer TF, Wilson ME, Gonzalez E. Bacon therapy and furuncular myiasis. *J Am Med Assoc*. 1993; 270: 2087-8.
5. Kudur MH, Pooja N, Nayak S. Unusual presentation of cutaneous myiasis. *Indian J Dermatol Venereol Leprol*. 2010; 76: 712-4.
6. Rossi MA, Zucoloto S. Fatal cerebral myiasis caused by the tropical warble fly, *Dermatobia hominis*. *Am J Trop Med Hyg*. 1973; 22: 267-9.