

MYIASIS DUE TO *DERMATOBIA HOMINIS* IN TRINIDAD. A CASE REPORT

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Abstract. A case of cutaneous myiasis from *Dermatobia hominis* in a 32-year-old male is reported from Trinidad.

Key words: cutaneous myiasis; *Dermatobia hominis*; Trinidad.

Introduction

Human cutaneous myiasis due to *Dermatobia hominis*, a common parasitic disease of Central and South America, has been rarely reported from other parts of the world [1-4]. A case of myiasis was reported from Trinidad in 1940 [5]. Since then there has been no published report on the occurrence in this country.

Case report

In October, 1984, a 32-year-old Indian male was seen by his family physician with a small nodular lesion on the scalp. It was cystic and mildly tender. Systemic examination and laboratory investigations were normal. With a diagnosis of a sebaceous cyst, it was excised under local anaesthesia. The excised lesion, 0.5 cm, greyish white oval nodule was sent for examination in formal-saline and was processed en block. Microscopically, it appeared to be a section of a parasite (*Figure 1*). From the remaining material on the paraffin block, it was possible to identify it as the early larval stage of *Dermatobia hominis*.

Discussion

Cutaneous myiasis is the infestation by the larvae of several diverse diptera genera. The most common cause of dermal myiasis in man is *Dermatobia hominis*. This species is known to exist in Trinidad as the eggs have been recovered from at least seven different species of mosquitoes [6]. Many people who visit forested areas have at times noticed worms on the skin after being bitten by mosquitoes and have described these as "mosquito worms"; presumably these are the larvae of *Dermatobia hominis*.

The adult *Dermatobia hominis* is a robust fly about 12-16 mm long and is generally a brownish grey in colour; the abdomen, however is of distinctly bluish cast, especially when viewed in reflected light; the legs and face are orange-yellow [7]. It is primarily a forest species and its larvae are parasitic for animals and man. *Dermatobia hominis* never comes in contact with its host, but uses a blood sucking arthropod, usually a mosquito, a biting fly, or rarely a tick, to deposit the larvae. The larvae penetrate the skin through the mosquito bite and development occurs in the subcutaneous tissue. It makes an individual domeshaped lesion with a central orifice which serves as an air source for the larva. When mature, it falls off and pupates in the soil to emerge as an adult fly.

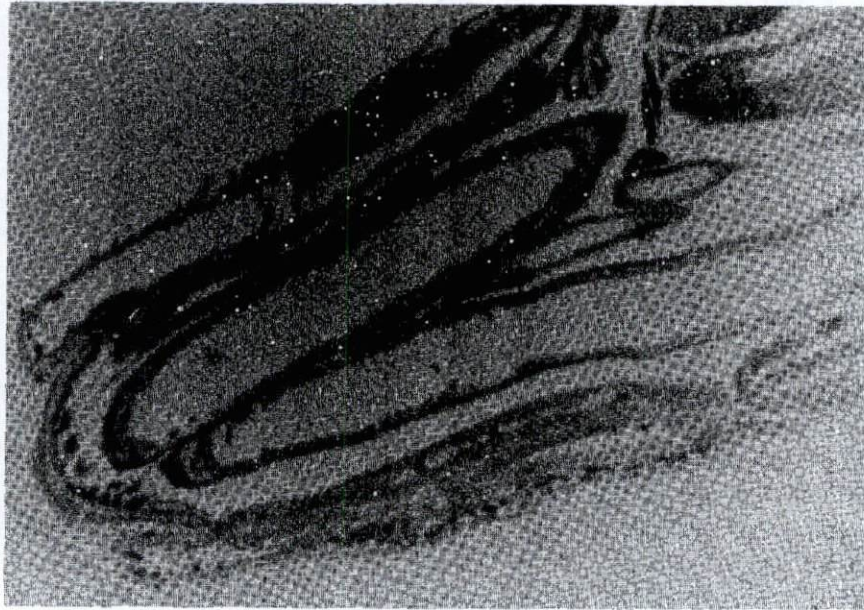


Fig. 1. Microscopic section of a *Dermatobia hominis* larva.

The clinical features of cutaneous myiasis include a creeping eruption and furuncular lesions, usually on an exposed area of the skin. A history of preceding insect bite helps in making a diagnosis, but the definitive diagnosis can be established by observation of the larva. While the lesion itself is only mildly tender, because of secondary infection, myiasis can be quite disabling. One death has been reported to be caused by direct extension of the parasite to the brain of a child [8].

Various forms of treatment include occlusion of the breathing orifice with plasters, occlusive dressings and heavy ointments, to produce asphyxia and death of the parasite. Another effective approach is direct surgical removal of the parasite.

Although this condition has rarely been documented from Trinidad, our understanding is that many people who suffer from myiasis are not seeking medical attention, but use remedies such as applying the burning end of a cigarette to the breathing orifice and squeezing it out. Our report serves as a reminder for medical practitioners that myiasis must be considered in a patient who has furuncular lesions, particularly in those who have visited forested areas.

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