

Long-Term Care Survey Alert

WOUND CARE TRENDS: Maggot Therapy Could Save A Resident's Life Or Limb

Find out what this 'smart' debridement method has to offer.

Medical maggot therapy has been called a "natural" debridement method, but for many, there's nothing that sounds natural about applying the wiggling scavengers to a wound.

Yet the method could be just the ticket for healing a serious chronic ulcer for certain residents in your facility.

The indications: Medical maggot therapy can be used to treat chronic pressure ulcers, venous stasis ulcers, neuropathic foot ulcers, and non-healing traumatic or postsurgical wounds, according to **Monarch Labs**, which produces the maggots for wound debridements. The **Food and Drug Administration** regulates the maggots as a medical device (for more information, go to http://www.monarchlabs.com).

Only certain maggots need apply: Surveyors have, of course, been known to cite immediate jeopardy when they see maggots in open wounds. And for good reason: "A regular maggot could eat good tissue as well as the dead tissue," says **Gerald Dowling, DPM**, a podiatrist and wound expert in Bay City, MI.

But maggot therapy requires using disinfected green blowfly maggots from a surgical supply house.

Pack a 1-2 Therapeutic Punch

"Maggots eat bacteria and dead tissue only, leaving healthy tissue [alone]--and they secrete a chemical" that helps the wound heal, explains Dowling.

Actual practice: Dowling uses maggot therapy periodically to debride diabetic ulcers in patients with "some peripheral vascular disease at risk for losing a limb without" the treatment. "A patient has to have decent blood flow for sharp debridement."

Thus, the maggots prove to be a good choice for a patient with a lot of dead tissue impeding wound healing who isn't a candidate for arterial bypass surgery, says Dowling.

"Each treatment lasts 48 hours," he adds, noting that many patients require repeated treatments.

Maggot therapy debrided most pressure ulcers in spinal cord patients within a week without complications, which proved to be faster than all other non-surgical methods, according to a prospective controlled study at the **VA Medical Center** at Long Beach, CA (Spinal Cord Med. 1995, Apr; 18(2): 71-4).

Maggots battle the bad bugs: Maggots are "staging a comeback" with the rise in antibiotic-resistant bacteria, notes an article on the therapy published by the National Institutes of Health (www.nih.gov/nihrecord/07 20 2004/story01.htm).

Overcome Psychological Barriers

Education helps patients get over the psychological hurdle of agreeing to the therapy, in the experience of **Scott Strong**, supervisor of **Health First Wound Management**, a wound care clinic in Melbourne, FL. "For example, you



have to let patients know it's a fairly sterile" treatment and "not ... the dirty kind of maggots that people associate with trash," he says.

Avoid Contraindications

You shouldn't use maggots on a patient without adequate blood flow for wound healing to occur "because you'll just make the hole bigger," cautions Dowling. And you don't want to use them on a cancerous wound, he says, which delays the treatment the patient needs for the cancer. Also, don't use maggots over a body cavity or over a nerve or large blood vessel, advises Dowling.

Simpler Than You Might Think

Maggot therapy is relatively simple to apply, says **Ronald Sherman, MD, MSc**, a researcher at **University of California**, Irvine, and lab director for Monarch Labs, which supplies maggots.

"Most doctors, nurses and family members have no difficulties even with their first dressings," Sherman says. "A little experience (or a training course, which is now available through many sources) can make the procedure even easier, faster, and avoid the few minor but occasional concerns that some first-time practitioners have like 'how do you get them out of the bottle," which the package insert explains.

Referral resources: For information about training, go to www.monarchlabs.com. A regional listing of practitioners providing maggot therapy is available at www.ucihs.uci.edu/som/pathology/sherman/mdtists2.htm.

What do you think? How do maggots differ from leeches in treating a wound? "Leeches are used to suck the blood out of a wound bed" and are "applied a lot after transplantation of a digit where a hematoma could cause the patient to lose the reattached fingers," says Dowling. "By contrast, maggots go in and clean up a wound."