

Two cases of cutaneous myiasis in travellers returning from Africa

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Myiasis is a parasitic infestation by larval stages of the flies in the living or necrotic tissues of humans and animals. Myiasis occurs mainly in tropical and subtropical regions and often originate in these areas even when reported in temperate climates. *Cordylobia anthropophaga* (Blanchard, 1872) (Diptera: Calliphoridae) (tumbu fly) is the African species; its larva causes obligatory myiasis of both wild and domestic mammals and humans. The most common type is the cutaneous myiasis. Tumbu fly is an etiologic agent of furuncular myiasis. The flies lay eggs on dry sand in a shade, that is often contaminated with urine or faeces, or clothes. Then larvae penetrate the skin of the host and reach maturity between 8 and 12 days.

The first case – 41 years old, an experienced traveller, who stayed in Uganda in 2018. He used repellents with 50% of DEET (diethyltoluamide). After returning to Poland the traveller found a skin lesion on his umbilical region. It was red and painless. No leakage and itching were detected. He was admitted to the emergency room but the doctor on duty was not experienced in tropical medicine and he refused to help him. Finally, the larva was removed by the patient's wife at home. Then the patient brought the larva to the Outpatient Tropical and Parasitic Diseases Clinic, and the doctor working there directed the sample to the Department of Tropical Parasitology MUG, where the larva was identified as *C. anthropophaga* by morphological features.

The second case – 40 years old woman with the history of one-week tourist stay in the Gambia checked herself into the emergency department of The University Center for Maritime and Tropical Medicine, because of an inflammatory skin lesion on the trunk. First symptoms occurred 7 days after return to home. There was only small pruritic erythematous papule at the beginning. Later tender boil-like lesion with central punctum was created. On the day of medical examination larva with serosanguinous fluid was removed, remaining inflammatory reaction around the lesion that resolved spontaneously within the next few days. Results of routine laboratory testing revealed slightly elevated C-reactive protein level. CBC count showed no leukocytosis and eosinophilia. In the Department of Tropical Parasitology MUG the larva was identified as Cordylobia anthropophaga by morphological features.

Dermatologic lesions are the third most common diseases in patients returning from the tropic, after gastroenterological symptoms and fever. Among them, there are skin infections, rash or itch, insect bite or sting, and animal bite or scratch.

Early lesions in myiasis may resemble insect bites, but as the larvae grow they become visible through an aperture from which serous fluid exudes. The lesions may be associated with oedema, secondary bacterial infection, inflammation, and lymphadenopathy. Removal of the larvae is generally the only required treatment. The history of travelling to the endemic regions helps to establish the diagnosis. The preventing measures include ironing clothes that could destroy both the larvae and the eggs of tumbu fly as well as avoiding drying clothes outside in the shadow.

Skin changes are frequent among travellers to tropical regions. Myiasis is often diagnosed and easy to treat. Unfortunately, there is a lack of tropical medicine specialists. In the face of growing tourism trends, there is an urgent need to educate doctors on duty in Polish hospitals.