

LICE

DEFINITION

Lice are small, insect-like parasites. They live on the human body, most commonly on the skin, hair, and genital area. They feed on human blood and lay their eggs on body hair and in clothing. The word "lice" is plural for the word "louse."

DESCRIPTION

Lice do not cause dangerous infections. However, they may carry organisms that cause more serious diseases, such as trench fever and typhus. Lice tend to be a problem primarily in overcrowded areas or areas that have inadequate facilities for bathing and laundry. They are often a problem among the homeless or in military or refugee camps. All humans are equally at risk to attack by lice, but elderly people are more prone to develop complications from lice attacks.

CAUSES

The three common types of lice infestation are head lice, body lice, and pubic lice. Head lice can be transmitted by sharing hats, combs, or hairbrushes. Epidemics of head lice are very common among school-age children. An epidemic is the rapid spread of a disease across a wide geographical area. Head lice do not cause typhus or other serious diseases.

The head louse is about 0.15 centimeters in length and can usually be seen by examining the patient's scalp. The louse reproduces by laying eggs, which are attached to the base of hairs close to the scalp. Nits (a name for the eggs and young lice) hatch in three to fourteen days. After they hatch, they must feed on blood within a day. If they do not, they die. Head lice may spread to the eyebrows, eyelashes, and facial hair in adults. They are usually isolated to the scalp in children.

Body lice are about the same size as head lice, but are more difficult to see. They tend to spend their lives in clothing, only coming to the skin to feed. People who wear the same clothes day after day are at risk for lice infestations. The lice spread easily from person to person through close personal contact or sharing of bedding.

Pubic lice, also known as crabs, tend to infest the genital area. However, they may also spread to other parts of the body. Individuals contract pubic lice through intimate contact or by sharing bedding, towels, or clothing.



SYMPTOMS

The most common symptom of a lice infestation is intense itching. The itching is caused by a toxin (poison) present in the saliva of lice. Repeated bites can lead to severe inflammation of the skin. Scratching lice bites can often cause injury to the skin. Other symptoms of lice infestation depend on the body part in which the lice occur.

Head lice often produce intense itching. A patient may actually scratch the skin open. When that happens, a bacterial infection may develop. An attack of head lice often causes swelling of the neck glands as well.

Body lice also cause intense itching. Their bites may first appear as small, red pimples. Eventually, the pimples develop into a rash that covers the skin. If body lice are not treated, complications may develop, including headaches, fever, and bacterial infections.

Pubic lice may be difficult to see, but scratches made by an itching patient are usually easily visible. Small dark-brown specks on a person's underwear are also a sign of pubic lice. The specks are matter excreted by the lice. Less commonly, pubic lice may cause the formation of small bluish spots on the patient's body, especially the thighs.

DIAGNOSIS

Doctors can often easily diagnose lice with a visual examination. The lice are large enough to be seen with the naked eye or through a magnifying glass. Brown specks on the patient's underwear are another sign of lice. The patient may also have bruised skin where he or she has been scratching. Lice nits are also easy to see. They can be found at the base of hairs near the skin.

Final diagnosis may involve ruling out other medical problems. For example, ordinary dandruff sometimes looks like an infestation of head lice. Scabies also resembles body lice. Scabies is a skin condition caused by tiny organisms called skin mites. Differences among diseases can usually be detected with a microscope. Blood and other laboratory tests are not useful in making these distinctions.

TREATMENT

Treatment for lice involves two steps. First, a chemical is used to kill the adult lice. Two common products used for this are lindane (trade name Kwell) and permethrin (trade name Nix). Both products are strong chemicals and care must be used in applying them to the hair or skin.

The second step in treatment is removing nits. If left in place, the nits may survive and mature to become young lice. The easiest way to remove nits is with a fine-tooth comb or tweezers. In most cases, a single treatment destroys all lice and nits. If necessary, a second treatment can be applied a week later.

Treatment also involves washing the patient's clothing and bedding in hot water. These objects should then be ironed with a hot iron. Clothing and bedding can also be treated with an insecticide, such as malathion powder.

PROGNOSIS

In the vast majority of cases, there are no serious long-term effects from a lice infestation. The patient recovers completely with no bodily damage. In rare cases, patients may develop complications, such as typhus or trench fever.

PREVENTION

There are no vaccines or skin treatments to protect a person against lice. The most people can do is follow a few simple rules to reduce the risk of contracting (getting) lice. These rules include:

- Teaching school-age children the basics of good hygiene. This includes the importance of not lending or borrowing combs, brushes, or hats.
- Notifying and treating the sexual partners of adults who have pubic lice.
- Checking homeless people, elderly patients who are unable to care for themselves, and other high-risk individuals before they are admitted to a hospital. In this way, other patients in the hospital may be protected from lice.

<http://www.faqs.org/health/Sick-V3/Lice>