

# Nontoxic Approach to Head Lice Dries Them Up

BY KATE JOHNSON  
Montreal Bureau

MONTREAL — A product that dehydrates, rather than poisons, head lice should be available soon in the United States to fill a gap widened by parental concerns about the toxicity of existing treatments, Dr. Ian Landells, said at Dermatology Update 2007.

The treatment, which was launched in Britain 2 years ago as Full Marks solution

(SSL International) and in Canada last fall as Resultz (Altana Pharma Inc.), contains 50% isopropyl myristate as its active ingredient and works by dissolving the waxy exoskeleton of lice and causing dehydration.

"This is the first clinically proven toxin-free treatment that has a mechanical mode of action," said Dr. Landells of Memorial University, St. John's, Nfld. "It's a really nice alternative and the only treatment I am going to be recommending from now on."

The product is currently in phase III trials in the United States and is expected to be marketed here by Piedmont Pharma in the next few years, noted Dr. Landells, who has served on the advisory board for Altana.

An increasing number of parents are expressing reluctance about using currently available pediculocides on their children because of concerns about neurotoxicity and lack of efficacy.

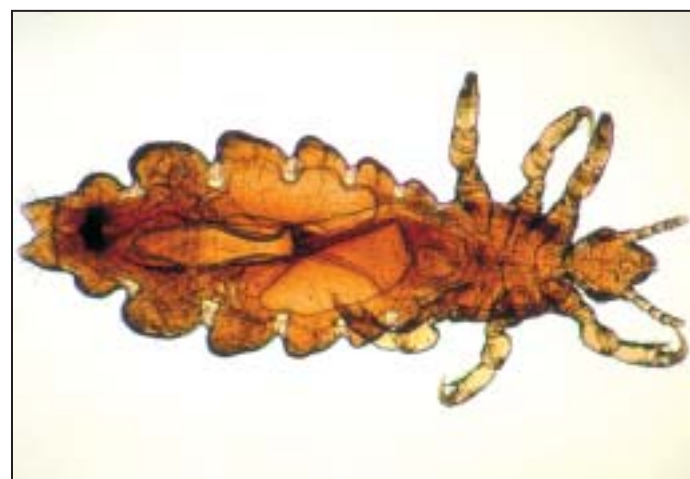
Company data on a Canadian efficacy and safety trial showed that treatment with Resultz eliminated 100% of live lice at 24 hours, resulting in an overall 96.5% cure rate. A second treatment 1 week after the first is very important to catch any

new lice that may have hatched from remaining nits, Dr. Landells said.

In addition, he presented data from a company-sponsored phase II trial comparing Resultz with a pyrethrin plus piperonyl butoxide product (Rid) and a phase III trial comparing it with a permethrin 1% product (Nix/Lyclear). The cure rates in the first study, which in-

involved 52 patients, were 63% for Resultz and 23% for Rid. In the second study (94 patients), the cure rates were 78% for Resultz and 20% for Nix/Lyclear, he said.

Adverse events for Resultz were mild and less frequent than for permethrin 1% (11% vs. 29%). They included rash,



Isopropyl myristate is used to dissolve the waxy exoskeletons of head lice, causing them to die of dehydration.

tingling, burning and dry scalp, and stinging eyes, and resolved within 24 hours. "It's a harmless surfactant found in products like soaps that we use on kids all the time," he concluded, noting that because it is toxin free, there are no safety concerns about repeated treatments. ■

## Plantar Wart Patients Report Satisfaction With Bleomycin

BY MIRIAM E. TUCKER  
Senior Writer

WASHINGTON — Intralesional bleomycin should continue to be a therapeutic option for treating plantar warts, Dr. William Stebbins said in a poster presentation at the annual meeting of the American Academy of Dermatology.

The efficacy of the antineoplastic agent bleomycin against recalcitrant plantar warts comes from its ability to bind to human papillomavirus DNA, resulting in single-strand breaks, direct cytotoxic effects, virucidal effects, and upregulation of tumor necrosis factor- $\alpha$  (J. Exp. Med. 1989;170:655-63).

Bleomycin is associated with injection pain and rare systemic events, so it is less commonly used for wart treatment than are other methods such as cryosurgery, laser treatment, or immunotherapy. But intralesional bleomycin can be effective in patients with especially large plantar warts that are resistant to other therapies, or for patients who want resolution of their warts in weeks rather than months.

In one of the few studies of intralesional bleomycin to include patient satisfaction as an outcome measure, Dr. Stebbins, a first-year dermatology resident at Mount Sinai Hospital, New York, and his associates reviewed 33 patients with one or more plantar or periungual warts who had received their last bleomycin injection at least 12 months prior to the study. Data were gathered from chart reviews and telephone interviews. The patients were 18 men and 15 women with a mean age of 39 years and a total of 257 treated warts.

Two-thirds of the patients had multiple warts, and most had attempted one or more other treatments unsuccessfully before undergoing the bleomycin injection.

However, five of the patients, with 40 warts, were treatment naive, he noted.

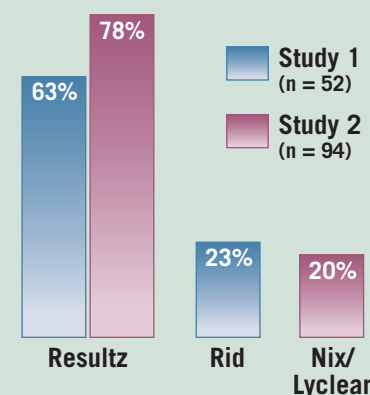
Before the administration of bleomycin, the surgical site was anesthetized with lidocaine plus epinephrine using a 30-gauge needle. The wart was then pared down using a No. 15 scalpel blade. Bleomycin sulfate 3 U/cc was injected into the warty focus at a depth of 1-1.5 mm, using no more than 0.025-0.05 mL/3 mm<sup>2</sup>.

Treatment sessions were typically limited to a total dose of less than 3 U (or 1 mL) of bleomycin per area treated. Lower doses were delivered to the tips of the fingers or toes; slightly higher doses were used for large plantar lesions. The maximum total dose of bleomycin used in any one session was restricted to 5 U. Treated sites were covered with soft gauze, and a hemorrhagic callous was removed 2.5-3 weeks later.

This method resulted in complete resolution of all warts in 27 of the 33 patients: 16 of them after just one session and 22 after two sessions. All five treatment-naive patients experienced complete resolution, said Dr. Stebbins, who has no financial relationship with Bristol-Myers Squibb, manufacturer of bleomycin. Three-fourths of the patients reported a pain duration of less than 2 days, with one-third saying that their pain lasted less than 6 hours following the treatment, but five patients reported pain lasting more than 5 days. The average pain rating—including during and after the procedure—was 5.2 out of 10.

Other side effects included skin discoloration in one patient; callous formation in two patients; and pain, erythema, ulceration, and infection in one patient. There were no systemic or vascular side effects. In all, 26 of the 27 cured patients were satisfied with their treatment. One said it was too painful. ■

### Cure Rates for Head Lice



Source: Dr. Landells

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