Is Something Biting Me?

Many people suffer from the feeling that insects, mites, or other tiny creatures known as arthropods are biting them, crawling on them, or burrowing in their skin.

Frequently, the causes of these feelings are unknown and no tiny creature can be captured for analysis. This pamphlet will aid sufferers in receiving relief from what, for many, has become an unbearable condition.

What Types of Tiny Arthropods Could Be Affecting Me?

Very few creatures are parasites in the skin of humans. In northern areas such as Pennsylvania, most of these are mites such as scabies (human itch) mites, chigger mites, or follicle mites.

Scabies mites are very tiny and can only be diagnosed by a physician taking skin scrapings and viewing them under high magnification. Most scabies infestations are located in the skin folds of the hands, wrists, and elbows. Scabies mites usually begin to itch several weeks to a month after infestation. They do not produce a biting or crawling sensation.

Chigger mites are more common in the southern states, especially during the warmer months of the year. They are acquired when people walk through high grass and weeds. “Chiggers” do not live in structures or buildings. They produce an intense itching, usually where clothing fits tight against the skin such as the waist, wrists, and lower leg. Technically, chiggers do not burrow in the skin. Instead they attach themselves to the base of a hair and excrete a chemical that causes the skin to swell, thus enclosing the mite in the expanded flesh. They feed on fluids generated at the site. Chigger mites do not produce a biting sensation.

Follicle mites are found on approximately 75 percent of the human population. The vast majority of people don’t know they exist even though there may be hundreds or thousands of them in the oil glands of the face. Occasionally, some individuals (mostly teenagers) will have an acne-like condition because of a reaction to the mites. Most adults have no reaction to the mites.

1. In tropical locations, certain fly larvae (maggots) can infest the skin, and patients that have visited these locations should advise their physicians of their travels. Occasionally, immobile and obese patients in Pennsylvania have exhibited myiasis from bot fly larvae, which normally attack rabbits, mice, and other small mammals. The infestations are characterized by a hole in the skin, surrounded by swelling and redness, and the white larvae can be seen moving within the opening. Note that this is an extremely painful, localized, and rare condition.
Tiny Arthropods That Live on the Skin

The two types of human lice commonly encountered are head lice and pubic lice. Both species are white, small (but can be seen without magnification), and are usually found in the area of the body described by their names. Their biting causes an intense itching in those regions. The eggs of both the head and pubic louse are found on hair shafts at the skin level and are called nits. Nits are whitish, somewhat translucent eggs that are glued on the base of the hair. Over time, as the hair grows, the nits will be found farther from the skin surface.

Tiny Arthropods That Bite the Skin

Some of the very small arthropods that do bite but do not burrow or live within the skin include fleas, bed bugs, mosquitoes, black flies, punkies (a small biting fly), bird or rodent mites, and straw itch mites. Although these arthropods are small, they can be seen without the aid of magnification.

Fleas usually bite the lower legs and are brown in color and flattened from top to bottom. The adults are approximately 1/8 inch in length. Bed bugs feed during the night or early morning hours. They frequently go unnoticed because many people have no reaction to the bites and there is no sensation when a bite occurs. Some people, however, do have a reaction to the bites. The site of the bite becomes reddened, raised, and begins to itch—sometimes intensely.

Flies such as mosquitoes, black flies, and punkies occasionally will enter homes (during the summer) but will not reproduce in the structure. They can be seen without the aid of magnification and the sensation of biting is immediate. Although punkies (also known as no-see-ums) are very small (1.6 millimeter or about the width of an "a" on this page), they have a very noticeable, stinging bite.

Bird and rodent mites can become problems in buildings for short periods of time, particularly in the early summer when birds nest in holes of buildings or if infested rats have been removed from a building. Although these mites are small, they can be seen without magnification, especially when they walk across a light-colored surface. These mites are typically brown in color. The bites of these mites feel like a slight sting—not noticeable but not very painful.

Straw itch mites are predators on other small creatures that infest grains and stored products. They feed on the eggs and larvae of moths and beetles that are pests of stored products. On rare occasions, people who work in feed stores, seed package companies, and similar places will be bitten by these mites (the mites are only tasting the skin). Their bites result in pain and an eventual reddened, small, raised bump. The mites rarely infest homes unless there are vast numbers of stored products pests present. The adult mites can be seen without aid of magnification, but the immature mites cannot. It is highly unlikely that a residence would be infested with straw itch mites.

Bed bugs are oval, chestnut brown insects that are flattened from top to bottom. The adults are approximately 1/8 inch in length. Bed bugs feed during the night or early morning hours. They frequently go unnoticed because many people have no reaction to the bites and there is no sensation when a bite occurs. Some people, however, do have a reaction to the bites. The site of the bite becomes reddened, raised, and begins to itch—sometimes intensely.

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