The "Heads Up" on Head Lice

A Fact Sheet for School Nurses

Head lice *(pediculosis capitis)* are small parasitic insects that live on the scalp and hair of their human hosts. They survive by feeding on human blood and are generally found on the scalp, primarily around the ears and at the nape of the neck.[1] The adult louse is about the size of a sesame seed and can adapt to the color of the hair.[2] Eggs, or nits, are smaller and are silver in color.[2]

Prevalence

- Each year approximately 6 to 12 million children between 3 and 12 years of age are infested with head lice.[2]
- About one in every 100 U.S. elementary school children will be infested with head lice.[3]
- Girls are more likely than boys to become infested because of sharing personal hair items.[2]

Signs and symptoms of head lice

- The most common symptom is itching of the head that is caused by an allergic reaction to the louse saliva. There may be sores caused by the scratching as well as irritability and sleeplessness.[1]
- Because of the small size of head lice and their resemblance to dandruff or residual from hair products, it is not uncommon for patients to receive a delayed diagnosis or misdiagnosis. Diagnosis is usually made on the basis of symptoms and confirmed through the identification of a live louse on the head. Identification of a nit (egg) is not confirmation of a louse infestation.[4]
- Dead eggs and the remnants of hatched eggs remain firmly glued onto the hair for weeks, months, or even years.[3]
- Embarrassment and social stigma frequently accompany identification of head lice.[5]

How is head lice spread?

- While head lice are not considered an infectious disease, transmission from one individual to another can occur primarily through direct head to head contact or secondarily through the sharing of personal items such as hats, scarves, helmets, brushes, combs or pillows.[2]
- Head lice are "equal opportunity" parasites. They infest all socioeconomic groups, races, genders and ages, but are most commonly found in children due to their close contact with each other.[2]
- Infestation can occur throughout the year, although a peak is generally experienced during summer and back-to-school time periods.[2]
- Lice are not a sign of poor hygiene and they do not transmit disease.

Treatments for head lice include:

- Over-the-Counter (OTC) products
- Prescription products
- Alternative therapies — natural and herbal. These products have not been proven effective and are not regulated by the Food and Drug Administration (FDA).[4,6]
- Nit picking (hair combing) with a fine-tooth comb is often used to remove the nits (eggs) from the hair. Combing takes time and patience. While it may remove the eggs or empty shells, alone, it is not considered an effective treatment for head lice.[6]
- Many approved products are safe and effective but like all medical treatments, they must be used as directed by parents. Also, studies have shown that head lice are developing resistance to OTC pyrethrin and pyrethroid products, in much the same way that some bacteria have developed resistance to antibiotics.[6]

What can you do to help?

- Educate the school community, including parents and teachers, regarding head lice management. As the school nurse, you are ideally suited to provide guidance on this health issue.
- If you suspect that a student has head lice, advise his or her parents and encourage them to speak with their health care provider.
- Do your part to dispel myths and stigmas regarding lice infestation. The condition is not a sign of poor hygiene and head lice do not transmit disease. Further, they do not jump or fly through the air.
- In an effort to decrease head lice infestations, many U.S. schools have adopted a "no nit" policy.[5] It is the position of the NASN that "pediculosis should not disrupt the education process. Children found with live head lice should be referred to parents for treatment. Data does not support school exclusion for nits"[5] You have an important role here in safeguarding the education and privacy of every child while managing any case of head lice infestation in your school.

This program is supported through an educational grant to the National Association of School Nurses from Shionogi Pharma, Inc.

1. CDC Fact Sheet. http://www.cdc.gov/lice. Accessed April 12, 2010. ■ 2. Hansen RC (September 2004). Overview: The State of Head Lice Management and Control. *Am J Manag Care,* 10, S260-S263. ■ 3. Pollack RJ. The Role of the School in Battling Head Lice. *Our Children Magazine.* http://www.pta.org/2151.htm. Accessed April 10, 2010. ■ 4. Frankowski BL (September 2004). Overview: The State of Head Lice Management and Control. *Am J Manag Care,* 10, S269-272. ■ 5. National Association of School Nurses Position Statement. (www.nasn.org). ■ 6. Burkhart CG. Relationship of Treatment-Resistant Head Lice to the Safety and Efficacy of Pediculicides. *Mayo Clin Proc.* 2004;79:661-666.