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Arisoy ES, Levy ML, Correa AG

Departments of Pediatrics (ESA, AGC) and Dermatology (MLL), Baylor College of Medicine and Texas Children's Hospital, Houston, Texas.

[Furuncular myiasis is an unusual parasitosis of the skin among travelers to tropical and subtropical areas. Its clinical picture may be confused with cellulitis, leishmaniasis, sebaceous cysts or staphylococcal boils. We present a case of furuncular myiasis in a mother and child returning from the jungles of Central America.

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Furuncular myiasis is an unusual parasitic of the skin among travelers to tropical and subtropical areas. Its clinical picture may be confused with cellulitis, lymphangitic, necrotizing, or suppurative abscess. We present a case of furuncular myiasis in a mother and child returning from the jungles of Central America.

Case Report

An 8-month-old boy was referred to our hospital for a non-healing nodular lesion of the forehead. The lesion was first noted upon return from a bird-watching trip in the jungle of the Mbae Mountains of Beira. He had suffered several mosquito bites which resolved spontaneously but this lesion had been increasing in size and did not appear to be tender. He was initially given a course of cephalixin without improvement. The parents had noted the intermittent protrusion of a white object from the central opening of the lesion, as well as small amounts of a clear brownish discharge. The mother had developed a similar lesion on her left breast, which was intermittently painful. She described feeling "movement" within the lesion. Upon further questioning, she recalled feeling the sensation of "an insect bite" in that area while she was beach-combing outdoors in the jungle.

On examination, a 2.5 cm firm, non-tender nodule was noted over the forehead of the infant (Figure 1). A small central aperture with intermittent protrusion of a whitish object was also noted. The area around the lesion was tender but not fluctuant. A similar, non-tender nodular lesion was noted over the inner upper quadrant of the left breast of the mother. No other skin lesions or abnormal physical findings were noted in either parent.

Based on the clinical appearance, the diagnosis of furuncular myiasis was made and benzoin therapy, as
described by Brewer et al., was attempted without success. Cessation therapy with vinblastine resulted in ulceration of the lesion, which required surgical excision by plastic surgery for removal. The application of tobacco to the child's lesion resulted in migration of the larva, which was captured with surgical tweezers and removed (Figure 2). The lesions then healed without complication.

Discussion

Furuncular myiasis is the result of infestation of the skin with the larvae of Drosophila (two-winged flies). The two most common causes of furuncular myiasis are Dermatobia hominis and Cuterebra anthropophaga. D. hominis, the human botfly, is common in the tropical and subtropical areas of Mexico and Central and South America. C. anthropophaga, the cattle botfly, is found in the tropical and subtropical areas of Africa.

The life cycle of the human body is extremely interesting. The adult female produces a larva that must live for several weeks in a vertebrate, usually wild, and domestic mammals or even birds. The adult female captures a flying insect, most commonly a mosquito, and attaches eggs to the ventral surface of the insect's body. When the larva makes contact with the host, the hatched larvae penetrate the skin at the site of the bite. After approximately 6 weeks, the larva will leave the area.

Figure 1 Non-healing nodular lesion over the forehead of the child.
of swelling and drop to the ground as pupae, reaching its adult stage in 2–3 weeks. By congest, the number fly sets 10 eggs in the soil or on clothing, and the larvae penetrate the skin upon contact with contaminated clothing.

The lesions of myiasis are more common in the exposed skin surfaces. When the larva first penetrates the skin, a sharp pricking sensation may be felt. The nodular lesions increase in size over the next couple of weeks and develop a central punctum with serous discharge. These lesions tend to be highly pruritic and intermittent. The patient may describe seeing a "worm" or "fly" emerging from the lesions. Visualization of the posterior spiracles of the larva (sometimes mistaken for eyes) confirms the diagnosis. Secondary bacterial infection may complicate this infection.

Because the larva of *D. hominis* is anchored to the subcutaneous tissue by hooklets, manual removal with tweezers may be difficult. Occlusive therapy with products such as vaseline or fingernail polish, may cause the migration of larvae, but may also facilitate the parasite at it occurred in this host. Surgical removal may then be necessary. Other described methods of treatment include the application of pork fat, bacon strips, or tobacco. The injection of adrenaline into the lesion has also been attempted with good results.

An unusual form of secondary myiasis, which is the result of larvae being deposited into open wounds, is caused by the screwworm flies, Calliopha americana and Chrysomya bezziana. These flies lay eggs on injured or decaying tissue, from which the maggots feed. These screwworms tend to burrow deep into pockets of normal tissue and may cause extensive damage.

Fomite infestation should be inspected on anyone returning from an endemic area with a non-healing nodular skin lesion. Prompt recognition of this entity may avoid the unnecessary use of antibiotics and surgical procedures.

References: