

Wellness Rx: Lice

Facts:

- Six to 12 million kids in the U.S. get lice each year
- Lice are parasites that cannot survive without a human host. They have no wings, cannot fly and do not carry any disease. They can only live a day or two off the scalp
- Live adult head lice are generally visible (about the size of a sesame seed) and lay or secrete their eggs (nits) right onto the shaft of hair especially **near the scalp**
- Head lice spread by close person-to-person contact especially head-to-head contact (very contagious). **They are not spread by pets**, but they can easily be spread by sharing clothing, hair brushes, barrettes, hats, or beds with an infested person. If one person in the household has head lice, check everyone's hair and scalp for signs of infestation
- A variety of techniques will be needed to ensure that both all adult lice and their eggs are killed. Lice have evolved over many years and often become **resistant** to common over-the-counter treatments. Multiple treatments will be needed and weeks of vigilance is advised to prevent lice from reappearing

Treatment:

- Traditional treatment generally consists of three products:
 1. Use of a prescription insecticide shampoo which can be quite toxic or the use of an over-the-counter treatment which consists primarily of **permethrin lotion 1%** (synthetic Chrysanthemum flower; brand name-Nix; #1 recommended) or RID (piperonyl butoxide 4% and pyrethrum extract).
 2. Fine-toothed metal comb with or without a magnifying glass/light to examine the hair and scalp for lice and nits(eggs).
 3. Reduced dose permethrin spray (0.5%) to help kill lice and eggs on mattresses, furniture and other non-washable items.
- Natural treatments include **Shampoo with Tea Tree Oil** (at least 2%), Lavender Essential Oil and Olive Oil which tries to smother lice and Vinegar (acetic acid) which helps to prep hair for nit combing after bug killing treatment

*First, **confirm if there is a problem**. Examine everyone in the family. Many things can cause an itchy scalp and dandruff can look troubling (**dandruff should move** when lightly touched). Then comb hair section-by-section with the fine-toothed metal comb. Look especially for eggs that are stuck to the hair shaft (eggs within 1/4 inch of the scalp are most likely to hatch into lice). Use a magnifying glass and light to examine the hair and scalp. Look behind the ears and at the hairline since lice and eggs are easier to see in areas where the hair is thinner.*

If either lice or nits (eggs) are found or you are not sure,

1. Wash hair with a shampoo without conditioner (it will reduce effectiveness of treatment). Rinse with warm water.
2. Towel dry hair so that it is damp but not wet.
3. Shake the bottle of Permethrin Lotion 1%. Completely saturate the hair and scalp with the lotion. Begin behind the ears and at the back of the neck. Protect the eyes with a washcloth and watch for any allergic reaction
4. Leave lotion on the hair for **10 minutes, but no longer**. Rinse with warm water. It is best to rinse over the sink to reduce risk of splashing the pediculicide on skin outside the head. Towel dry hair and comb out tangles.
5. Remove lice and eggs by hand (use plastic gloves), combing the hair with the metal comb (get comb as close to the scalp as possible) and by cutting the hair if needed. **Always keep the hair damp**. Part the hair into four sections and work one section at a time. Use clips to pin back each strand of hair after you have combed out the nits. Clean the comb completely as you go with a clean tissue. Apply olive oil or coconut oil to the scalp if any redness or irritation is seen or felt.
6. **Check the affected head daily** to remove any nits you might have missed. **Traditional treatment recommends a second treatment be given if live lice are seen seven days or more after the first treatment.**
7. **Natural medicine** is more cautious especially with the high probability that the lice could be resistant to the initial treatment. Use of a shampoo with at least 2% Tea Tree Oil and Lavender Essential Oil is highly recommended **daily for 1 week or days 2-7 if treatment began with permethrin or a like lotion since live nits take about a week to hatch.**
8. Work the Tea Tree Oil/Lavender shampoo into the shampooed hair (no conditioner) and pay careful attention to the scalp area. Cover the hair with a shower cap or swimmers cap. **Leave treatment on for 30 minutes.** *Watch for any allergic reaction. If there is a problem, rinse hair with warm water and re-wash the hair with a very mild shampoo. Repeat the wash if the scalp is still itchy or red.*
9. **After 30 minutes**, work shampoo into a lather with your fingers. Try to eliminate as much lice as possible. Rinse completely with warm water and then apply a conditioner to the hair (can help to suffocate any lice not killed by the Tea Tree Oil). **Do not rinse out the conditioner.**
10. Now use the metal comb to comb through the hair. Start at the scalp and follow procedure described in #5 above.
11. **Repeat daily for at least 7 days** (shampoo the same time each day). Olive oil can be applied overnight to hair under a shower cap to try and smother any remaining lice. Overnight use is needed since lice can survive without breathing for many hours. Shampoo more than 7 nights If you suspect any remaining problems or if a new outbreak at school has occurred.

Prevention:

To prevent re-infestation, clean items that have been in recent contact with the infected family members' heads. Wash bedding, caps, scarves and towels in hot water and dry on a hot setting. Soak combs and brushes in very hot, soapy water. Vacuum floors, pillows,

upholstered furniture and car seats. Stow non-washables (i.e. a stuffed animal) in a sealed bag for 2 weeks.

To reduce future exposure especially during school outbreaks, keep long hair in a tight ponytail or braid and reinforce the need to avoid head-to-head contact. Consider adding Tea Tree Oil (2%) as prevention into the household shampoo. **Use once a week.**