There’s Something Bugging Me—Or Is There?

Kelly Murray Young

Symptoms

Common symptoms include itching, redness and bumps on the skin. It feels as if your body has been invaded by “bugs” crawling under your skin, burrowing into you and gnawing and biting. Nothing seems to help, including scratching, digging or using lotions and creams.

The tiny “bugs” may appear to jump long distances or change colors.

You feel certain that your house and furniture are infested too. Sometimes they come out of linens, tobacco, stored food or cleaning products. The “bugs” may even seem to follow you from place to place. No one has been able to see them but you. You’ve tried having your home treated by professional pest control, perhaps even fumigated.

You’ve probably tried every remedy family, friends and non-medical professionals have suggested, but you are still experiencing discomfort. What could be causing your suffering?

Possible Causes

The itching, crawling and biting sensations may be caused by unrelated medical conditions such as:

Arthropods (insects, mites and related creatures)
- Lice: Hair, body and pubic lice do not burrow under skin but may live on the body or in clothing and bedding. Adults are visible crawling in the hair or skin; eggs (called nits) look like small pearls and can be found attached to hairs.
- Scabies: Human scabies, tiny mites related to those that cause mange in dogs, are the only arthropod known to burrow and live in human skin. A trained medical professional can use a skin scraping to easily diagnose scabies. Scratching, digging or cutting your skin to remove these parasites can increase your chances of developing a bacterial or fungal infection and may leave scars.
- Fleas and ticks are pests of dogs and cats but may occasionally bite humans and are large enough to be visible to the naked eye. Consult with your veterinarian for the most effective strategy for eliminating the problem on pets and in the home.

- Mosquitoes, bedbugs and kissing bugs feed on human blood, but do not live in or on human bodies. Kissing bugs and bedbugs feed while the person sleeps, leaving spots of blood on the bedding in the morning. To prevent mosquitoes and kissing bugs from getting into the house, install screens on all windows. Bedbugs are a growing problem in Arizona. The insects are large enough to be seen without magnification. Scout around near the bed and look for rust colored insects, or their droppings, along the mattress seams, between the mattress and box spring and behind the headboard.
- NOTE: Do not apply pesticides to your body, your clothing, or your property unless an insect pest has been positively identified. If an insect pest has been identified and you choose to use a pesticide, select one made specifically for that purpose and follow the directions on the label. Improper use of pesticides may make the problem worse as these chemicals tend to be skin irritants.

Personal Care
- Stress
- Dry skin
- Scratching or excessive washing may result in skin irritations that look like bug bites.

Allergic Reaction
- Fibers from new fabrics, feathers and other stuffing material
- Bacteria, mold, mildew and fungus spores
- Human and pet dandruff, and pet hair
- Laundry, dish or bathing soap
- Paint
- Formaldehyde (often found in permanent press clothing)
- Perfumes
- Pollens
- Food including seafood, nuts, dairy products

Medication
- Side effects from prescription drugs or interactions between multiple prescription drugs such as antibiotics and blood pressure medication
Side effects or interactions from over the counter medications, vitamins, and dietary supplements
Drug abuse of methamphetamines, cocaine or other illegal drugs

Medical Conditions
- Hypothyroidism
- Skin cancers
- Vitamin or protein diet deficiencies
- Cerebrovascular disease
- Delusory parasitosis

While there is no such thing as a “Paper Mite”, in airtight, heavily insulated buildings dust, chemicals and static electricity build up leading to pricking, tingling, creeping sensations very similar to bugs on the skin. Dust from computer paper, carpet fibers, draperies, new filters in evaporative coolers and heating/air-conditioning systems can cause itching.

Sometimes people feel that their work environment is “infested.” Workers feel that they are being attacked by “mites,” bitten by something that no one can see. In this case, it might be appropriate to call in an entomologist (a person who knows a lot about insects) and/or an industrial hygienist (someone trained to look for dust, debris, and other materials) to find out what the problem is. In one instance, an entomologist found out that the symptoms had started after a new power cable was installed in the ceiling of a lab. At that time dust had been dislodged from insulation, and got into the ventilating system. The dust circulated throughout the lab, causing the workers’ skin to itch and break out. When the dust was removed, the problem ceased.

Who Can Help Diagnose And Treat The Problem?

A thorough physical examination should be able to identify and provide treatment for the problems listed above. **First, contact your primary health provider.** There are many common conditions that a medical professional is trained to identify and treat. You may be referred to a dermatologist who is trained to deal with disorders of the skin and their causes, including parasites. Allow these professionals to submit specimens for further analysis by entomologists, parasitologists, or other biologists for verification or identification. These specialists can aid in identifying or ruling out various kinds of parasites as well as provide important additional biological information that can assist in your treatment.

- Entomologists are trained in identification of the various life stages of insects, and can identify what they are. Some medical entomologists specialize in working with insects that attack people.
- Parasitologists study organisms that live at the expense of their hosts like protozoans or parasitic worms.
- They can assist in your treatment.
- As provide important additional biological information that identifying or ruling out various kinds of parasites as well verification or identification. These specialists can aid in

It is very important to see medical professionals to be properly diagnosed, especially if insects or parasites turn out not to be the problem. In that case you will need additional help, and your primary health care provider can assist you. If you are not satisfied with the diagnosis offered by the first doctor, get a second opinion. It is unlikely that you will encounter two consecutive doctors that make incorrect diagnoses.

If, after having been thoroughly examined and investigating all possibilities that might be causing the discomfort with no solution found, it could be that you have a medical condition called delusory parasitosis. This is the mistaken, unshakable belief that organisms are present in or under the skin even when confronted with the fact that there is nothing there. The sensations felt are very real to those suffering from this problem, and may be caused by stress.

Stress is known to be associated with many health problems, and can be caused by a myriad of factors: marriage, divorce, loneliness, relationship problems, death of loved ones (including pets), financial problems, and job-related pressures, to name a few. Learning how to effectively deal with stress may reduce or eliminate these types of skin problems.

Delusory parasitosis can become so overwhelming that it can lead to a vicious cycle of constantly cleaning or treating the skin, which can cause skin damage increasing rashes and itching. Some sufferers will dig into their skin trying to find out what’s there. Others will bring in skin tissue for analysis in a desperate attempt to find a solution.

Your health care provider may be able to assist you in managing stress or may prescribe medications that alleviate the symptoms, at least temporarily, while more permanent solutions are sought. If your primary health care provider determines that further therapy or advice is needed, you may be referred to a psychiatrist or other specialist. Delusory parasitosis is a real problem.


Acknowledgment

Special thanks to Sue Hakala, Master Gardener and Dr. Tim Dennehy, Entomologist for their assistance with this publication.

References

Hinkle, Nancy, *Delusory Parasitosis*, American Entomologist, Vol 46, Number 1, pp 17 – 25,
Lyon, William F. *Mystery Bugs*, Department of Entomology, Ohio State University Extension Service.
Also included is information researched by Arizona Entomologist Roberta Gibson.
Any products, services or organizations that are mentioned, shown or indirectly implied in this publication do not imply endorsement by The University of Arizona.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Economic Development & Extension, College of Agriculture and Life Sciences, The University of Arizona.

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.