



# Pediatric Clips

**NURSING**

## *Lice advice*

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Pediatric Nursing Clips from Pediatric Advanced Practice Nurses at Dayton Children's are quick reviews of common pediatric conditions.

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### CASE STUDY

Eight-year-old Rachel was sent to the school nurse after her teacher noticed she was continually scratching her head during class. Rachel tells the school nurse she feels like something is crawling on

her head and it "really itches." The school nurse examines Rachel's hair and finds small tan dots behind her ears and near the hairline at the base of the neck. Rachel also has sores throughout her scalp. The school

nurse calls to notify Rachel's parents that Rachel has lice. The school nurse examines the other children in Rachel's classroom to find that four other children have lice.

### CASE DISCUSSION

#### DISCUSSION

A diagnosis of lice can be an embarrassing moment for any parent, but it shouldn't. The Center for Disease Control and Prevention (CDC) reports that six to 12 million people in the United States are infested with head lice each year, making it a common problem for children and their families.

#### WHAT ARE HEAD LICE?

Lice are tiny, wingless parasitic insects that live among human hairs and feed on extremely small amounts of blood drawn from the scalp. The nit (egg) is very small, about the size of a knot in thread, and look like yellow, tan or brown dots before they hatch. The adult louse is about the size of a sesame seed, has six legs and is tan to grayish-white. To live, adult lice need to feed on blood about every four to six hours. Adult lice can live up to 30 days on a person's head, but can survive only two days if they fall off the person.

#### SIGNS AND SYMPTOMS

Lice are most commonly found on the scalp, behind the ears and near the hairline at the neck. Head lice hold on to the hair with hook-like claws found at the end of each leg. Children may complain of a "tickling" feeling of something moving in their hair or you may notice them

scratching their scalp. The itching is caused by an allergic reaction to the bites. Some children develop sores on the head caused by scratching.

#### DIAGNOSING HEAD LICE

An infestation is diagnosed by looking closely through the hair and scalp for lice and nits. Finding an adult louse may be difficult; there are typically less than a dozen active lice on the scalp at any one time and they can move quickly. If crawling lice are not seen, finding nits within 1/4 inch of the scalp confirms that a person is infested and should be treated. If nits are found more than 1/4 inch away from the scalp without additional symptoms, the infestation is probably an old one and does not need to be treated.

#### TREATMENT

The child and any other family members should be treated with medicated shampoo to kill the lice. It is important to follow the directions exactly because these products are pediculicides and applying too much or shampooing too frequently can increase the risk of side effects. Lice treatment should not be used on children two years of age or younger. The nits and lice will have to be removed by using a nit comb. Patient and family education about treatment of the infested individuals should include the following:

1. Before applying treatment, remove all clothing of the infested child from the waist up.
2. Apply lice medicine to the hair, paying special attention to how long the medicine should be left on and whether rinsing the hair is recommended after treatment. Note: Warn parents not to use cream rinse or combination cream rinse/shampoo before using lice medicine and not to use a hair dryer after applying the scalp treatment because some contain flammable ingredients. Don't wash hair for one to two days after the treatment.
3. Have the child put on clean clothing after treatment.
4. Nit combs should be used to comb nits and lice from the hair.
5. After treatment, check hair with a nit comb every other day to remove nits and lice.
6. Re-treatment may be needed in seven to 10 days when using over-the-counter medications.

Head lice do not survive long once they have fallen off a person. Here are few steps that should help prevent an ongoing issue with lice:

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*Continued from the front.*

1. Wash all bed linens and clothing that has been worn or used by the infested person during the two days prior to treatment. Use the hot water cycle on the washer and dry laundry using high heat for at least 20 minutes.
2. Dry-clean any clothing that is not machine-washable.
3. Store all stuffed animals and bedding that cannot be washed or dry-cleaned in a plastic bag, seal tightly and leave for two weeks.
4. Vacuum floors and any upholstered furniture, including the car and/or car seats. Do not use sprays or hire a pest control service to fumigate the house. Some of these chemicals can be harmful if inhaled or absorbed through the skin of small children.
5. Soak hair care items like brushes and combs in rubbing alcohol or medicated shampoo for one hour.

### PREVENTION

Lice are most commonly spread directly by head-to-head contact. Pre-school and elementary children (three to 11 years) and their families are most at risk for a lice infestation. Children should be taught to:

- Avoid head-to-head contact at school and at home.
- Do not share combs, brushes, sports uniforms, or other personal care items with anyone else.
- Do not lie on beds, couches, pillows, and carpets that have recently been used by someone with lice.

As many parents and health care professionals know, lice infestation can be a persistent nuisance. Parents should be reminded to use caution in their efforts to eliminate lice; these drugs can be dangerous when overused. Frequent combing to remove nits and observation of the child's hair may be best after treatment to kill the adult lice.

### REFERENCES

1. American Academy of Pediatrics. (2006) Red Book: 2006 Report of the Committee on Infectious Diseases. *Pediculosis Capitis* p. 488-492.
2. Centers for Disease Control and Prevention (2005). *Treating Head Lice*. Retrieved October 27, 2006, from [http://www.cdc.gov/ncidod/dpd/parasites/lice/2005\\_PDF\\_Treating\\_Head\\_Lice.pdf](http://www.cdc.gov/ncidod/dpd/parasites/lice/2005_PDF_Treating_Head_Lice.pdf).

### FEATURED NURSE SPECIALIST



**HILA COLLINS, MS, RN**, has been a pediatric nurse at Dayton Children's for 19 years. She is the infectious disease nurse clinician

working with patients who have a communicable disease. Her role is to provide education and training about the prevention and control of infections and she also acts as a consultant for physician offices and child care centers. She is a member of the Association for Professionals in Infection Control

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