

Summary of Key Points of the Head Lice Clinical Report, Pediatrics (Official Journal of the American Academy of Pediatrics)

- Head lice infestation is associated with limited morbidity but causes a high level of anxiety
- There has been a call for greater physician involvement in the diagnosis and treatment of head lice.

ETIOLOGIC AGENT

- The female lives up to 3 to 4 weeks and, once mature, can lay up to 10 eggs per day.
- Note that some experts refer to “eggs” as containing the developing nymph and use “nits” to refer to empty egg casings; others use the term “nits” to refer to both eggs and the empty casings.
- Itching may not develop for 4 to 6 weeks, because it takes that amount of time for sensitivity to result. If not treated, this cycle may repeat itself approximately every 3 weeks.

EPIDEMIOLOGY

- Head lice infestation is not significantly influenced by hair length or by frequent brushing or shampooing.
- Infested individuals rarely have more than a dozen live lice.

TRANSMISSION

- Lice cannot hop or fly; they crawl.
- Transmission in most cases occurs by direct contact with the head of an infested individual. Indirect spread through contact with personal belongings of an infested individual (combs, brushes, hats) is much less likely but may occur rarely. Lice found on combs are likely to be injured or dead.
- In 1 study, examination of carpets on 118 classroom floors found no lice despite more than 14,000 live lice found on the heads of 466 children using these classrooms. In a second study, live lice were found on only 4% of pillowcases used by infested volunteers. Thus, the major focus of control activities should be to reduce the number of lice on the head and to lessen the risks of head-to-head contact.

DIAGNOSIS

- Diagnosis of infestation by using a louse comb is quicker and more efficient
- Tiny eggs may be easier to spot, especially at the nape of the neck or behind the ears, within 1 cm of the scalp.
- It's important not to confuse eggs or nits with dandruff, hair casts, or dirt.
- Nits are more difficult to remove, because they are firmly attached to the hair shaft eggs found more than 1 cm from the scalp are unlikely to be viable.

PREVENTION

- It is probably impossible to prevent all head lice infestations.
- Young children come into head-to-head contact with each other frequently.

- It is prudent for children to be taught not to share personal items such as combs, brushes, and hats. However, no one should refuse to wear protective headgear because of fear of head lice.
- In environments where children are together, adults should be aware of the signs and symptoms of head lice infestation, and infested children should be treated promptly to minimize spread to others.

TREATMENT

- Never initiate treatment unless there is a clear diagnosis of head lice.
- Ideal treatment for lice would be completely safe, free of harmful chemicals, readily available without a prescription, easy to use, and inexpensive.
- The pediatrician (or someone in the community, such as the school nurse) should be skilled in the identification of an active infestation with head lice to avoid treating patients unnecessarily or falsely identifying “resistance” in the community to a certain product.

Manual Removal

- Nit removal can be difficult and tedious.
- Studies have suggested that lice removed by combing and brushing are damaged and rarely survive.
- Shampoo hair twice per week for 2 weeks and to vigorously comb out wet hair each time. The wet hair seems to slow down the lice.

ENVIRONMENTAL INTERVENTIONS

- If a person is identified with head lice, all household members should be checked for head lice, and those with live lice or nits within 1 cm of the scalp should be treated.
- Fomite transmission is less likely than transmission by head-to-head contact; however, it is prudent to clean hair care items and bedding used by the individual with infestation.
- Head lice can transfer to pillowcases at night, but the incidence is low (4%).

CONTROL MEASURES IN SCHOOLS

Screening

- Screening for nits alone is not an accurate way of predicting which children are or will become infested, and screening for live lice has not been proven to have a significant effect on the incidence of head lice in a school community over time
- Such screening has not been shown to be cost-effective
- Head lice infestations have been shown to have low contagion in classrooms.
- Often schoolchildren are inappropriately diagnosed and treated.
- Routine classroom or school-wide screening should be discouraged.
- It may be useful to provide information periodically about the diagnosis, treatment, and prevention of head lice to the families of all children.
- Education of parents in diagnosing and managing head lice may be helpful.
- Parents should be encouraged to check their children’s heads for lice regularly and if the child is symptomatic. School screenings do not take the place of these more careful parental checks.
- It may be helpful for the school nurse or other trained person to check a student’s head if he or she is demonstrating symptoms.

Management on the Day of Diagnosis

- Confidentiality must be maintained.
- Prompt, proper treatment of this condition is in the best interest of the child and his or her classmates.
- It may be prudent to check other children who were most likely to have had direct head-to-head contact with the infested child.
- In an elementary school, one way to deal with the problem is to notify the parents or guardians of children in an infested child's classroom, encouraging all children to be checked at home and treated, if appropriate, before returning to school the next day.
- Alert parents only if a high percentage of children in a classroom are infested.
- "Alert letters" cause unnecessary public alarm and reinforce the notion that a head lice infestation indicates a failure on the school's part rather than a community problem
- Design guidelines that best meet the needs of their student population, understanding that although a head lice infestation may not pose a public health risk, it may create a public relations dilemma for a school.

Criteria for Return to School

- Most researchers agree that no-nit policies should be abandoned; the American Academy of Pediatrics and the National Association of School Nurses discourage no-nit policies.
- Nit removal may be considered for the following reasons: nit removal can decrease diagnostic confusion; nit removal can decrease the possibility of unnecessary re-treatment; and some experts recommend removal of nits within 1 cm of the scalp to decrease the small risk of self-reinfestation.
- Perform a valuable service by rechecking a child's head if requested to do so by a parent.
- Offer extra help to families of children who are repeatedly or chronically infested.

Reassurance of Parents, Teachers, and Classmates

- The school can be most helpful by making available accurate information about the diagnosis, treatment, and prevention of head lice in an understandable form to the entire school community: information sheets.

Child Care and "Sleepover" Camps

- Child care centers and camps where children share sleeping quarters may allow for easier spread.
- Reminding parents of the importance of carefully checking a child's head before and after a sleepover experience may be helpful.

The complete report may be found at

<http://pediatrics.aappublications.org/content/early/2010/07/26/peds.2010-1308.full.pdf+html>

Other resources:

<http://headlice.org/>

<http://www.cdc.gov/parasites/lice/>