



LAC+USC

Trauma Surgery Mission to Haiti



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Learning Objectives



- Lessons to be learned from disaster response
- What does it take to be successful, effective and safe
- Sticking to the basics in a disaster zone
- Crisis intervention and team work in disaster

The Mission



- Earthquake in Haiti
- Keck/USC Response and Plan
- Haiti History and Health Facts
- Current Medical Needs
- Logistics in a Disaster Zone
- Lessons Learned
- Caution – the following slides are quite graphic and of an emotional nature

The Haiti Quake



- Tuesday January 12, 4:53pm 7.0 Earthquake
- Centered 10-15 miles SW of Port au Prince
- 33 aftershocks 14 between 5.0 and magnitude 5.9
- 100-150,000 killed (estimated at the time)
- 230,000 later confirmed deaths
- Up to 1 million homeless
- 3 million affected immediately

Haiti gained its independence from France in 1804 via the only successful slave rebellion in history (French & Creole official languages)

Hispaniola (Caribbean island - Dominican Republic)



Haiti Historically a Place of Destruction



- Historically a politically violent and seismically active nation
- Total population roughly 9,000,000
- 80 % of population live under the poverty line 54% under abject poverty
- Quakes of 1751, 1770, 1842 caused mass devastation
- 1946 Quake of 8.0 Dominican Republic left only one building standing in Port-au-Prince the Capitol of Haiti
- 1946 Tsunami killed 1, 790
- Tropical Storms and Cyclones in 2008 caused 800 deaths

Health Risks



- 58% aged 15 – 64 years
- 2.2% adult prevalence of HIV/AIDS
- 120,000 people living with HIV/AIDS
- 60 deaths/1,000 live births
- Life expectancy 61 years

Major Infectious Diseases

- Bacterial and protozoal diarrhea
- Hepatitis A and E
- Typhoid fever
- Vector borne diseases: dengue fever and malaria
- Water contact disease: leptospirosis

How and When



- Thursday, January 14
- Keck Dean Dr. Puliafito proposes USC
- Medical team, discusses feasibility with Dr. Demetriades
- Friday, January 15
- 10:30am - Planning meeting – Dr. Puliafito,
- Dr. Demetriades, Dr. Cestero, Dean's staff
- 3:00pm – Names selected by Dr. Cestero,
- Submitted as team to University of Miami
- Saturday, Jan 16
- 11:00 am – Leave LAC+USC to airport

What the Team Must Be



- Versatile, flexible, self-sufficient team small enough to be mobile but large enough to be effective
- 2 Trauma/Critical Care surgeons
- 1 Orthopedic surgeon
- 1 ER physician
- 1 Trauma Intensivist
- 1 CRNA
- 1 Trauma PA, 1 Trauma ICU nurse, 1 ER nurse

Logistics the BIGGEST challenge



- Logistics
- ? Communications (cell phone towers down, no satellite phone), ? Contacts
- ? Food supply (MREs)
- ? Water (take enough for 1-2 days)
- ? Shelter (tents)
- Security
- ? Situation, dangerous area, UN carries weapons
- Equipment
- Plan to use other group's equipment
- Personal equipment
- Malaria prophylaxis, eye pro, gloves

LAC+USC Contingent



Claudel, Ramon, Kara, Howard, Andy, Mira, Kären & Dave

The Completed USC Trauma Team

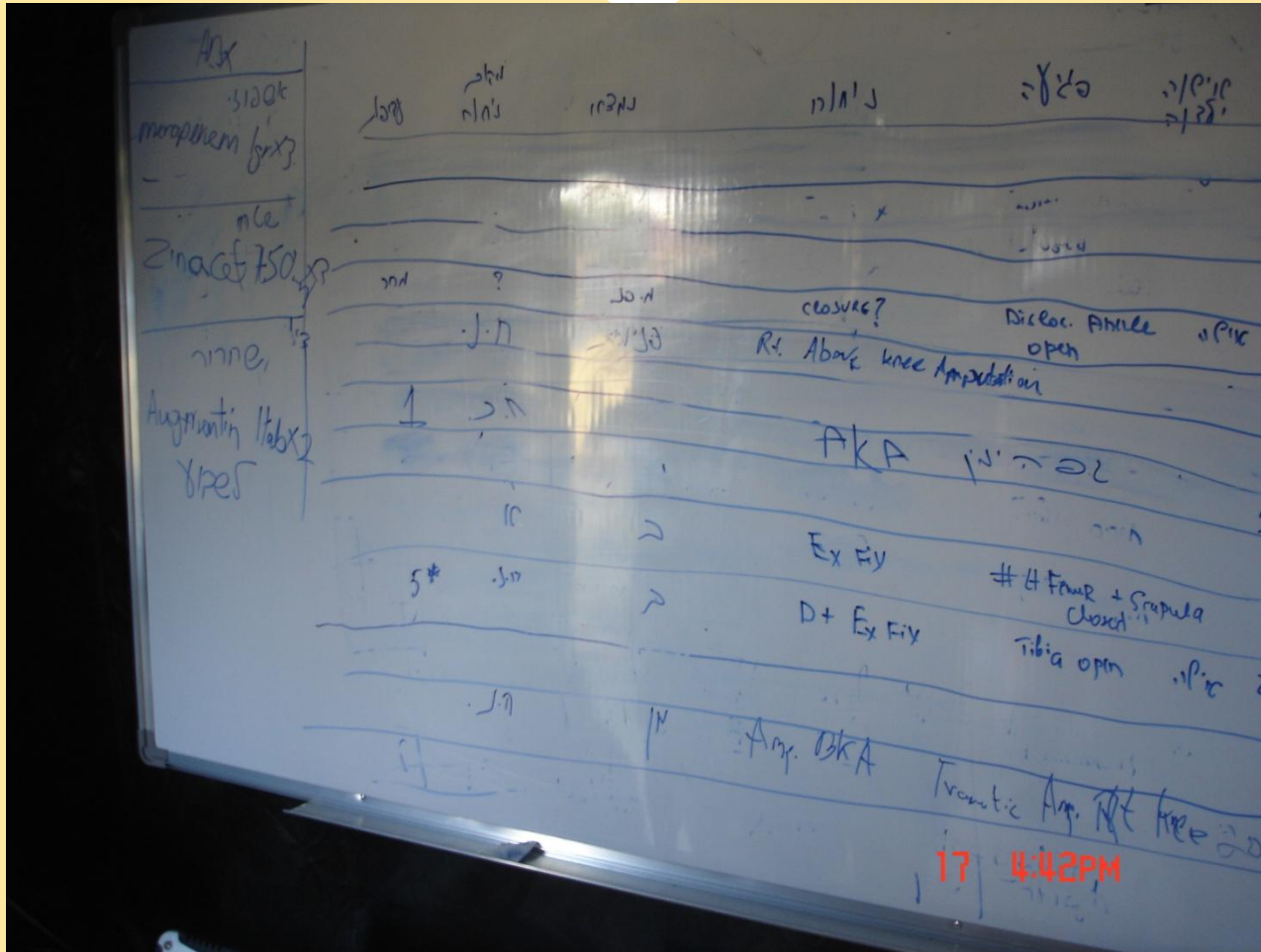


Ed, Dave, Andy, Kara, Claudel, Mira, Howard, Kären & Ramon

Israeli Field Hospital



The OR board – Hebrew & English



The State of Israel
Field Hospital

Date 19 / 12 / 76

No.

Name

Complains:

Medical hospital

Physical hospital

Lab. Test

Diagnosis

Recommendations

Signature

(L4) Hip pain since earthquake.

X Ray - Posterior dislocation
(L4) Hip Posterior Dislocation
Reduction under sedation

① Normal weight bearing
② Analgesics as needed.

Michael Benedit MD

Morning Ethics Briefing



Double Harvest Hospital



Case Total Estimates



- Caseload after 5days
- Triage 300-350 patients
- Clinic 150
- Anesthesia 50-60
- Ex fix 50
- Amputations/debridements 40-50

A Good Time to Leave



- **Haiti awash in doctors; nurses in short supply**
by **Lisa Desjardins and Danielle Dellorto, CNN**

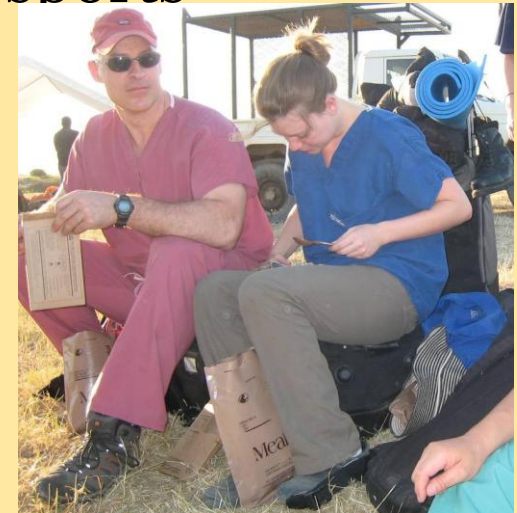
January 25, 2010 9:30 a.m. EST

- **Doctors crowd Haitian hospital**
- **Largest hospital in Port-au-Prince has too many doctors; coordination is a problem**
- Patients have dressings opened three, four times in close
- succession by different medics
- Volunteer nurses and physical therapists are in short supply

What it takes to be successful



- Team composition
- Flexibility/Mobility, Personalities
- Security – ongoing concern as situation changes
- Logistics essential
- Attach to well-established group in host country
- Transportation – flights/ground (\$), passports
- Communications
- Satellite phone, battery chargers
- Survival equipment
- Tents, food (MRE)/water concerns
- PPE, vaccinations



A Debt of Gratitude to:



- Dean Puliafito
- Dr. Demetriades
- Dean's Office Staff
- Keck School of Medicine USC
- LA County Health Services
- University of Miami
- Medishare
- The Israeli Field Hospital
- Double Harvest Farm

Anesthesia Essentials for Haiti



- Haiti Medical Mission Jan 16 – 22, 2010
- Suggested Anesthesia Equipment for Similar Missions:
- **Regional Anesthesia supplies including:**
 - Stimuplex needles of various lengths
 - Nerve Stimulators
 - Spinal anesthesia kits or needles
 - Local anesthetics for SAB or regional anesthesia blocks (bupivacain and lidocaine)
 - Portable pulse oxymetry (in huge demand following the quake)
 - CO₂ detection devices (highly desirable but not essential)
 - Sterile gloves of all sizes
 - Opioids including: morphine, ketamine, demerol, fentanyl

