Follow Hemangiomas; Outcome Not Guaranteed

BY SHERRY BOSCHERT
San Francisco Bureau

LAS VEGAS — Telling parents that an infant’s facial hemangiomas will go away and doesn’t need follow-up is no longer acceptable, Dr. Edward D. Buckingham said at an international symposium sponsored by the American Academy of Facial Plastic and Reconstructive Surgery.

Older studies that support the leave-it-alone approach defined ‘acceptable’ cosmetic outcomes in ways that don’t meet today’s higher standards, said Dr. Buckingham of Austin, Tex.

Hemangiomas are benign tumors that evolve from an initial proliferative phase to a second phase of involution, in which the tumor gradually disappears. Complications can include scars from ulcerations, erythema of thinning from the skin as the tumor grows, cosmetic distortion of facial features, residual telangiectasias, redundant skin after involution, or carriage damage by some hemangiomas around the ear or nose.

In the half of children with hemangiomas who show significant (‘early’) involution before age 5, 38% had ‘imperfect’ cosmetic outcomes, one 1983 study found. In the other half of children whose hemangiomas did not show significant (‘late’) involution by 5 years of age, 80% had imperfect cosmetic outcomes.

Once the hemangioma stops proliferating, the rate of involution can give a sense of the likelihood of an acceptable cosmetic outcome without medical or surgical treatment.

Observation alone may be adequate management for small hemangiomas in clinically insignificant cosmetic areas, but this does not mean forgetting about the lesion. All birthmarks that develop during the first month of life, should be evaluated by a specialist and followed through serial evaluations, Dr. Buckingham said.

There are reasons to treat many hemangiomas during the proliferative or involution phases with the goals of preventing the lesion from getting larger than it needs to be and achieving the best cosmetic results by age 2 or 3 years, when children begin to form a self-image, he said.

Evaluation by a specialist also is key to proper diagnosis of hemangiomas, which commonly are confused with port wine stains. Port wine stains are venous malformations, do not require treatment, and do not differ and are different and more difficult treatment.

Hemangiomas in 4-10% of white newborns, with girls four times more likely to develop the lesions. Most hemangiomas develop on the head or neck. Diagnosis is made by history.


Hemangiomas: Fact vs. Fiction

Confusion about the differences between vascular malformations and hemangiomas abound. Many physicians entertain the following common misconceptions about hemangiomas, Dr. Hochman said.

Myth: Hemangiomas are big bags of blood, so surgical resection carries a big risk of bleeding.

Reality: Hemangiomas are solid tumors. Surgical removal is relatively simple.

Myth: There are numerous and tortuous feeder vessels in hemangiomas that require embolization.

Reality: Hemangiomas typically have one feeder vessel that’s easily isolated. This is very low-tech surgery,” Dr. Hochman said.

Myth: Hemangiomas infiltrate surrounding tissues and are difficult to remove.

Reality: Hemangiomas can push tissue out of the way, giving the impression of infiltration, but there is always a plane between the tumor and surrounding normal tissue. Dissection is relatively easy in discrete planes that occur naturally and can be created between the superficial and deep components of the hemangioma, or in the deep component, or when the cavity residual of skin and scar tissue.

Dr. Hochman cautioned that while these myths don’t apply to apply to hemangiomas on port wine stains.
Low-Level Energy Therapy Aids Wound Care

**BY KERRI WACHTER Senior Writer**

**ORLANDO** — Low-level energy is an effective technique for enhancing wound healing, said Dr. Robert F. Jackson, who offered a few postsurgery tips at the annual meeting of the American Academy of Dermatologic Surgery.

Dr. Jackson, a practicing cosmetic surgeon in Marion, Ind., focused on the use of ultrasonic massage, electrical stimulation, and low-level laser therapy.

After liposuction, external ultrasonic massage can correct minor irregularities, decrease edema, and help prevent long-term induration, he said. The therapy also stimulates tissue and wound healing.

Dr. Jackson typically starts this therapy 1 week after surgery and treats patients twice weekly until the induration is gone. He uses a level of 2 W/cm² continuous for 6 minutes per area on the extremities, and 20 minutes for the abdomen and back.

“If you've got induration that you haven't really treated for a long time, you can still treat it, but at that point you'll also have to mechanically stretch the tissue as you use the ultrasonic therapy,” Dr. Jackson said.

“It's a very good marketing tool—my patients enjoy it,” he said.

When used after cosmetic surgery procedures, electric stimulation improves blood flow, increases wound tensile strength, reduces edema, inhibits bacterial growth, and reduces pain. The primary purpose, however, is to reduce postoperative pain and edema, Dr. Jackson said.

Electric stimulation immediately reduces swelling and improves wound healing. And ultimately, the technique improves the end result of the surgery.

“The Department of Health and Human Services tested all of the adjunctive therapies for pressure sores ... The only [therapy] they recommended for wound care management was the use of electric stimulation,” he said.

Dr. Jackson typically starts this therapy the day after surgery and treats patients twice a week in 20-minute sessions until the wounds are satisfactorily healed. He recommends starting with an intensity of 100 pulses per second and increasing the intensity until the patient can feel the pulsation. Use this intensity for a few minutes and then increase the intensity until it just becomes uncomfortable for the patient. Then reduce the intensity gradually.

Low-level laser therapy is a relatively new modality that involves the application of low-power monochromatic and coherent light to injuries and lesions. This therapy is believed to promote blood vessel growth. Dr. Jackson uses low-level laser therapy for wound and ulcer healing. The therapy also reduces pain after surgery.

He uses a 635-nm laser for 8 minutes to enhance wound healing. For incision healing, he treats patients once or twice weekly for 3 weeks. Treatments for ulcers continue until healing is complete.