

WHERE THE EXCHANGE ON AESTHETIC PERSPECTIVE BEGINS

Cosmetic SURGERY TIMES

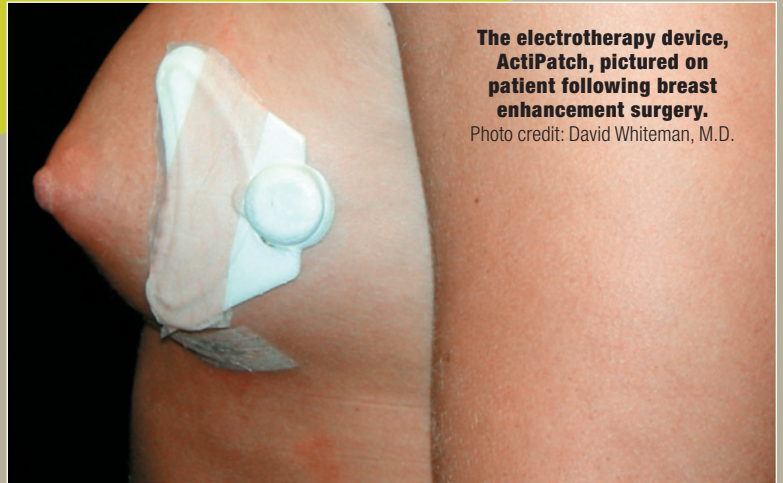
B O D Y

B R E A S T

F A C E

body

Pain waive



The electrotherapy device, ActiPatch, pictured on patient following breast enhancement surgery.

Photo credit: David Whiteman, M.D.

“On average, the patients who have the patch take fewer pain pills.”

— David Whiteman, M.D.
DULUTH, GA.

Electrotherapy device may help decrease post-op swelling and encourage healing



An adhesive pain patch which uses pulsed electromagnetic fields to ease pain and promote wound healing is making its way into cosmetic surgery offices.

Lisette Hilton

STAFF CORRESPONDENT

NATIONAL REPORT ► It's about the size of an EKG patch and contains a tiny circuit (like that in a cell phone) that emits a pulsing electromagnetic field. Cosmetic surgeons who place these patches on swollen, painful areas after facial, breast and other aesthetic procedures, report that the device, called ActiPatch (BioElectronics; Frederick, Md.), helps patients heal faster than those who do not use the patch. Some surgeons also report that patients who wear the patch say they experience less pain than their patchless counterparts.



Dr. Kinney

Brian M. Kinney, M.D., plastic surgeon in Los Angeles and clinical assistant professor at the University of Southern California, says the U.S. Food and Drug Administration has cleared the ActiPatch for post-operative swelling from blepharoplasty. Dr. Kinney, who is on the board of directors and medical advisory board of BioElectronics, manufacturer of the ActiPatch, says the device is approved in Europe and Canada for soft tissue pain and swelling.

The frequency of the patch's signal and the dosage delivered have been shown to grow capillaries in rats, improve wound healing in animal models and decrease swelling after blepharoplasty in a human study of 21 patients (Nicolle et al. 1982).



Dr. Casas

Plastic surgeon Laurie Casas, M.D., associate professor, Northwestern University Feinberg School of Medicine, Chicago, performed a prospective observational study on more than 30 facial plastic surgery patients using ActiPatch Therapy and compared them to a control group of 30 patients to evaluate the effect of ActiPatch on post-operative swelling and bruising, localized subcutaneous fibrosis and localized discomfort. Dr. Casas, who serves on the BioElectronics medical advisory board, reported a 30 percent to 50 percent reduction in the number of days the ActiPatch

“In an era when patients want as little downtime as possible, the patch helps.”

patients had visible swelling and ecchymosis compared to the control group and says the ActiPatch group required 30 percent to 50 percent fewer sessions of lymphatic drainage therapy (something she offers all her facial cosmetic patients) compared to the controls.

Dr. Casas started using the patch on patients after she used it on herself to relieve back and neck pain.

“I went from having to have nurses ice my back during long procedures to wearing ActiPatch in the cervical, thoracic and lumbar areas for about a year and a half every day, and it allowed me to function,” she says.

David Whiteman, M.D., a plastic surgeon in Duluth, Ga., who uses the patch and has no financial interest in the company that makes it, says he offers the option to his breast augmentation patients. One breast augmentation patient who used it after her operation was so impressed that she wrote Dr. Whiteman a letter telling how she was waiting for the pain that she was told would be excruciating — and it never came.

“I never felt pain [post-operatively],” she wrote.

Patients, according to Dr. Whiteman, do not feel discomfort from the patches and many who wear them need less pain medication than those who do not.

“The remarkable thing is that the nurses who work in recovery can tell which patients have the patches on and which do not by their level of discomfort and amount of pain medication that they have to give them,” Dr. Whiteman says.

“On average, the patients that have the patch take fewer pain pills. My patients wear the patch for the first seven to 10 days,” Dr. Whiteman says.

Dr. Casas uses the patch in her practice to diminish facial swelling and bruising from rhinoplasty, blepharoplasty, facelift, neck lift and neck liposuction.

“I’ve been using it for swelling in the axilla, following liposuction of the axilla, after breast reduction. I’ve been using it for any ischemia; for example, if you’re doing breast reduction or a mastopexy and the nipple areola has a little ischemia, I will place an ActiPatch right over the areola and, in my opinion, it increases blood flow faster than if the patient were without it,” Dr. Casas says.

Dr. Casas has patients wear the patch directly on the swollen area right after surgery for a few days, then moves the patch as the swelling moves and becomes more centralized.

Some cosmetic surgeons build the cost of the device into their services. The patches cost surgeons between \$30 and \$50 each. Other practitioners, including Dr. Whiteman, offer the option to patients and charge them for the purchase.

“We sell them through the office and charge \$150 for the pair,” Dr. Whiteman says. “Most patients will buy one, but other patients are cost conscious.”

STICKY ISSUE Surgeons who use the device report that they and patients sometimes have difficulty placing the patches on curved surfaces.

But the manufacturer, which is in its third-generation design, is working to make an even smaller, more maneuverable patch. One way the company is hoping to make it more user friendly is by embedding it in ankle wraps, bras and abdominal garments used after tummy tucks.



Dr. Whiteman

Dr. Whiteman does not see the need for the imbedded alternative.

“I have my patients wear a simple cotton sports bra that fastens in the front. The patch can be laid inside the bra and the bra has enough tension that it holds the patch. I do not think you have to buy a special bra,” he says.

Dr. Casas says that she gets creative when it comes to sticking on the patch. She will put it under the facial wrapping post facelift; on the forehead, taped to the skin for rhinoplasty; and under or beside the eye with tape after blepharoplasty.

Dr. Kinney, who uses the patches post abdominoplasty, as well as after breast and facial cosmetic surgeries, says he recently helped design semicircular patches to put under the eye and some circular patches for around the nipple.

In an era when patients want as little downtime as possible, the patch helps, Dr. Casas says.

“If your patient population does not complain of swelling and bruising, then why would you bother with the patch? My population wants the least downtime possible,” she says. ◀

Reference

Nicolle FV, Bentall RM. Use of radio-frequency pulsed energy in the control of postoperative reaction in blepharoplasty. *Aesthetic Plast Surg.* 1982;6:169-171.

For more information

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