Prophylactic Combo Curbs Postherpetic Neuralgia

BY BRUCE JANCIN
Denver Bureau

WAIKOLOA, HAWAII — A week of oral antiviral therapy combined with 4-8 weeks of gabapentin markedly reduces the postherpetic neuralgia rate in patients with herpes zoster, reported Dr. Stephen K. Tyring.

"We've followed 138 patients out to 6 months. [It's] the most dramatic reduction I've seen in my 24 years of doing shingles research: a 77% reduction in postherpetic neuralgia by using the combination," said Dr. Tyring at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation.

He reported on 138 patients with acute, blister-stage shingles. All were at least 50 years old, with vesicles of less than 72 hours' duration and self-reported pain scores of 4 or more on a 0-10 scale, an indicator of increased postherpetic neuralgia risk. All participants were placed on 1 week of valacyclovir, analgesics as needed, and 4-8 weeks of gabapentin. The comparator group consisted of historical controls meeting the same entry criteria who received 1 week of valacyclovir, plus analgesics as needed.

The cumulative rate of postherpetic neuralgia at 6 months was 33% in the control arm, compared with 9% in the combined therapy group, Dr. Tyring reported.

Dr. Tyring, a dermatologist at the University of Texas, Houston, indicated that he is confident that the substitution of acyclovir or famciclovir for valacyclovir, and pregabalin for gabapentin, would yield similarly favorable outcomes.

Dr. Tyring was prompted to study gabapentin's potential as prophylaxis against postherpetic neuralgia in patients with acute herpes zoster because the scientific literature indicates that gabapentin is far more effective as a neuroprotective agent than as a therapeutic one.

"This leads to the question, why would you want to wait until someone gets postherpetic neuralgia to use gabapentin or pregabalin?" he observed.

In response to an audience question regarding the point at which the acute zoster lesions become too old to initiate effective therapy, Dr. Tyring said the conventional cutoff in clinical trials of antiviral agents is 72 hours.

However, "In real life I give antivirals on the 7th day all the time," he explained. "My philosophy is, if there are vesicles and they're not completely crusted, I'll give [patients] the antiviral because it may benefit them. I'd rather treat them and not have them benefit than not treat them until 6 months later when they're having postherpetic neuralgia."

It's 'the most dramatic reduction I've seen in my 24 years of doing shingles research.'

DR. TYRING

His dosing of gabapentin is 300 mg once daily for the first week, while the patients are also on valacyclovir.

"If you give 300 mg t.i.d. or higher during the week of antiviral therapy and they start getting drowsy or dizzy, they may stop both drugs and lose the benefit of the antiviral. After that, it's 300 mg t.i.d. for a week. If they tolerate that, 600 mg t.i.d. for a week. Then if they tolerate that, 900 mg t.i.d. for a week. At some point they're going to start getting drowsy or perhaps a little disoriented. I certainly don't want these senior citizens to fall and break anything, so as soon as they start getting side effects, I stop at that dose or go back one step in order to maintain the highest tolerated dosage," he said.

If, at 1 month, the pain score has fallen below 4 for the past week, Dr. Tyring tapers the gabapentin over the next 3-4 days, and treatment is over. Those who have a pain score of 4 or more can stay on the highest tolerated dose through the 8th week before tapering.

Dr. Tyring observed that physicians now have three ways to intervene in order to prevent postherpetic neuralgia. One is to vaccinate children against chicken pox. Although the definitive answer on this approach is not in, the Japanese experience over the last 30 years suggests that it results in less shingles and postherpetic neuralgia in later life than with wild-type infection.

The second approach is to prevent shingles by vaccinating patients aged 60 and older. This, however, has problems, noted Dr. Tyring, because the average age at which shingles occurs is in the mid-50s, so by the time patients reach eligibility for reimbursement for the costly vaccine, their chance of ever developing shingles has already been reduced by more than 50%.

And now, there is a third means of preventing postherpetic neuralgia: Combine any of three oral antivirals with gabapentin or pregabalin and analgesics, he said.

He disclosed receiving research funding, consulting fees, or honoraria from Astellas Pharma Inc., Catalyst Pharmaceutical Research LLC, GlaxoSmithKline Inc., Merck & Co., and Novartis.

SDEF and this news organization are wholly owned subsidiaries of Elsevier. ■

Burn Wound Dressing Speeds Recovery And Reduces Complications, Costs

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Use of Biobrane wound dressing in pediatric burn patients resulted in a short hospital stay and follow-up as an outpatient with few complications, results from a single-center study demonstrated.

Researchers reviewed the medical charts of 116 pediatric burn patients aged 0-18 years who received Biobrane wound dressing at the University Hospital trauma center in San Antonio, Tex., between 2002 and 2007.

Biobrane (Bertek Pharmaceuticals) is a synthetic nylon mesh bonded to silicone and coated with collagen peptides. It functions as an analogue to the dermis and its pores allow exudate to be drained, Dr. Cristiane M. Ueno told the annual meeting of the Wound Healing Society.

The dressing "usually can be trimmed away after 1 week as the wound heals, decreasing the healing time when compared with some other dressings," Dr. Ueno of the University of Texas Health Science Center at San Antonio, said in an interview.

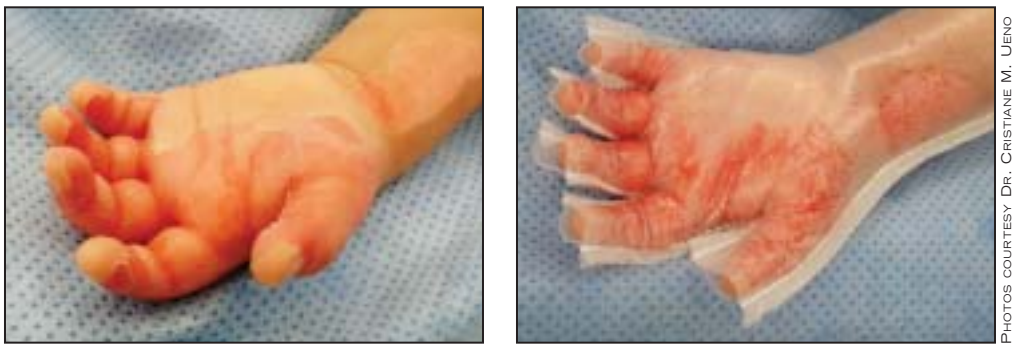
The low risk of complications and need for only oral pain medications could help cut costs and reduce hospital stays.

DR. UENO

The mean patient age was 5 years, males outnumbered females 2:1, and 68% were Hispanic. Of the cases, 52% were scald injuries, and 70% of the patients had second-degree burns.

Of the 116 patients who received Biobrane dressing, 58 had burns to the upper extremity. More than two-thirds were admitted to the hospital for 1-2 days for dressing care and instruction on care. Seven complications occurred from the use of Biobrane, including one case of bacteremia, two cases each of local infection, cellulitis, and fever, Dr. Ueno said at the meeting, held in conjunction with a symposium on advanced wound care.

Most of the patients needed only oral pain medications or mild conscious sedation, not general anesthesia, for debridement, Biobrane application, and dressing changes. This and the low risk of complications suggest the dressing could reduce costs and hospital stays in this population, said Dr. Ueno, who had no conflicts to disclose. ■



PHOTOS COURTESY DR. CRISTIANE M. UENO

A pediatric burn patient's wound is shown (left) after cleaning and debridement. The hand is then covered with the Biobrane glove, which can be trimmed away as the wound heals.

FDA Approves Sealant for Grafting Over Burn Sites

A fibrin sealant recently approved by the Food and Drug Administration for adhering autologous skin grafts in pediatric and adult burn patients provides an alternative to staples and sutures, according to the agency.

The sealant, derived from pooled human plasma, will be available in July and will be marketed under the trade name Artiss by Baxter Healthcare Corp.

Approval was based on a multicenter study of 138 patients whose mean age was 31 years (15% of the patients were aged 7-18 years). Each patient had one split-thickness skin graft attached with surgical staples and another attached with Artiss.

Artiss was determined to be as good as staples in attaining complete wound closure, according to the FDA: At 28 days, 45% of the Artiss-treated wounds and 37% of the stapled wounds had completely closed.

Adverse reactions with Artiss were skin graft failure (5 of the 138 patients) and pruritus (2 of the 138 patients).

Artiss is almost identical to Tisseel, another fibrin sealant manufactured by Baxter, but contains a much lower concentration of thrombin (4 IU/mL vs. 500 IU/mL in Tisseel), so it provides surgeons "more time to position skin grafts over burns before the graft begins to adhere to the skin," according to the FDA. Artiss contains aprotinin, a fibrinolysis inhibitor. It is applied in a thin layer.

The availability of Artiss "can help surgeons using a fibrin sealant to fine-tune graft placement on burn sites," Dr. Jesse L. Goodman, director of the FDA's Center for Biologics Evaluation and Research, said in an FDA statement announcing the approval.

The warnings and precautions section of the Artiss label points out that because it is derived from human plasma, it potentially can transmit infectious diseases and, theoretically, the agent that causes Creutzfeldt-Jakob disease. It is for topical use only and is not approved for hemostasis.

At press time, Baxter did not have a price for Artiss.

—Elizabeth Mechcatie