Docs beat back bacteria

Man survives race against flesh-eater

By DAVE WEDGE

Just a month after a Marion fisherman died from a rare flesh-eating bacteria he picked up from his contaminated catch, a Marblehead fishing captain nearly lost his arm after he caught a similar infection.

Doug Drew, a 42-year-old lifelong fisherman, was hauling in a net of flounder Sunday when he was stabbed in the thumb by a jagged fishbone. Doctors say the wound festered for hours and that a form of strep bacteria seeped in.

Feeling intense pain and noticing that his thumb had “ballooned,” Drew rushed to Salem Hospital.

“Within a half-hour, I had a strap running up my arm and red lines up to my armpit,” Drew, of Marblehead, said yesterday. “It felt like somebody was running a sword up my arm. I can take a lot of pain, but this was too much.”

When he complained of severe chest pains, panicked doctors slit open his hand and arm, revealing a fast-moving infection that had morphed into a flesh-eating bacteria.

Doctors worked feverishly to scrape off the bacteria from his muscles and tendons. After several hours, they were able to stop the infection in its tracks and save Drew’s arm.

“He was on the edge of taking my arm,” Drew said.

CLEANED OUT: Marblehead fisherman Doug Drew shows the arm that surgeons cut open to rid it of a rare flesh-eating bacteria he says he contracted when a fishbone stabbed him in the hand. A similar bacteria killed another Massachusetts man recently.

The bacterial strain is similar to that which killed Thomas Lippin, 55, of Revere, whose mother, Priscilla, explained that the bacteria entered a blood clot that had formed after he was stabbed by a fishbone.

Drew, who was discharged from the hospital Wednesday, said the bacteria entered through a cut in his skin from a fishbone.

“Most people don’t realize how serious it is. It’s a frightening thing. The bacteria spread very fast,” he said.
This lecture is dedicated to the memory of all US Navy corpsmen.
Medical Readiness

- Your Crew
- Your Vessel
- Your Destination
New Crew
Medical Readiness for The Crew

- Pre-existing medical problems: the most common are hypertension, chronic back pain, heart disease and poor teeth.
- Individual Medications: Who takes what? Do they have an extra supply for the duration?
- Serious Allergies
- Smokers and Drinkers (At sea is not the time to quit)
- Seasickness
- A Summary Medical Record for Each Member
Medical Readiness for the Crew

◆ Men are at risk for:
1. Back injuries
2. Heart attacks
3. Prostate problems
4. High blood pressure
5. Kidney stones

◆ Women are at risk for:
1. Heart attacks
2. Urinary tract inflections
3. Yeast infections
4. Pregnancy
Fig. 13-16  Incision and drainage technique. A, Fluctuant abscess. B, Abscess incised with scalpel. D, secret drainage removed by suction or caught in gauze sponges. C, Cross section showing incision.
Summary Medical Record

1. Your medical conditions requiring regular attention
2. Past surgeries and inactive medical problems
3. Medications and allergies
4. How to reach your doctor
5. Who to call in an emergency
6. A copy of an EKG
Name: William Grovesn
ID: 4579009336
Sex: Male
BP: 148/100 mmHg
Weight: 160 lbs
Height: 72 inches
Age: 46 Years
Physician: Dombert/Lyon/Lacey
History: Family history - significant
Medication: None

Interpretation:
- Sinus Bradycardia with rate variation
- P, QRS, T Normal
- Heart rate: 58
- QRS axis: 60
- T axis: 60
- Date of report: 13/08/08
- Renewed: 13/08/08
- Comments: Within normal limits

S & W Thermal Plant Clinic
Medical Readiness for Your Destination

- What immunizations do you need?
- What are the local disease risks?
- Is clean water and fuel available?
- Will they bar your entry if you have not had a yellow fever shot? Attention esp.. if you plan on transiting the Panama Canal.
- Malaria
- Immunizations are not always safe in undeveloped countries. Do it before you go.
Countries at risk for yellow fever and having reported at least one outbreak, 1985-1997

- **At risk**
- **Reported outbreak**

(as of 06/04/98)
Medical Readiness for Your Vessel

◆ Secure Storage: Will anything fly if you suffer a knockdown?
◆ Do you have a preventer? If not, can you perform neurosurgery underway?
◆ Screens and repellants to keep the bugs out
◆ Secure harnesses and jacklines
◆ A comprehensive medical locker
◆ Communication Link: Primary and Secondary
A word of thanks to you Dr. Carlin.
A couple of weeks back I attended a safety at sea seminar at Annapolis. I found the entire experience great and tried to learn a little from each of the speakers. What I remembered from your presentation was the importance of preventers in decreasing the possibility of injuries caused by a swinging boom.
The week after the seminar, together with two of my sons, I brought a C&C 25 from Providence, RI to the Bronx, NY. At one point, out at the east end of Long Island Sound, rolling west in one of those short chops kicked up by 20ks from the SE, I looked over the boat and asked myself what was missing. I remembered your reference to a preventer, and quickly rigged one.

About a half hour later, while my son was steering, doing more talking than watching, and as I stood in the cockpit looking forward, I heard the swoosh of the main pulled over as the boat rolled the wrong way down a wave. As I looked back I realized that the talking helmsman steered us into an accidental jibe. To my good luck however, the preventer kept the boom from swinging into me, and me into either never, never land or the 50 degree water of the Sound.
I hope others at the seminar took away insights and tips as useful and life-saving to them as your reference was to me.
Martin Schulman, Woodside, New York

(By the way, the trip, which took three days with anchoring at night, was one of the best of my life. The sea and wind conditions were outstanding, just at the edge of uncomfortable but still exhilarating. The boat, a 25, sailed like a 30 footer, and all of us got along better at the end of the trip than at the beginning.)
Thanks again.
Vessel Readiness: Medical Locker

- Bandages, Splints, Duct Tape, Betadine
- OTC meds
- Prescription and Controlled Meds
- Surgical Equipment
- Dental Kit
- Reference Book
- Crew Medical Records
- A Preventer
Best Book, Best Authors
Vessel Readiness: Medical Locker

Essential prescription meds:
- Levaquin, tetracycline, Flagyl, Azithromycin
- Phenergan supp., Zofran, Transderm Scop
- Sublingual nitroglycerin spray, aspirin
- Narcotic pain reliever: Vicodin, Dilaudid supp.
- ANAKIT, Benadryl, and prednisone
- Diflucan tabs and Clotrimazole creme
Dangerous High Seas Infection: Treated with Cipro and Tetracycline
Diflucan 100mg. tablet
Betadine: The antibacterial equivalent of duct tape
Random & Useful Stuff
Surgical tools: Use what you know
Jeffrey Isaac, PA-C Ltd.
Phone: 1-970-275-4999
www.medicalofficer.net

Jeffrey Isaac, PA-C is the curriculum director and a lead instructor for Wilderness Medical Associates, Inc. He is a co-author with Dr. David Johnson of Wilderness and Rescue Medicine, A Practical Guide for the Basic and Advanced Practitioner, used as a textbook in WMA courses worldwide. His teaching reflects the experience of 25 years in emergency medicine, outdoor education, and wilderness rescue.
Vessel Readiness: Communications

- Single Side Band: Voice / e-mail (Seawave LLC)
- SATPHONE: Globalstar, Iridium, Inmarsat-C
- Marine VHF: Fixed and Handheld
- Cellular Phone: effective to 20 miles offshore
- Worldwide e-mail: SailMail, MarineNet Radio
- SKYPE: indispensable

*Log a Voyage Plan, preferably on-line*
The Internet is almost everywhere.
Medical Response: Common Illnesses and Injuries

- Seasickness / Dehydration
- Hypothermia
- Heat Exhaustion / Sun Sickness
- Lacerations and Contaminated Wounds
- Broken bones, injured backs, pulled muscles, wrist tendonitis
- Devastating Injuries: Head Trauma, Heart Attack, Major Burns
In 1980, I met a young man from Detroit who had joined the US Navy. His first assignment was...
Medical Response: Seasickness

- Mismatch between what your middle ear feels and what your eyes see.
- Steer the boat for awhile. Do something on deck.
- Stabilize your neck with a c-collar or towel wrap.
- Lie down, neck stabilized, head slightly elevated, in the lowest center point.
- Meclizine (Bonine) is good before you go.
- Transderm Scopolamine: Test it's use first.
- Phenergan suppository is good once symptoms start. Add a decongestant (Sudafed) if you are still queasy.
relief band
Seasickness through life:

Susceptibility

Seasickness Susceptibility

Age

From: "Motion Sickness Susceptibility And Behavior," C.S. Mirabile Jr., in Motion and Space Sickness, 1990
"He was the most courageous and virtuous man that I have ever known."
Medical Response: Hypothermia

- The symptoms start with shivering, euphoria, irritability, lethargy
- And proceed to stumbling, slurred speech, loss of memory
- Closing with victim looks pale, breathing slow, pulse weak, leading to collapse and unconsciousness
Medical Response: Hypothermia

- Wind and being wet lead to rapid heat loss
- Obey the Ocean Dress Code: Layer upon Layer!
- Treat it by: Strip him, Dry him, Rack and Sack him, Hot Liquids
- Do not rub limbs, give alcohol or quit CPR
- WARM THE CORE FIRST: THE LIMBS WILL WAIT
Sun Sickness

- Sunblock: 30 grade, waterproof, twice a day. Apply esp. to the ears and tip of your nose.
- Late stage Melanoma is lethal, so look for it first:
  - irregular speckled border
  - bizarre and inconsistent coloration
  - history of rapid growth
- Fair skinned folks should perform a mole check once a month.
Medical Response: Lacerations and Wounds

- Obey the 3 Rules of Managing Wounds:
  1. Open it till you see or feel the bottom.
  2. Clean the hell out of it.
  3. Make sure the rest of the limb still works.
- NEVER, EVER, CLOSE A DIRTY WOUND. Infection and death may ensue.
- If in doubt, clean it, pack it with clean gauze, and leave it open.
Stingray spine to the thigh. Venom, salt water, spine sheath.
Boom to the back of the head.
Shearing laceration. Low risk
You must see the bottom of the wound
Rinse, Rinse, Rinse.
Staple/tape it together. Keep the edges up.
Figure 2-2. Fishhook removal: the “push-and-snip” technique.
Medical Response: Muscles, Bones, and Backs

- The foredeck is where most injuries occur.
- An injured back is the complete loss of one able bodied sailor for the duration.
- For all of the above: RICE IT
  1. Rest it
  2. Immobilize it with a splint.
  3. Cold and Compress it.
  4. Elevate it.
- Check and recheck the blood flow, strength, and sensation downstream from the injury.
Fractured toes. Buddy tape it.
Juno e-mail printed Thu, 19 Nov 1998 19:36:17 , page 1

From: 427310272@c-link.net
To: raceop@sac
Date: Wed, 11 Nov 1998

001 427310272 1111 3340.343S 00048.148E 08510 2154 G
WELL, THIS IS VIKTOR,
I DID IT, BUT IT WASD SOMETHINGU NEXPEKTED.
I COULD NOT STOP BLEEDING, LOST AT LEAST HALF A LITER.
PLACED TWQ SHOCK KORDS AS TIGHT AS POSSABLE BLEEDNG THE SAME. AFTERT BANDAGE T BECAME EASIER,
BUT NOW THREE HOURS LATER THE HAND CAN NOT GET THE S
IT FEELS HOT AND COLD BUT NO STRANGTH AT ALL.
PLEASE WHAT SHOULD I DO BEFORE TOO LATE.
VIKTOR,
Devastating Injury: Head Trauma, Heart Attacks, Burns

- The most common traumatic death at sea is a head injury from a swinging boom.
- Anything more than a minor burn should be evacuated as soon as possible. Force fluids, cleanse gently, antibiotic ointment, cover.
- A heart attack is a failure to prepare adequately. If you are over 45, test your own pump before heading offshore
Other Things To Do
1. Take a baby aspirin each day to thin the blood on the thin side. A glass of wine will also help. Six glasses will not.
2. Take your blood pressure medication as often as required. Take your blood pressure once a week, mornings before you take your medicines are best.
3. Put down the cigarette. You will not be able to if your crew does not do this.
4. Be attentive to your surroundings. Like a funny noise—mention it to your captain if it goes ignored.

Bon Voyage
Head out and have a good voyage. Just remember, this is the center of your crew's world's most essential pump.
Protect it, maintain it, and if you have trouble-free life.

Cardiac Chest Pain
- dull ache, pressure sensation
- substernal, radiates to arms, neck
- not worsened by movement or respiration
- not affected by pressing on it
- not relieved by antacids
- lasts more than 3 minutes

Non-Cardiac Chest Pain
- sharp, stabbing
- localized, non-radiating
- provoked with movement or respiration
- worse with pressing on it
- relieved by antacids
- short-lived, less than 30 seconds
(because what you can’t see or feel, can kill you)
Medical Response: Preventive Medicine on the High Seas

◆ Stretch out your back every time you leave your rack. Knee to chest and twist, switch legs
◆ Obey the Ocean Dress Code
◆ Did I mention the part about a preventer?
◆ Drink lots of fluids to help stabilize your core temperature and prevent dehydration
◆ If you are over 35… take a baby aspirin, take your meds, and look after your crew/spouse.
Medical Response: What to Do in an Emergency

- Stay calm. People rarely die suddenly.
- Move the patient to a secure bunk.
- Splint and immobilize the neck of anyone complaining of neck pain before you move.
- Find out exactly what happened.
- Call your medical resource: Report the situation clearly and calmly. Use a form.
- Clarify all advice you receive.
Medical Response: Radio Medical Advice Resources

- The US Coast Guard
- DH MEDICO on the SSB
- Passing ships
- Commercial Medical Advisory Services
  1. Medical Advisory Systems Inc. 301-855-8070
  3. Maritime Health Services 206-340-6006
How to Die Underway

- **Drown**: after falling overboard while urinating
- **Roast**: hyperthermia
- **Freeze**: hypothermia
- **Seasickness**: leading to impairment of judgement
- **Injury**: leading to loss of skipper at a bad time
- **Bad Heart**: too far from land
- **Drive, esp. at night, in a developing country**
“For the truth is that I already know as much of my fate as I need to know. The day will come when I will die. So the only matter of consequence before me is what I will do with my allotted time. I can remain on shore, paralyzed with fear, or I can raise my sails and dip and soar in the breeze. “

-Richard Bode

“First You Have to Row A Little Boat”