# Hemostatic Agents Can Help Control Bleeding

BY DOUG BRUNK

PORTLAND, ORE. — As the chief of dermatologic surgery at the University of Washington, Seattle, Dr. Daniel Berg likes to have a handful of nontraditional topical hemostatic agents handy.

One is bone wax, a combination of beeswax and isopropyl.

He's had to use it twice in his 15 years of practice to tamponade bleeding of a bone: once on the skull and once in the nasal region.

You warm up the bone wax, pack it, and stuff it into [the bleeding site] like Silly Putty," Dr. Berg said at the annual meeting of the Pacific Dermatologic Association. "Consider having a box of it on standby if you do any surgery, particularly on the scalp.'

Possible complications of the agent include a granulomatous reaction, infection, and impediment of osteogenesis. He keeps a box of bone wax packets in his office, and he replaces it every few years when it expires.

A new alternative to bone wax is Ostene, a water-soluble alkylene oxide copolymer manufactured by Ceremed Inc. that dissolves in 24 hours (Dermatol. Surg. 2008;34:431-45).

Dr. Berg also discussed Gelfoam, an absorbable gelatin sponge manufactured by Pharmacia and Upjohn, which he uses for diffuse oozing.

The product promotes clotting and granulation, liquefies in several days, and is degraded over a period of 4-6 weeks. It is applied after being moistened with saline or with a local anesthetic.

"I don't like to put it into wounds that I'm covering over, because although it liquefies and is degraded, it can serve as a nidus for infection," he said. "A great use is to line forehead flap pedicles with Gelfoam.'

Topical bovine thrombin is another agent Dr. Bergs likes to have at his disposal. Supplied as a sterile powder that has been freeze dried in the final container, along with mannitol and sodium chloride, thrombin directs conversion of fibrinogen to fibrin. It is sprayed on the wound or saturated on Gelfoam.



Avitene, a hemostatic agent, is used to control bleeding in a cheek flap.



Use of the agent allowed the defect to be closed with no bleeding.

"I've only used this once in a patient that kept bleeding on aspirin and Plavix [clopidogrel]," he said.

Rare complications include allergy to bovine products, disseminated intravascular coagulation if the product gets into large vessels, and immune-mediated coagulopathies.

Dr. Berg concluded his presentation by discussing hemostatic agents that contain microfibrillar collagen, such as Avitene, manufactured by Davol Inc. These products attract blood platelets and, according to Dr. Berg, tend to be more effective than Gelfoam.

Sticky, powderlike substances, these products are applied directly with surgical gloves and have little immunogenicity; there have been rare reports of allergic or foreign body reactions.

Dr. Berg reported having no conflicts



# Discussions in Dermatology

#### **Welcome and Course Description**

Dear Colleagues,

Please join me in a new and exciting CME adventure - Cosmetic Surgery Forum 2009: Discussions in Dermatology - jointly sponsored by the Dulaney Foundation, Practical Dermatology, and Cosmetic Surgery Forum, LLC. To be held at the Palazzo Las Vegas (a new, exclusive, part of the Venetian Hotel) in Las Vegas from December 4th to 6th 2009, this course will feature practical tips and innovative solutions to cosmetic surgery conundrums.

A key element of any course is discussion, and this CME course is designed to facilitate meaningful dialogue between faculty and attendees in a relaxed and collegial atmosphere. Registration is open to all dermatologists, cosmetic surgeons (core specialties), and residents in these fields. I hope you'll join us for an exciting and informative educational experience offering fresh insights instead of stale slide

Sincerely,

Joel Schlessinger MD, FAAD, FAACS

Past President, American Society of Cosmetic Dermatology and Aesthetic Surgery Course Director





#### **CME Information**

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Dulaney Foundation, Practical Dermatology and Cosmetic Surgery Forum, LLC. The Dulaney Foundation is accredited by the ACCME to provide continuing medical education for physicians. This CME activity has been approved for 12.5 AMA PRA Category 1 Credits<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### **Educational Objectives**

- Botox vs Dysport: Which is the winner?
- **Hydroquinones**: What is the future of these and which work best?
- Fat Treatments: Laser, ultrasound, injections or liposuction?
- **Cosmeceuticals**: Which ones are the most effective and what is the science and reality behind them? How are they inventoried?
- Communicating with Your Patients in the Facebook and Twitter Era: HIPAA vs the Internet
- Potpourri/Grab Bag of Questions from the Attendees
- Risk Management: From Botulinum Toxins to Biologics -How do we manage risk and inform patients appropriately?

This meeting will be commercially supported by unrestricted

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## Moderators

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