# Compounds Blamed for Deaths

**Topical** *from page 1*

and upper chest could be dangerous, Dr. Carruthers said.

Another product, endorsed by cosmetic surgeons at a recent meeting he attended contained 4% benzocaine, 4% lidocaine, and 4% tetracaine.

"Dermatologists know benzocaine can cause very severe reactions and once you get allergic to it, you get all these cross-reactivities," he said.

"I wouldn't use this stuff on my dog. I like my dog," Dr. Carruthers said.

Hilary Baldwin, M.D., speaking at a different session at the meeting, also alerted physicians to toxicity that can occur when topical ingredients are mixed, or when they are applied to mucous membranes, enhancing systemic spread.

On its own, prilocaine can cause contact sensitization in rare cases, and has a "unique ability" to trigger methemoglobinemia, particularly in patients already taking methemoglobinemia-inducing agents such as sulfonamides, acetaminophen, minophen, and anticonvulsant drugs. Peak methemoglobin levels are achieved 8 hours after administration, so patients showing signs of toxicity at 1 hour may need to be hospitalized for slow intravenous administration of methylene blue, said Dr. Baldwin, who serves on the dermatology faculty at the State University of New York, Brooklyn.

Lidocaine can also cause toxicity, early signs of which include drowsiness, tingling of the lips, and later, tinnitus, dizziness, muscle twitches, seizures and eventually respiratory distress and coma.

Combination products of various topical anesthetics can, in some cases, have additive toxicity potential.

"When we take that tube and put it on the skin, we need to be at least as cognitive [of the total potential systemic dose] as if we took it from a bottle and injected it," she said.

The lawyers for the families of the two young women who died in recent months said that they know of other cases in which patients have had cardiac arrests after applying topical anesthesia creams, but have recovered.

Ms. Berg died while on the way to Premier Body, Laser, & Skin Clinic in Raleigh, having covered her legs, underarms, chest, and abdomen with a cream containing 10% lidocaine, 10% tetracaine, and 0.5% phenylephrine and occluding the mixture under plastic wrap, said a nurse on the staff of her family's lawyer, David Kirby.

A motorist saw her in distress on the side of a highway and called 911; despite resuscitation efforts she went into a coma and died Jan. 5.

The North Carolina Medical Board has charged the medical director of the clinic, an otolaryngologist, with two counts of unprofessional conduct.

Ms. Bolanos died Nov. 18, 2004, after a similar incident.

On Jan. 25, 2002, she applied a 6% lidocaine, 6% tetracaine cream over both legs and covered them with plastic wrap as directed by a laser technician who later said in a deposition that she did not know what the "numbing cream" contained or how it worked.

While driving to Golden West Medical Center in Tucson, Ms. Bolanos used her cell phone to call a friend, complaining that she was lost, disoriented, and ill, said her lawyer, Martin Rodriguez, in a telephone interview with Skin & Allergy News.

The friend found her unconscious and having seizures.

She never regained consciousness and died after spending nearly 2 years in a coma on a respirator.

A family practice physician who is not board certified directed the center where she was to have her laser hair removal treatment.

The SDEF and this newspaper are wholly owned subsidiaries of Elsevier. ■



# Pain-Relief Options Available For Cosmetic Procedures

BY BETSY BATES
*Los Angeles Bureau*

WAILEA, HAWAII — Ice, vibrators, "talk-esthesia," and sundry topical anesthetic creams and gels were advocated as safe and effective options for relieving pain during a mini-symposium at the annual Hawaii dermatology seminar sponsored by the Skin Disease Education Foundation.

"How much is a happy patient worth? If you hurt them, they won't come back," said Kevin C. Smith, M.D., a dermatologist practicing in Niagara Falls, Ont.

The discussion focused on patients undergoing cosmetic procedures, but the techniques, listed here, can be used on medical dermatology patients as well:

► **Ice**. It's effective and about as cheap as pain relief gets. "We use it a lot," said Alastair Carruthers, M.B., a dermatologist in practice in Vancouver, B.C.

► **Vibrators.** Snickers aside, the Hitachi Magic Wand with a Wonder Wand attachment provides excellent pain relief when applied under a patient's chin during facial procedures by blocking pain signals to the brain, said Dr. Smith.

The devices can be found at the Web site www.drugstore.com.

► **Talk therapy**. "It's not enough to put some cream on a patient," Dr. Smith said. From the time a patient first calls the office, the staff and the physician should convey calm reassurance. Patients will have less pain if they feel "confident of your skill and your care."

He said he always uses "talk-esthesia" to talk patients through procedures, even when other forms of pain relief are used.

► **Analgesics.** Some procedures call for up-front pain relief. Dr. Smith sometimes advises patients to take an NSAID in combination with acetaminophen for an additive effect. Patients who do not have asthma may be prescribed propranolol, which provides analgesia but does not interfere with a patient's ability to drive.

► **L.M.X. 4.** This 4% lidocaine cream (formerly ELA-Max 4%) is sold over the counter, does not require occlusion, and provides anesthesia 30 minutes after application, Dr. Carruthers explained.

He tested it against a vehicle cream in 24 patients receiving Botox (botulinum toxin type A) injections for crow's feet.

"I like to think this is not a very painful procedure, so in order to reduce the discomfort, this stuff has to work very well," he said.

The study showed a significant difference in patient visual analogue scale scores and observer ratings of discomfort when L.M.X. 4 was used, with *P* values in the range of .005.

► **L.M.X. 5.** This anorectal anesthetic cream is more appropriate for use in the mouth than alcohol-containing topical gels, which can cause sloughing of mucous membranes and irritation and stinging if they get in the eyes, Dr. Smith said.

For lip procedures, optimal anesthesia can be obtained by numbing the mucosal surface of the lips, including the anterior mucosae of the anterior labioalveolar sulci down to the gingival sulcus as well as the vermilion and a 1-cm margin around the vermilion border.

To achieve this without getting anesthetic all over the inside of the patient's mouth, he cuts a Telfa pad to mimic a plastic laser shield designed to protect the teeth from laser work performed around the mouth. He cuts a 3-by-4-inch Telfa pad in half, lengthwise, then folds it over and cuts a slit in the middle (to allow the patient to breathe) and slits at the top and bottom to accommodate the frenula.

He inserts the pad into the patient's mouth, against the teeth. He then uses a tongue depressor to apply L.M.X. 5 thickly over the lips and gums and attends to other patients for 30-45 minutes, until his watch alarm sounds to remind him to return to perform the procedure.

At that time, he can inject lidocaine painlessly or, for simple filler procedures, move directly to injections of Restylane (nonanimal stabilized hyaluronic acid gel).

Dr. Smith noted that previous research has determined that the anesthetic mixture in L.M.X. 5 does not produce toxic blood levels, even when applied to mucous membranes.

Dr. Carruthers disclosed that he has financial ties to Allergan Inc., which distributes Botox. Dr. Smith received L.M.X. 5 samples from Ferndale Laboratories Inc. for his research.

The Skin Disease Education Foundation and this newspaper are wholly owned subsidiaries of Elsevier. ■