

COUR Haiti Update, February 9th 2010

COUR Committee

Dear POSNA Members:

We wanted to provide an update on the activities in Haiti, and offer some feedback provided by POSNA members who have been involved in the massive relief effort. We thank all individuals who have been involved in one way or another.

1. Recommendations for “damage control” service delivery in an environment with limited sterility and only basic resources. We thank Dr. Ed Fink for writing this. Please take note of our ***request for feedback on your experiences***, which will be included in a database on the COUR section of the website.
2. Note from Dr. Michael Vitale, including a pdf (attached) from WHO on amputations and a press release.
3. Note from Dr. Kaye Wilkins (pdf of his trip report is attached).
4. Note from Dr. Frederick Reed
5. Note from Dr. Dale Maples
6. Note from Dr. Ken Guidera
7. Information on volunteering by Carol Fipp, Sacred Heart Hospital (Hopital Sacre Coeur) in Milot , Haiti (3 pdfs are available on the POSNA website giving further details)
8. Note from Dr. James Beaty
9. Message from Scott Nelson with web sites
10. Information from USAID on donations
11. **Summary of messages relating to ACPOC from Ted A. Trower (C.P.O., FAAOP, A-S-C Orthotics & Prosthetics, Jackson , Michigan , USA), Derrick R. Stowell, M.S., CTRS, (Lifespan Programs Coordinator, Amputee Coalition of America, 888/267-5669 Ext. 8130. dtstowell@amputee-coalition.org), and Don Christenson L,CPO. 509-990-7414.**
12. Word document summarizing other communications received which was posted on POSNA website last week. (Schwend)

1.) RECOMMENDED GUIDELINES FOR APPROPRIATE TREATMENTS

The people of Haiti and the world community are grateful for the tremendous response of the orthopaedic community in volunteering their time and expertise in providing care for the victims of the devastating wounds inflicted upon this country. The magnitude of the injuries, the overwhelming number of individuals affected, and the fragile social and medical infrastructure have conspired to make treatment efforts difficult and fraught with potential complications. Yet we can make a significant difference!

What follows are recommendations from surgeons who have recently been working in Haiti, and a request for further feedback from those who have already volunteered since the earthquake.

Recommendations:

While many of the injuries may be similar to those we have seen in our daily practices, the environment in which they have occurred is starkly different. Fluoroscopy and intra-operative radiographs are simply not available. Maintenance of a sterile operating room environment is exceedingly difficult, in spite of all attempts, with flies routinely circulating overhead and inconsistent sterilization techniques and equipment. We are receiving reports from several sites in Haiti that closed fractures that were treated with open reduction and internal fixation have effectively become open fractures with hardware and have become open fractures—now infected, leaving critically ill individuals.

To promote safe effective treatment in the setting of Haiti or other similar resource-poor environments, we propose the following recommendations:

1. Damage control orthopaedics suggests that most long bone fractures be initially treated with external fixators to achieve rapid stabilization and mobilization of the patient. However, these may have been placed emergently, become unstable and will require revision.
2. Most closed fractures should be managed with plaster, traction or external fixation. Performing open reductions and fixation converts the injury into an open fracture with the risks of post-operative infection, life and limb.
3. Open wounds should be copiously irrigated, debrided and dressed open. Multiple debridements may be required, with plans for delayed primary closure or some form of skin graft or tissue flap only when a clean wound environment has been achieved.
4. Traumatic amputations should similarly be left open and closed only when a clean wound environment has been established.
5. An intramedullary device such as the SIGN nail, should be considered when available: (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2584284/>)

- Physical and occupational therapy and rehabilitation are critical! They must be an integral part of the pre-operative planning and instituted as soon as possible after fracture and wound treatment have begun.

Feedback:

To continue to learn from the orthopaedic experiences of those helping in Haiti, we are compiling a database and would appreciate your input. Please email us with the following information:

Name	
Address	
Phone	
Email	
Affiliation for Haiti Work (PIH, DWB, etc.)	
Site and conditions in Haiti where you worked	
Dates of work in Haiti	
Number of patients operated on	
Types of operations performed	
Complications	
What sponsoring organizations need to know going forward	
Lessons learned- what worked and what did not work	
What to do differently on the next trip	
Advice and recommendations.	

One pearl or trick of the trade.	
At least one relevant image from the trip.	

2.) Dr. Michael Vitale:

I went down with a loose group of organization including the United Aid Foundation and basically had a mobile team supported by 5 anesthetists and 2 nurses. At the beginning of the week, i was overwhelmed placing quick ex fixes at Hospitals on the DR side of the border and then in Jimani on the border. Lots of neglected/ open long bone fractures but this slowed considerably even in 7 days. As we exit the phase of fracture care, the challenge will focus on limb salvage for open tibias, conversion of suboptimal ex fixes, and wound and amputation management.

I proceeded to a facility called the Disaster Recovery Center which sprang up from an orphanage called Love a Child on the Haiti side of the border. It is an ideal place for subacute management with great organization led by Dr Kranmer of the Harvard Disaster Initiative, and very good infrastructure. I was there Day 1 when nothing was there and had the opportunity to see this place evolve and grow at an incredible rate. I passed off the orthopaedic operation to Operation Smile when i left and they contributed greatly to organization and care. I anticipate this will become one of a few places for patients to go post op for medical/rehab care. Also well-placed on Haitian side of border so easy to get to, and easy to get patients back from DR. I am working now to get the Love a Child site crutches, wheelchairs, and a prosthetic program.

Orthopaedic tips:

- self drilling, nonconical pins for ex fix make fracture fixation much easier in nonsterile environment.
- ex fix revisions as this point should add stability; early ex fixes were often inadequate.
- work hard to save length on amputations, save tissue during debridement. amputate as a last resort.
- plastics people are important now for coverage.
- VAC dressings would make a big difference but KCI has not been forthcoming.
- figure out a way to mobilize people off the floor of tents.
- the fasciotomy wounds urgently need pt

From an ortho perspective, we are exiting the acute stage of massive crush and acute fracture. There are unlimited open wounds, lots of bad amputations and ex-fixes all over needing care. I think about this as follows

1. Stable closed tibias- need to convert to cast at 4-6 weeks. If some of these could be xrays, we could achieve a better reduction as many are likely malreduced since ex fix put on under duress without fluoro.
2. Open ex fixed tibias - we are in critical period for limb salvage. Resources here will make a difference.
3. Femurs with (inadequate) ex fix _ challenge bc will be difficult to maintain for 3-4 months. If we could figure out a way to convert these patients to more definitive fixation, it would help. My partner, Mel Rosenwasser who leads trauma at my place, is going down to do just that at a Hospital in Santo Domingo. It will be hard to do that in Haiti.
4. Amputations. Lots of guillotine amputations being closed now. Attention to muscle balance, maintaining length and molding of stumps will help.

These are my initial thoughts from an orthopaedic perspective for the group. I am ccing the leadership of the site on this email where leadership of our national orthopaedic organizations is copied. I would be happy to facilitate next steps as others see fit. We are in a window where outcomes can be improved for many of these patients.

3.) Dr. Kaye Wilkins (See attachment for formal report)

I was desperate to find a way to get to Haiti following the earthquake as in the 15 years that I have been going there I had developed a lot of great friends. Through the Generosity of Karl Rathjen I was made a part of the CURE team that went 20-27 January. I made up a report of my experience there e.It explains my experience there. The Saint of our group was Scott Nelson. He did a superb job of getting things organized early.

Unfortunately, I was not able to meet up with any of my Haitian friends. I have learned that they are all OK.

I Echo the fact that the work has just begun. There has been a lot of excitement to go during this phase in which there has been a lot of dramatic surgery. Unfortunately, there is now a large reservoir of patients who will need the less glamorous post operative care/repair. I am encouraging our hospital to accept some children that will need follow-up treatment. I think that we all realize that there are not adequate facilities to do the necessary work there in Haiti. So put Christus Santa Rosa Children's Hospital on the list of hospitals that will accept children from Haiti. One further note. We need to involve the Haitian Orthopedic Community in any future plans regarding Orthopedic care of patients in Haiti. We need to assist them in their recovery process. I am afraid that they have been pushed aside in many instances. Thanks to all of you who have been a part of helping Haiti recover.

4.) Dr Frederick Reed, Medical University of South Carolina

I was involved in helping 2 Haitian surgeons treat numerous earthquake injuries both adult and child. Hopital Lumiere, Bonne Finn, Haiti **Funds received for Haiti Earthquake Relief will be directed to Lumiere Medical Ministries - please send to: World Witness, One Cleveland St, Greenville, SC 2961)** Hopital Lumiere is about 20 miles west of Les Cayes (toward PAP), then north (about 5 miles) from Cavaillon. It is about 70 miles south east of Port. It is known throughout the country as has had missionary medical personnel there in years past

Organizations Supporting the Jan 15 Charleston Relief Team

- a. Water Missions International - 2049 Savannah Highway, Charleston, SC 29407 (843) 769-7395 <http://www.watermissions.org> A Christian, nonprofit organization that provides clean, safe water to people in developing countries and disaster areas through a variety of technologies developed by George C. Greene III (843-266-4965,843-266-4965). One of their technicians sent to assess areas of Port-au-Prince that had not been reached by aid workers, was the connection to Mike Petrillo who provided our plane and pilot. As of Jan 21 the water systems in Haiti total 41(5 solar powered). Twelve of those systems have already been installed and are providing life-saving water to as many as 60,000 refugees. Channels have recently opened for Water Missions International to ship water systems and supplies by way of ocean-going vessels. Patrick Haughney. 480-768-2500 480-768-2500 PIN 881631641799 Cell – 843-303-4927 843-303-4927
- 5.) *Paul Barringer of Forestry Products - provided a King Air and pilot for our flights into and out of Haiti . He is a faithful contributor to The Refuge in Hilton Head, SC, of which three members of the first mission, Mike Petrillo, EMT; Adam Kurtz, EMT; and Aaron Stephens, water technician are members.
- 6.) Provo Air Center - (649 9464181) The owner of this airport in Providential, Turks and Cacos, gave us invaluable help to get us into Haiti . This is a communication hub that allows numerous options to small Medical Teams once they arrive by commercial or private carriers.
- 7.) Florida Disaster Recovery - this team of pilots, led by Stewart (Buddy) Fuzzel (954 3494611), constantly kept in touch to be ready to provide transport into Cap Haitian, Les Cayes and Jacmel if we needed them. They are one option when flying into Provo . (Other option is thru Nassau or Inagua using Methodist Bahama Habitat.org,
- 8.) Mustard Seed Ministries - pilots flying tents to PAP offered to make a straight flight into Les Cayes. They were first ever to land a jet on this short runway
- 9.) *Methodist Habitat Mission Flights - met us in Cap Haitian and got us in and out of Les Cayes.
- 10.) Lumiere Ministries of Gastonia , NC - This was the parent organization for Hopital Lumiere until they sold the hospital to Mission Evangelique Baptiste du

Sud d'Haït. They still run 2 hospitals in PAP (Hopital de la Paix and King's Hospital). 3816-20 South New Hope Road, Gastonia , NC , 28056 , 704-823-0271 704-823-0271. Because Lumiere is not directly involved now with Bonne Fin, contributions should be sent to World Witness, One Cleveland St. Greenville , SC 29601 , 864-233-5226 864-233-5226
www.worldwitness.org

- 11.) MEBSH is a 60 year old cooperation between missionaries from such countries as: the United States , France , Germany , Canada and Jamaica and Haïtian pastors). They currently run 2 hospitals in PAP, dental clinics, University and Med school, 312 churches, 235 schools. The main contact and shepherd for our flock was John Vrooman: (John & Diane Vrooman, c/o Agape Flights Inc., 7990 15th Street East, Sarasota , Florida 34243 USA
Haiti@Vrooman.org

Name	Rick Reed
Address	MUSC Dept Ortho Charleston , SC
Phone	843 7296846
Email	reedfred@musc.edu
Affiliation for Haiti Work (PIH, DWB, etc.)	Lumiere Ministries
Site and conditions in Haiti where you worked	Hopital Lumiere, Bonne Fin , Haiti
Dates of work in Haiti	1/15 - 23
Number of patients operated on	45
Types of operations performed	Amputations, ex fix, compart release, debride, tx pins
Complications	2 deaths, 1 gas gangrene
What sponsoring organizations need to know going forward	Must have Haitian and missionary connection, interpreters, more allied health than MD
Lessons learned; advice to be shared	Don't close anything, rehydrate, broad spectrum AB, Tet tox even if after injury – 2 nd infect of open wound; could use a cheap flexible nail for kiddy fem and tib with limited fx exposure

5.) Dayle Maples

I was in Haiti from Jan 23-30, located in a makeshift street side clinic across from the presidential palace and adjacent to the tent cities. Field surgery with many amps/ revisions, debridement and splinting of 2 week old open fractures, and misc illnesses, especially pediatric (including full blown tetanus). Our conditions were primitive with no electricity, plumbing, but with IV sedation and basic wound techniques, we were able

to make progress on many amps that had been done the first week after the event. We could see progress throughout the week in being able to “transfer” a few patients for definitive fracture care to the U Miami hospital at PAP airport, and to the Comfort. By the end of the week, the local police were able to provide ambulance and escort for these patients. As everyone knows, the situation remains dire and the orthopaedic needs will be changing to the need for prosthetic fitting, and hopefully rehabilitation. Hopefully, a coordinated effort utilizing what few “systems” have been in place previously (and can be revived) will help with this. We have access to many prostheses, prosthetists, ambulatory aids and therapists at Mary Free Bed; will be in touch with anyone who can offer ideas to coordinate the ongoing effort.

6.) Ken Guidera

The trip will leave a lasting impression on me. I will hopefully not take for granted all our luxuries and comforts. It was good to go back to basics and sleep on a mat + take cold showers [but not for too long!]. The people of Haiti are polite, appreciative and tough. The country has no infrastructure to include the medical system. When we got there I was amazed at the chaos and the extreme medical /surgical needs of the injured. It looked like a war zone and I felt like we were in MASH. We were first not made to feel welcome at our hospital, but our multi discipline team with all the competent, industrious people just started to work our way into the system. There were several other American teams there and by the end of the week we were basically running the hospital.

The orthopedic surgeons arranged an O.R. to take care of fractures, wounds and amputation revisions. We developed a clinic and cast room, and rotated between those two areas and the inpatient wards. Somehow a C-arm showed up and we were able to take care of complex fractures. We worked about 12 hrs /day in either setting. It was hot, tiring and stressful, with flies in the O.R. and wards. But we all enjoyed it and I never heard a cross word. We felt good about our work and the Haitians were appreciative. We developed lifelong friendships and most plan to go back. At the end of the day we stumbled back to camp, ate some goat meat and rice and supported the Haitian economy with beer money! My mat, sleeping bag and cold shower were greatly appreciated. As other teams arrived we got more equipment to take better care of the patients. The hospital seemed more organized each day. I think we left the place better than we found it. We passed the torch off to other teams and left somewhat reluctantly.

I must take this moment to thank the team of No Time for Poverty on their excellent organizational skills. We had food, lodging, travel, and all necessities taken care of. I was amazed at their ability to get things done. I would stress to anyone who wants to go, to work with an established group with ties to a local facility. Don't just show up like some volunteers did.

I believe Haiti will need long term care once this acute phase is over. In my Pediatric Orthopaedic specialty we will need long term deformity management and prosthetic

care. We need to work together to establish this. I am hoping that if we put groups together like NTFP, Shriners Hospitals, ACPOC [prosthetic group], and facilities such as St. Damien's, we can make this happen.

I would like to close by thanking all my new friends at NTFP [even you Kirk A.!] for their assistance, comradeship and spirit of volunteerism.

7.) Carol Fipp, Sacred Heart Hospital (Hopital Sacre Coeur) in Milot , Haiti

(904) 223-7233 (904) 223-7233

(904) 451-0003 (904) 451-0003

cfipp@bellsouth.net

Crudem Foundation, Inc.

www.crudem.org

Thank you for your willingness to volunteer at Hopital Sacre Coeur (Sacred Heart Hospital) in Milot , Haiti , supported by the Crudem Foundation! I really appreciate the outpouring of support that has come forth for our hospital. Right now, we are making a list. Things are changing day to day and we do not have a lot of lead time. If you would like to volunteer, you need to be flexible and ready to go with short notice. If we can get you on a team, we will need you in Haiti for one week minimum. If that won't work for you, we probably won't be able to use you. We are sending people in teams, so please wait to be put on team. Teams go from a Saturday to Saturday and volunteers must pay for their own transportation to Haiti . Room and board and transportation to and from the airport are covered by Crudem. Accommodations are very basic at present - mattresses on the floor because of the large numbers of volunteers. We do not have a charge for accommodation but donations towards the costs are appreciated. During this emergency time we are asking for a contribution of \$40/week from each person: \$20 for soda, \$20 for the cooks/ housekeeping staff.

Read the three attachments for more info. Ignore the part about sending in CMMB forms; due to the circumstances volunteers are covered by CMMB insurance without submitting the forms. You can learn about the Crudem Foundation and Sacred Heart Hospital from www.crudem.org and the attached documents.

Please send me by email. Please put answer next to each line.

1- what is your specialty in medicine

2- when you can go

3- how long you are available

4- and this travel info:

1 - full name as it appears on passport

2 - US address

3 - date of birth

4 - US passport number

5 - passport expiration date

6 - passport place of issue (under "authority" on photo page)

7 - nationality/citizenship

8 - gender

9- weight

10 – cell phone number

11 – email address

8.) Dr. James Beaty

POSNA Members Derek Kelly (Campbell Clinic, Memphis, TN) and Josh Meier (Kosair Children's Hospital, Louisville, KY) are together with a 9 member team from Lebonheur Children's Medical Center (Memphis, TN) in Port-au-Prince, Haiti, at Sacre Coure Hospital. Other orthopedic surgeons from Nashville and Knoxville recently joined our larger multiple-national team. There is a functional OR with 4 rooms, one C-arm, and a variety of different fracture fixation options. Many of our most recent cases include wound debridements, amputation revisions, long bone fractures (forearm plating, femoral nailing and external fixation, tibia external fixation, among others), and lots of external fixation revisions as many of the early frames were likely placed under very difficult circumstances. There are still many physeal fractures that are partially healed, many in poor alignment. The orthopedic surgery need is still great but the need for plastic surgery and physical therapy is rapidly increasing. Many patients need flap coverage to have any hope of limb salvage as the Haitians are very fearful of amputation. And formal therapy is so limited that many patients with complex, multiple extremity injuries, are lying in bed for days. Still the spirits of the Haitians are high; and, the efforts of the multitude of volunteers are always met with extreme gratitude.

9.) Update from Scott Nelson

As many know Scott has been contributing to disaster relief efforts since the event, tirelessly. You can go to <http://curecaribe.blogspot.com/> to read a report on his trip to Haiti. At the end there is a link to more photos (or click http://www.pbase.com/scottnelson/haiti_earthquake).

10.) Information from USAID on public donations

The most effective way people can assist relief efforts is by making cash contributions to humanitarian organizations that are conducting relief operations. Information on organizations responding to the humanitarian situation in Haiti may be available at www.reliefweb.int. USAID encourages cash donations because they allow aid professionals to procure the exact items needed (often in the affected region); reduce the burden on scarce resources (such as transportation routes, staff time, and warehouse space); can be transferred very quickly and without transportation costs; support the economy of the disaster-stricken region; and ensure culturally, dietary, and environmentally appropriate assistance.

More information can be found at: USAID: www.usaid.gov/haiti
Information on relief activities of the humanitarian community can be found at
www.reliefweb.int.

11.) Summarized messages relating to ACPOC from Ted A. Trower) C.P.O., FAAOP, A-S-C Orthotics & Prosthetics, Jackson , Michigan , USA), Derrick R. Stowell, M.S., CTRS, (Lifespan Programs Coordinator, Amputee Coalition of America, 888/267-5669 Ext. 8130. dtstowell@amputee-coalition.org), and Don Christenson L,CPO. 509-990-7414.

With regard to my recent email about the needs in Haiti , I have more information from ACPOC members that I'd like to share with you (see below). Later in the year I plan to put together an article for the ACPOC News about how ACPOC members got involved. For those of you that did or will go to Haiti and might have some pictures, please send a couple to me. Thank you.

Healing Hands for Haiti has been running a full time prosthetic facility on Haiti for some time. Unfortunately it was destroyed in the quake. The already had plans for a new facility to be constructed in process. It would be wise and prudent to coordinate your efforts with them.

Also, the ACA is very active in efforts to help. ACA recently created a Haiti Relief Action Center on our main webpage www.amputee-coalition.org. ACA has notified all of their trained Parent Peer Visitors of the possibility of providing peer support to any families affected by the earthquake, and families who are adopting or have adopted children what have suffered amputation as a result of the earthquake.

All Hanger Orthotic Prosthetic centers are accepting donated prosthetics. These are to be sent to Physicians for Peace . This would include all 660 facilities.