Lice 411

Everything You Always Wanted to Know About Head Lice, But Were Afraid to Ask <u>By Elin Cohen, MD</u> *Medical Director and co-founder of the Lice Treatment Center*

Head lice are not dangerous, and they are not known to spread disease, but they certainly are a nuisance! The itching and discomfort can interfere with sleep or concentration, and a case of lice can cause unnecessary absence from work or school. Treatment is often laborious and time-consuming. The following information is meant to help understand lice, control the spread of lice, and aid in an approach to treatment.

According to the Centers for Disease Control, there are an estimated 6 million to 12 million cases of lice per year in children- ages 3 to 11 years. Of course, the numbers are significantly greater if we consider all the affected adults and teens as well. They are most commonly spread from head to head, and cleanliness has nothing to do with getting a case of head lice.

The louse may be found in three stages. **Eggs, called "nits**", are very tiny, oval in shape and are firmly glued to the hair strand. They may be yellow or white in color, although they sometimes blend with a darker hair color. A nit takes eight or nine days to hatch, and viable nits are usually located within 1 cm (about 1/4 inch) of the scalp--most commonly at the nape of the neck or behind the ears. Nits can live for one week if they are away from their host, but they require a temperature close to body temperature to hatch, so nits that are not on a person would be unviable.

Nymphs are immature lice that take nine to twelve days to mature. They cannot lay eggs in the immature phase, and they do not survive when away from the host.

Adult lice are 6-legged insects that are about the size of a sesame seed. The color is generally grayish-white, but they can sometimes look darker. The mature females lay the eggs--generally four to ten eggs in a 24-hour period. Lice can move quite quickly, traveling at a rate of six to thirty cm per minute! They do not, however hop or fly, so they can only spread by direct contact to the hair. Mature lice can live for thirty days on a head, but if they are not on a human, they die within one to two days.

The most common way that lice are spread is from direct head to head contact. It is possible for a louse that has fallen off of a head onto a couch or carpet to crawl onto another person's head, but such a transfer would be uncommon. Sharing brushes, combs, hair accessories, hats, helmets, scarves, or coats can all spread lice as well. Lice are not spread from household pets.

Many people feel overwhelmed when faced with a case of head lice on themselves or in the family. Successful treatment requires patience and often repetition with a plan of killing any live bugs, and avoiding any new ones! With a systematic approach, even the toughest cases can be beat.

There are several methods of eliminating the live lice and nymphs, and if you are confused about how to proceed, you can always ask your physician. People can choose from the commonly used pyrethrin or permethrin based shampoos and rinses, or they may **choose a treatment that uses natural essential oils.** Some lice are resistant to treatment with a pyrethrin or permethrin, so the essential oil treatments may have an added benefit.

A second approach is to smother live lice and nymphs with an oil-based treatment or with a different type of smothering agent. This approach works well in conjunction with the treatment shampoos and rinses as a next step in the process.

The final step I recommend is to comb out nits and lice with a high quality, metal lice comb. Any louse or nit that has survived a treatment shampoo and a smothering treatment can be caught in the comb-out. The comb-out should be systematic and careful, using small, one inch sections of hair that are combed from above, below, and from each side.

Many people find that using the three pronged approach will catch every nit and louse. Occasionally, after any type of treatment combination, people are devastated to find a cluster of nits the following day or within the week.

Remember though, it only takes one wily, fast moving louse to escape the treatment and to lay 4 to 10 nits every day. Simply continue with the systematic approach until that last louse or two is eliminated. You can repeat a system of treatment shampoos and/or conditioners (in the product recommended time intervals), smothering agents, and comb-outs until you eliminate every last louse from the hair. With a bit of patience and a calm approach, the system will work. As for the house and environment, as the lice and nits do not survive away from a human host, the clean up will effectively eliminate any risk of re-infestation. Bedding and washable items that have been in contact with the affected person within two days prior to treatment should be washed in hot water, and dried in a high temperature cycle. Anything that is not washable can be sealed in a plastic bag for two weeks, which is more than enough time to isolate those items. Upholstery, floors, and carpets can be vacuumed. I do not recommend using toxic sprays in living spaces.

Sources:

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Dr. Elin Cohen, a pediatrician and a mother of two, is the Medical Director of The Lice Treatment Center. She has formulated the non-toxic, all natural **Jolis Cheveux by LTC** line of lice treatment and prevention products for LTC. **Jolis Cheveux by LTC** products are available online at www.licetreatmentcenter.net and in select stores.