Nonpesticide Agent Suffocates Head Lice Safely

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SAN FRANCISCO — Suffocating head lice with a benzyl alcohol product appears to be a safe and effective alternative to current therapies, industry-sponsored studies suggest.

Unlike many other lice therapies, the "lice asphyxiator" product does not contain pesticides. Therefore it shouldn't carry the potential for the lice to develop resistance, Terri Meinking wrote in a poster presentation at the annual meeting of the American Academy of Dermatology.

The increasing incidence of head lice in the past 8 years has been largely a result of lice becoming more tolerant or resistant to conventional treatments. "For this reason, children are being overtreated with pesticide-containing products as well as unconventional treatments," noted Ms. Meinking of Global Health Associates of Miami Inc. and her associates. Global Health Associates is a contract research organization.

The active ingredient in Summers Nonpesticide Lice Asphyxiator, benzyl alcohol, works by stunning the louse's respiratory spiracles open, thereby allowing the product to mechanically block the respiratory system. Ms. Meinking, also of the department of dermatology and cutaneous surgery at the University of Miami, and her associates tested the safety and efficacy of this product in three randomized, observer-blinded studies sponsored by Summers Laboratories Inc., which makes the product.

Patients came from an area of high lice infestation in South Florida and had a high probability of being reinfested after treatment. They ranged in age from 2 to 70 years and had at least 3 live head lice and 10 eggs at study entry.

In the first study, 81 patients enrolled and 79 completed the study, which involved two applications for 10 minutes, 1 week apart, of a 5% or 10% concentration of the asphyxiator product, vehicle alone, or RID shampoo. Patients who were treated with the asphyxiator or RID who still had live lice 1 week after the initial treatment (day 8), were re-treated with the same product. Those who initially had been given placebo and had live lice on day 8 were treated with the 5% asphyxiator.

At day 1 after the first treatment, the kill rate was more than 80% among the 20 patients who had applied a 5% solution of the asphyxiator and among the 20 patients who had applied a 10% solution of the product. This was the same kill rate seen among the 20 patients who had applied RID shampoo, a pyrethrin-piperonyl-butoxide pediculicide. In comparison, the kill rate was less than 20% among the 19 patients who applied vehicle alone (placebo).

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At day 15, all three active treatment groups had achieved a 70% success rate in eradicating live lice. The success rate was 53% among those in the placebo group. Only one adverse event, a mild burning on the scalp experienced by a patient in the RID group, was thought to possibly be treatment related.

Investigators noted that some of the scalps probably were insufficiently saturated to fully suffocate the lice and hypothesized that this may have been why success rates in the treatment groups were not higher.

In the second study, Ms. Meinking and her associates corrected for this and looked at duration of application. They compared 10- and 30-minute applications of the 5% concentration of the asphyxiator product on fully saturated hair in 44 patients, 43 of whom completed two applications, 1 week apart, and returned for follow-up on day 15. At follow-up, the success rate was 100% for all 21 patients randomized to apply the solution for 10 minutes and for all 22 who had applied it for 30 minutes. No treatment-related adverse events were noted.

The investigators then evaluated whether a 5% concentration of the asphyxiator was more effective than a 2.5% solution. At day 15, the overall treatment success was 91% among the 18 patients given the higher dose and 81% of the 21 given the lower dose. The 5% concentration is the dose of choice, they concluded. ■