

Information 1

Pediculosis



How to eliminate lice

Has your child got head lice? Rest assured, these parasites are not synonymous with poor hygiene at home. In fact, they are insects that are easily transmitted, which is why we must fight them relentlessly. A lotion or shampoo is usually enough to solve the problem.

Head lice easily attack any scalp that is nearby. You can pick it up through occasional contact with an infested head, caps, hats or even from a piece of clothing that has been left near you on a certain hanger.

In the past, those who had lice suffered a harsh punishment: their hair was shaved off completely, without mercy. This radical treatment is always traumatising for the child.

Fortunately, we no longer need to resort to the "machine zero". Nowadays, there are a wide variety of products that get rid of these intruders without the need to shave the hair.

Types of anti-lice lotion

We divide anti-lice shampoos and lotions into three main groups, based on their active ingredient.

Pyrethroids are effective and not very toxic to mammals, such as humans. There are no known cases of poisoning due to the action of these substances.

However, their use can cause some local irritation. On the other hand, anyone with asthma or eczema should seek medical advice before resorting to a pyrethroid-based treatment. In their natural state, pyrethrins (taken from chrysanthemums) have the disadvantage of degrading quickly. For this reason, almost all pyrethroids used in shampoos and lotions are synthetic (artificially produced) products that are more stable and effective than their natural counterparts. Bioalethrin, permethrin and d-phenothenothrin are also synthetic pyrethroids that are toxic to fish and bees, but not dangerous to people. Piperonyl butoxide is also widely used in pyrethroid-based products because it prevents their degradation and strengthens (potentiates) the effect of pyrethroids. According to some experts, repeated and incorrect use of these insecticides can cause resistance phenomena. In other words, the lice build up their defences and the pyrethroid-based treatment ends up not being effective. When this phenomenon occurs, we have to resort to other types of products, such as lindane.



Lindane is a chlorine-based insecticide from the same family as DDT. Its effectiveness in treating head lice is recognised, although it is not superior to pyrethroids. In excessive doses, lindane is very toxic, whether inhaled, ingested or even through simple skin contact. There are several symptoms of acute poisoning: nausea, vomiting, paresthesia (abnormal perception of sensations, such as a tingling sensation on the skin), convulsions, coma and respiratory arrest. There have also been cases of liver, kidney and heart toxicity, as well as cases of anaemia. Lindane has even been banned in Japan. In other countries (such as the USA), there are strong reservations about the use of lindane due to its toxicity and its effects on the environment. In Portugal, we still use lindane to combat head lice. The maximum concentration of lindane allowed by law is 1%, and this limit is generally respected.

Crotamitone is an effective scabicide against skin diseases caused by mites, such as scabies. It also successfully fulfils the role of anti-parasite.

How to prevent

Unfortunately, there is no effective means of preventing head lice. Not even strict hygiene or frequent washing can protect children from these parasites. However, if you suspect that your child has lice, it is essential to extend the treatment to all members of the family and carry out a general disinfection of clothes.

Some schools systematically recommend the use of anti-lice shampoos before school starts. This treatment is useless and even inadvisable because the preventive use of shampoos can create resistance phenomena in lice.

Avoid contagion

A child with head lice can quickly infect all his classmates, playmates and family. It's therefore important to "nip it in the bud" to avoid contagion.

If the school informs you that one of your child's classmates has head lice, wash the child's head with anti-lice shampoo. Don't just treat the head, also disinfect everything that comes into contact with the hair: hats, caps, bed linen, etc. Repeat the full treatment one and two weeks later.

If your child is infested, notify the school immediately. Don't forget to disinfect all places that could be a favourite nest for lice, such as sheets, blankets, etc. If you have carpets, vacuum the floor thoroughly and take the opportunity to vacuum the sofas. There's no point in treating pets for this reason, as they don't carry lice.



The efficacy of a shampoo may not be enough for a successful lice treatment, especially if the product is not applied properly. Here are the most important tips:

- shampoo your hair thoroughly;
- massage the scalp well, especially the nape of the neck and the areas around the ears;
- leave on for at least 10 minutes for pyrethroid-based products and four minutes for lindane-based shampoos;
- don't apply the shampoo in the shower, as the insecticide tends to be absorbed by the skin;
- if you wish, wash your hair afterwards with a classic shampoo, rinse well and add vinegar to the last rinse (to dissolve the nits' glue);
- comb through your hair, strand by strand, starting at the roots;
- do a complete re-treatment a week later. After 15 days, repeat the treatment. This way, any parasites that have survived won't have time to reproduce and will be eliminated.

The treatment

Shampoos kill adult lice on the head, but they don't get rid of lice nesting in clothes. Other means of disinfection are therefore necessary.

Lice are very sensitive to heat. We have found that a temperature of 54°C for half an hour or 60°C for a quarter of an hour is enough to kill them. You can disinfect your child's clothes and, if necessary, those of the whole family by washing them at 60°C. As for combs and brushes, you should soak them in very hot water (over 60°C) for at least five to ten minutes.

To disinfect objects that cannot be heated (mattresses, for example), wrap them in plastic for 10 days. Lice, like all parasites, need blood to feed and survive. It only takes 48 hours without food to kill adult lice. So a ten-day period of "plastic quarantine" is enough to exterminate lice and nits in one go. Finally, vacuum the house thoroughly to catch "runaway" lice that have been forgotten in the corners.