

THE BeTER LeTTER

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Taking BioTherapy Education on the Road

The BTER Foundation has been setting up “mini-workshops” at medical conferences around the Country. These “exhibits,” based on the popular one-day workshops (*Principles and Practices of Maggot Debridement Therapy*), have featured hands-on learning opportunities for attendees to see and apply MDT dressings on mock wounds. In addition, therapists can view our museum specimens of therapeutic animals, learn where to obtain medicinal grade creatures, and pick up policies and other reference materials to help them and their patients.

In the past six months the BTER Foundation exhibits have reached over 2,000 visitors at the 2006 Wound Healing Society Conference in Phoenix, AZ and the Clinical Symposium on Advanced Skin and Wound Care in Orlando, Florida. Upcoming events include the 2007 Diabetes Expo in Los Angeles and the 2007 Symposium on Advanced Wound Care (SAWC).

Meanwhile, full-day maggot therapy programs continue. MDT Workshops are scheduled for March 9, 2007, in Irvine, CA; and a few

months later in Palm Springs, CA. The program in Irvine will include a tour

of the Monarch Labs Medical Maggots production facility.



BTER Foundation Exhibit at the 2006 Clinical Symposium on Advanced Skin and Wound Care in Orlando, FL.

Maggot Treatment Saves Limbs in China

By Shouyu Wang, MD, Ph.D; Decheng Lu MD; Jiangning Wang, MD; China

Editor's Note: This case was reported previously in Journal of Reconstructive Microsurgery. 2006;22(4): 277-280. PMID: 16783687. The following is an edited account of that case, published with permission of Thieme-Connect.

Today replantation has become routine for successfully salvaging amputated extremities. However, since many amputations are caused by agriculture and manufacture accidents, firearm injuries or motor vehicle trauma, wound contamination is still one of major complications of replantation.

Post operative infections can lead to vascular thrombosis, sepsis, and loss of the replanted extremity. Treatment of infected wounds involves debridement (removal) of infected and devitalized tissue and coverage with vascularized tissue. We choose maggot therapy to

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Foundation Announcements

Maggot Therapy Workshops — The next scheduled MDT workshop will be March 9, 2007, in Irvine, CA. UC Riverside Extension will co-sponsor the workshop, and will offer Continuing Medical Education credits.

Monarch Labs in Irvine will also provide support, and will invite all participants to tour their medicinal maggot production

facility at the conclusion of the workshop.

Another MDT Workshop will be held in Palm Springs a couple months later. More information about these workshops can be found at: <http://www.BTERFoundation.org/indexfiles/workshops.htm>.

If you would like to co-sponsor a Maggot Therapy Workshop in your city,

contact the BTER Foundation or visit our website. Whether you need a one-hour lecture or a full-day hands-on training session, the BTER Foundation has an educational program to meet your need, in your city.

New MDT slideset available — A set of over 50 slides from our MDT workshops is now available, thanks to the expressed wishes of past workshop attendees, and some generous support from Monarch Labs. Af-

ter registering at: <http://BTERFoundation.org/indexfiles/mdtslides.htm>, anyone can download the Adobe Acrobat Reader (*.pdf) version for free. MS PowerPoint formatted slides are also available, but the file is so large that it is being provided only on CD. Cost of the CD, which contains both the PDF and PowerPoint versions, is \$29 plus shipping. The CD will be provided free to all Founding Members.

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Biotherapy in the News

CBS News Channel 2 News featured an article about maggot therapy on November 7, 2006. See the video at: <http://www.cbs2.com/video/?id=28062@kcbs.dayport.com>.

Veterinarians at Oklahoma State University used maggot therapy to treat a horse bitten by a rattlesnake. An extensive area of the neck necrosed, compromising the animal's breathing

(despite a tracheostomy and access for intravenous antibiotics). Three cycles of maggot therapy were applied, the wound began to heal, and she was released from the hospital. You can read more about

this amazing story at: http://osu.okstate.edu/index.php?option=com_content&task=view&id=480&Itemid=90. Or, just use our home page link at: www.BTERFoundation.org.

Maggot Therapy in China saves Reattached Limb

Story continues from page 1

help with these treatments, and carried out the research at Dalian University Xinhua Hospital and Dalian Medical University, supported by a grant from the National Natural Science Foundation of China (No.30471786).

We report, here, the successful treatment with maggot therapy of a wound infection after replantation of a traumatically amputated arm.

A 36-year-old male patient was referred to our hospital with his left arm completely amputated at the elbow. The patient's left arm had been crushed by an industrial machine 3 hours before arrival. The amputation wound was grossly contaminated. X-rays demonstrated comminuted fractures of the radius and ulna. The patient was immediately transferred to the operating room for replantation

surgery.

During the surgery, the wound was thoroughly debrided. The radius and ulna were fixed with plates, and the elbow joint was fused in a functional position. The lacerated muscles and median, radial and ulnar nerves were also repaired. Following re-anastomosis (joining) of the humeral artery and cephalic vein, blood flow to the distal arm was good, and the wound was sutured closed. Anticoagulation therapy was administered routinely for three days.

Three days after replantation, the arm found to be swelling, purulent (pus-filled) fluid was drained from the wound. The skin and muscle of the forearm was necrosing (dying). The wound was immediately opened, and fasciotomy (cutting of the deep muscle and fibrous tissue sheathes) was performed to facili-

tate wound drainage. The wound measured 10 x 20 cm, and it was difficult to distinguish viable from necrotic tissue. (Figure 1). Tissue cultures grew staphylococcus aureus. The wound was treated conservatively with dressings and systemic antibiotics for seven days, but the infection, drainage, and necrosis continued. After discussion with the patient and his family, it was decided to debride the wound and save the limb with maggot therapy.

A sterile piece of fine nylon net was attached to the wound with adhesive tape, leaving an opening through which about 50 maggots were introduced. The wound was then sealed with surgical pads to absorb exudate.

The dressing and maggots were changed every 2 days for a period of six days, by



Figure 1. Forearm infected wound 7 days after replantation.



Figure 2. Wound debridement with maggots.



Figure 3. Wound healing two months after replantation.

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Foundation Announcements

Speaking of Founding members—The BTER Foundation still has a few openings for Founding Members. The first membership, called “Founding Members,” will help the Board of Directors set policies for the future of the organization, including future membership criteria, grant reviewing, and faculty selection. Members are eligible for program discounts. Contact the BTER Foundation for a membership brochure and information.

When you purchase your Holiday Gifts—Don’t forget to make your purchases

through our Gifts Page (<http://www.BTERFoundation.org/indexfiles/giftstore.htm>).

Every time you connect to Amazon.com or Barnes&Noble.com through the convenient links on the BTER Foundation website, the Foundation will receive a percentage of the company’s profits from your purchase. You will receive the same quality merchandise, low prices and convenience that you have come to expect.

We have added a new purchasing service: **Extrabux**. Purchasing through Extrabux can

save you money at checkout, and you can then donate your savings to the BTER Foundation. Don’t forget to donate on your way out!

E-bay auctions benefit the BTER Foundation — Check out the BTER Foundation E-bay charity store, where all sales & profits are applied to the BTER Foundation programs.

Or, donate a portion of *your* E-bay sales to the Foundation, and advertise your generosity along with your sales items. What a great way to clean up clutter and get rid of those unused items

that have been taking up space; and, at the same time, help us to continue helping others. Find out more at: www.missionfish.org/ForSellers/forsellers.jsp.

Looking for BeTER Volunteers — Just a few hours can make a big difference. Spend a few hours a month with us, answering e-mail questions about maggot therapy, or updating our membership database, or reviewing our latest educational program, or finding help to produce our next instructional videotape. Before you know it, you too will be saving lives and limbs.



Community Announcements

International Biotherapy Society Meeting, Korea in 2007—

The 7th International Conference on Biotherapy will be held on June 20-24, 2007, in Seoul, Korea. Co-sponsored by the IBS and the Korean

Apitherapy Society, the conference will cover maggot therapy, leech therapy, helminotherapy, phage therapy, Ichthyotherapy and canine olfactory diagnostics. Find more information and registration forms at: www.icb2007.org.

Have you got a story to tell?

Do you want to recruit co-investigators for your biotherapy project?

Do you have an announcement to make in

THE BeTER LeTTER ?

Then Tell us!

E-mail: editor@BTERFoundation.org

Maggot Therapy saves Replanted Limbs in China

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which time most of the necrotic tissue was removed, and the wound was covered with a large amount of granulation tissue (Figure 2). The patient had no discomfort or complaints. Circulation remained good in the replanted distal forearm. Bacterial cultures were now negative. The wound was covered with a split thickness skin graft, and healing progressed without complication (Figure 3). The replanted forearm regained partial sensation and motor function within 2 months.

Maggot therapy is mostly used to treat chronic wounds, but the mechanisms of action appear to make the treatment also useful for many other wound types and conditions. In our case report, the wound was still relatively acute, being only one week old. The benefits may not have been limited to the debriding effect of the maggots' proteolytic enzymes. Antimicrobial activity and tissue growth (wound-healing) activities have also been described, and our patient likely benefited from these actions, as well.

Dr. Shouyu Wang is a Dalian University Hospital, Liaoning Province, China P.R., recently a visiting scholar at University of Mississippi Medical Center, Jackson, MS. E-mail him at: dlwangjn@vip.sina.com.

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(next one: Jan 9, 2007).

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