

# Head Lice Treatment



## What to do when nothing seems to work

There are four reasons why treatment of head lice can fail.

- 1) The head lice treatment was not applied properly.
- 2) The lice are resistant to the insecticide used.
- 3) A second treatment was not used to kill the newly hatched eggs.
- 4) Reinfestation occurs.

Each case is different. By going through the possible causes, you can determine which one is affecting your case. For more information, refer to our **Facts Of Lice** fact sheet or call 905-546-CITY (2489).

### **Cause 1) THE HEAD LICE TREATMENT WAS NOT APPLIED PROPERLY.**

In this situation, the chemical does not come into contact with the lice long enough at a high enough concentration. This is usually due to not covering all the hairs adequately with the chemical. Cover the hair from roots to ends with the product. One way to make sure that you have covered all the hair is to comb the product in with a normal comb.

Check how you are applying the product and read the instructions on the package. If you have done all of this then application is not a problem.

### **Cause 2) THE LICE ARE RESISTANT TO THE INSECTICIDE USED.**

Head lice can become resistant to insecticide. Some strains appear to be resistant to at least two insecticides at the same time. You can tell if the head lice are resistant by treating the head adequately as described in Cause 1) and then checking for live lice. Use a fine tooth comb and look for movement. If they are all dead or immobile, the lice are sensitive to the insecticide. If the lice are still active they are resistant to the insecticide in that product. KEY POINTS: note the "active ingredient", not the product name. If the lice are resistant, switch to another brand with a different "active ingredient". A non-insecticidal product called "Resultz" has been approved for use in Canada, but it should only be used in children 4 years of age and older. Ask your pharmacist for help in choosing the appropriate product.

### **Cause 3) A SECOND TREATMENT WAS NOT USED TO KILL THE NEWLY HATCHED EGGS.**

No product kills 100% of eggs, even if the strain of lice is sensitive to the active ingredient. Eggs take 7 days to hatch. Therefore starting from 1 day after treatment to 7 days, nymphs may be hatching. Retreatment at 7 days is a mandatory part of treatment. At this treatment if things are going well, you should expect to find nymphs, but no adults. At 14 days, you should recheck the hair, and retreat a third time if you find nymphs.

### **Cause 4) REINFESTATION OCCURS.**

Reinfestation can complicate treatment of head lice. This happens usually from head to head contact with a person who has lice. Reinfestation from the environment is very rare. Reinfestation is hard to detect. Suspect it if you have a sensitive strain as shown by testing as described in Cause 2) and are treating it correctly (Cause 1 and 3), but you unexpectedly find adult lice in the hair. Check the hair daily by using a fine tooth

comb. If the hair is clear one week and lice are present the next, reinfestation is highly likely. However don't blame reinfestation for persistence of head lice until you have ruled out the other causes. If you suspect reinfestation, ask your child with whom she/he has had head to head contact, and see if they can be checked. Don't just concentrate on the classroom; look at head to head contact opportunities at play and in the family.

**Be systematic. Don't expect a cure in less than a week. Keep a balanced view. Head lice infestations are a nuisance but do not spread disease. Do not use measures that put your child's health at risk.**

With the growing concerns about resistance of head lice to current treatment with pyrethrin and permethrin as the "active ingredient", many people have turned to alternatives. Some are ineffective or dangerous or may create more emotional harm to the child:

- 1) **Hair Removal** -Shaving a child's head may be effective in getting rid of the head lice however the child will become the focus of teasing among classmates. Is this treatment worth the negative impact on the child's self-esteem?
- 2) **Flammable Chemicals** -Deaths and injuries have occurred when flammable chemicals have been used to treat head lice.
- 3) **Dangerous Pesticides** -Some people resort to using dangerous pesticides which are not meant to be used on humans. Some examples include veterinary flea preparations, concentrated pesticides and industrial strength diazinon. Their toxic effect on humans may cause death or brain damage.
- 4) **Herbal Treatments** -Many companies have been promoting tea tree oil and other herbal lice remedies. There are two problems: 1) lack of information about safety 2) no proof that they work. These approaches may give families a false sense of security that they are treating the problem, and allow the head lice population to increase and worsen the infestation.
- 5) **Suffocating Treatments** -The effectiveness of using olive oil or mayonnaise has not been tested. Wrapping a child's head in plastic over night is creates a suffocation risk.
- 6) **Nit Cement Dissolving Agents** -Several commercial products have been marketed but have not been proven to be effective. The use of vinegar has been found to cause face and eye burns.
- 7) **Household and Environmental Sprays** -The head is where lice live and they are very rarely found elsewhere. Environmental sprays tend to be overused and there is no proof that they are safe once inhaled. Just imagine a sleeping child lying face down on a heavily sprayed pillow for a 10-hour sleep. It is recommended, instead, to wash pillowcases and vacuum.