

Cutaneous myiasis due to *Dermatobia hominis*

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SUMMARY

Cutaneous myiasis is extremely rare in Europe. The imported case from Brasil with furuncle-like lesions in 47-years old Yugoslav tourist is presented.

Introduction

Furuncular dermal myiasis is a rare form of the infestation by the larva of Diptera. *Dermatobia hominis* larvae infestation of the skin is extremely rare in Europe, North America and Japan and the cases are imported from Central and South America (1-4).

The adult *Dermatobia hominis* is a fly with complicated life cycle in which intermediary carriers of their eggs like mosquito or a biting fly are included. If the eggs are deposited on the skin surface the first stage larvae penetrate into the skin and then undergo their second and third stage. There follows an inflammatory reaction due to larva excretes or secondary infection. Extremely rare, larva can move deeper into the subcutis or even into the muscle tissue (1).

The larval phase lasts two or three months and the three-stage larva leaves the lesion through the same central orifice that was made during penetration into the host dermis. In Europe larval leaving the hosts (human) skin means the end of *Dermatobia hominis*

life cycle, because there are no future optimal conditions for survival, as there are in forest areas of Central or South America.

Case report

A 47-year old Yugoslav man is presented with three painful furuncle-like and four pustular lesions on the right buttock (Fig. 1). The lesions occurred about two months after he arrived from Brasil, where he spent two weeks as a tourist. The correct diagnosis was not initially made. Bacteriological examination revealed *Staphylococcus pyogenes* and peroral erythromycine (500 mg every 6 hours) was administered during two weeks, without any clinical improvement.

Except E.S.R. 40 mm/h and slight leucocytosis (without eosinophilia), all laboratory findings were

KEY WORDS

cutaneous myiasis, furuncle-like, *Dermatobia hominis*

within normal limits. Patient's general condition was unchanged and no regional lymphadenopathy was found.

Surgical excision of one purulent furuncle-like lesion discovered a third stage larva of *Dermatobia hominis* (Fig. 2 and Fig. 3). By this unsuspected finding, the correct diagnosis was established.

Three weeks after surgical removal of the parasites from each lesion and local application of gentamycin ointment 0.3 %, furuncular-like lesions healed with discrete residual scars 0.2-0.4 cm in diameter.

Discussion

In Europe, all published cases of furuncle-like cutaneous myiasis due to *Dermatobia hominis* were imported. As they are extremely rare and very similar to the furuncular lesions correct diagnosis could be overlooked, as it was in our case.

Patients can feel unpleasant moving, local pruritus or pain (1, 2, 4) in the affected area. In the observed patient the pain was intense and permanent, until the surgical removal of the third stage larva from each lesion. Headache, lethargy, malaise, fever, regional lymphadenopathy and eosinophilia (1, 2) often accompany furuncle-like dermal myiasis due to *Dermatobia hominis*. None of them were found in the patient under observation.

Conclusion

In patients presenting with furuncular lesions after return from tropical countries, furuncular form of dermal myiasis due to *Dermatobia hominis* should be considered in differential diagnosis. Otherwise, like in our case, correct diagnosis could be missed.

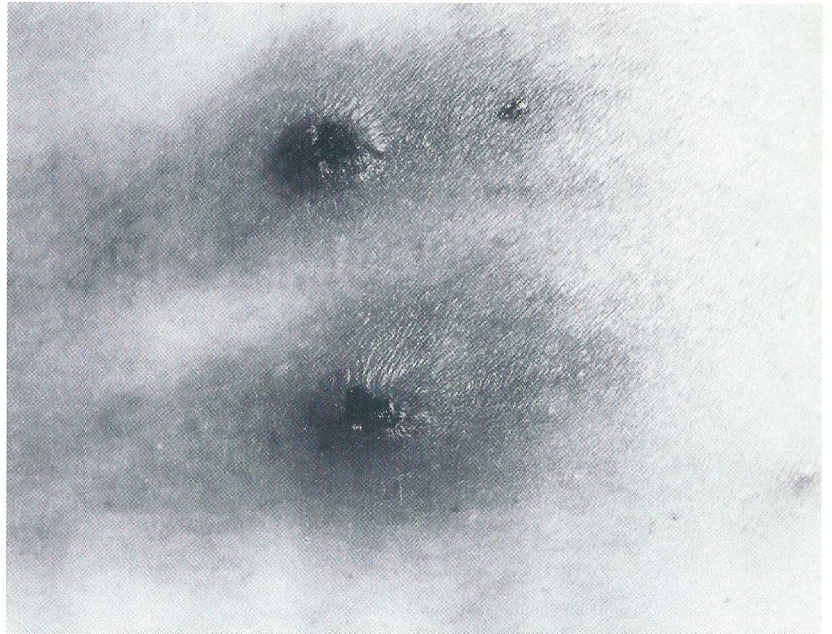


Fig. 1. Furuncle-like and pustular lesions on the buttock.

Fig. 2. *Dermatobia hominis*- third stage of larva.



Fig. 3. *Dermatobia hominis*- magnified larva.



REFERENCES

1. Hubler RW, Rudolph HA, Dougherty FE. Dermal myiasis. Arch Dermatol 1974; 110: 109-10.
2. Veraldi S, Gorani A, Süß L, Tadini G. Cutaneous myiasis caused by *Dermatobia hominis*. Pediatr Dermatol 1998; 15:116-8.
3. Jelinek T, Nothdurft HD, Rieder N, Löscher T. Cutaneous myiasis: review of 13 cases in travellers returning from tropical countries. Int J Dermatol 1995; 34:624-6.
4. Taniguchi Y, Yamazaki S, Ando K, Shimizu M. Cutaneous myiasis due to *Dermatobia hominis* in Japan. J Dermatol 1996; 23: 125-8.

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