

Head Lice: New Treatment Recommendations

Head lice are very common among children 3 to 12 years of age. Children in group settings like child care and schools are at increased risk, because of their habits of frequent head-to-head contact and sharing personal items. Although head lice are a nuisance, they are not a sign of poor hygiene and do not transmit infections.

Exercise caution

In the past two decades, head lice have become resistant to nearly all first-line treatments. As a result, these treatments will not kill the lice, are a waste of money, and expose children to unnecessary side effects and toxicity. Studies also show that the potential for misdiagnosis and the resulting improper use of pediculicides (chemicals used to treat lice infestations) raise concerns about unsafe use of these products, specifically when lice are not present or products are used excessively.

Know the biology of head lice

Understanding the life cycle is an important factor in the management of head lice. Head lice live and breed on the child's hair and scalp and feed on blood. They cannot survive for more than one to two days off of a live host.

1. The female lives up to three to four weeks and lays approximately six eggs (nits) a day. These tiny eggs (appearing as tiny white or dark ovals) are firmly attached to the hair, with a glue-like material, close to the scalp.
2. Young nymphs hatch in about 7-12 days, resembling a small adult.
3. Nymphs molt or shed skin three times to reach the adult stage in about 10 days.

What are the signs and symptoms?

The major symptoms are itching and scratching caused by the bugs and their bites. Continued scratching may lead to open sores and secondary infection.

What methods can be used to treat the infestation?

There are several treatment options available, but before treating, make sure the child has an active case. In fact, the

greatest harm associated with head lice is not from the lice, but from well-intentioned yet misguided use of toxic chemicals to eliminate the lice.

Non-chemical methods

- **Mechanical removal** of lice and nits can be an effective method. This is time-consuming, but safest for young children. Use a nit comb, a good light and magnification, since nits are small and hard to see. "Wet combing" is often more effective and haircuts make the search for lice and eggs easier.
- **Occlusive methods** (such as petroleum jelly or Cetaphil) with emphasis on careful technique and repeating for at least 2 weekly cycles, can get rid of lice.
- **Benzyl Alcohol 5% product** kills lice but not nits. A doctor's prescription is needed.
- **Heat** from the ordinary hand-held hair dryers may be sufficient to kill the lice and their eggs.
- **Alternative treatments** involving the use of herbal shampoos, mayonnaise, food grade oils, kerosene and hair gels are not proven to be effective.
- **Flammable or toxic substances such as gasoline or kerosene should never be used.**

Chemical methods

- **Shampoos** containing permethrin or pyrethrins are popular over the counter treatments, but because of resistance are no longer completely effective. They do not kill the eggs and a second treatment is needed about 10 days later to kill the newly-hatched lice. .
- **Malathion (0.5%) is available only by prescription as a lotion for children** who are 24 months of age or older. It is recommended when treatment with permethrin or pyrethrins fails or resistance is documented.
- **Lindan** is approved by the Food and Drugs Administration, but not recommended because of widespread resistance and side effects including neurotoxicity.

Selection and use of treatment products are very important. The remedy for head lice should be based on life cycle, resistance and safety considerations. According to American Academy of Pediatrics, the ideal treatment for lice would be completely safe, free of harmful chemicals, readily available without a prescription, easy to use, and inexpensive.

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Resources and References

AAP (2007). Therapy for head lice based on life cycle, resistance and safety consideration.

AAP (2010), Clinical Report—Head Lice online at <http://pediatrics.aappublications.org/cgi/reprint/peds.2010-1308v1>

CDC. Treating Head Lice, Fact Sheet for the General Public.



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