

5 October 2005

Where to begin?

First of all, I'm never again sharing a call with another soul.

The first time I shared a call, during residency, Mike Zimmerman took the first 4 hours of my OB call so that I could play basketball. Within an hour and a half, a patient with severe pre-eclampsia got so sick that she killed off her baby, her kidneys, and her brain. She walked out of the hospital (miraculously) after a 2-month inpatient stay, having been on dialysis that entire time.

I had arrived at Panabaj, in Santiago Atitlán, on September 22<sup>nd</sup>, to cover clinic and call at the Hospitalito Atitlán for Jack Page, an ER doc from North Carolina who was heading back to the US for a 3 week tour of recruiting, fundraising, and visa requirement fulfilling. Bernie Page, an ER doc from Duke working at the hospitalito and Jack's wife, was going to be driving me to the airport the next morning to pick up Jack on the same flight I was to be leaving on later that next day. I did not want her to be post-call and exhausted for the drive, so I came in at about 9:15 that evening, and sent her home by 10pm. I was in bed by 11:30, having treated and released a 17 year old girl with pelvic inflammatory disease, a result of her getting repeatedly abused by a relative, according to her.

The feeling of ground shaking and a low rumble that some have likened to a large dump truck rolling by, a freight-train approaching, or a jet rumbling overhead. Perhaps a small earthquake was my sleepy thought at 4:15am.

Then panicked yells, and banging on my door, "DOCTOR, DOCTOR". And again. "DOCTOR!!!". "Ok already". Some emergency is going on. I put on my glasses and sneakers and rushed as fast as I could out of the call room, to see a group of perhaps 5 people coming towards me.

Must be a delivery, I thought (why else would a group of people be coming towards me? The ER was directly across from the waiting room (where all the people were coming from), and the delivery room and the operating room were the only rooms in my part of the hospital). I went as far as opening the doors of the delivery room to usher the group of people in. I believe I even said, "¿está embarazada?" ("Are you pregnant?")

When a flashlight was shown down the hallway back towards the center of the building, I was able to see the mud more than a foot high in the corridor, coming from the waiting room and passing through the main hallway into the ER.

It has been raining non-stop for 4 days at that point, the convergence of Hurricane Stan from the East and a tropical storm from the west, but I could not in my wildest dreams fathom that this would happen. It was my first experience with a natural disaster. And I had no idea if it was going to get worse.



I felt like this was the REAL “Survivor Guatemala”. 4:15am. Only battery-powered electricity that usually would last about 8 hours. And no idea why there is a bunch of mud coming 20 feet in through the front door to the corridor and into the ER.

First thought: I’m going to die.

Second thought: How can I make sure I don’t die even if I get buried alive?

The worst part was the SOUND. The unceasing low rumble, with occasional crescendos which, every time they happened, made me think that Big Brother of mudslide #1 was coming to finish the job.

And we still had an inpatient: a 6 month old with very bad asthma.

Thankfully, Rigo (the guardian) and Jacinto (the nurse) were there as well. So, priority #1: get the inpatient to a safer spot.

Someone had opened the side door and it seemed to be mud-free on that side, so the patient was moved from the X-ray room (next to the ER) to that end of the building (next door to the call room where I had been sleeping). It was still pitch black outside, but I believe the flashlights revealed grass, and no mud, on that side.

So, patient and his family were moved to the “Sterilization Room”, where the autoclave and many surgical supplies reside. Better yet, the recently-constructed shelving, perhaps the sturdiest piece of furniture in the place, was also in that room. I moved everything out from under the shelving quickly, in case we had urgent need to dive underneath to escape more mud. Oxygen tanks were also moved to that room. Then fresh water. Food? Nobody wanted to venture to the other side of the hospital where the refrigerator, my stethoscope and my poncho all were sitting, because it seemed that the mud was on that side (though we didn’t know that for sure). It had been raining for the entire 3 weeks I had been in Santiago, and I hadn’t even been aware that there were volcanoes nearby. The heavy tree cover near the

hospital also made me feel that I was near relatively flat ground, so I wasn't sure where exactly a mudslide could be coming from. As time slowly ticked by, the fear of another mudslide subsided only slightly, but enough for me to venture to the Education Room to rescue my stethoscope and the remainder of the food in the refrigerator as the minutes went by.

Then, attempts to contact the outside world via cell phone:

- Leah Abraham (my friend from residency, who helped to open the Hospitalito (Spanish for "little hospital") back in January): no answer, I believe the message I left was, "Leah, BIG MUDSLIDE, CALL ME."
- Bernie: ANSWERED. I told her there was a big mudslide (I didn't know the extent at that point), then asked her to contact my parents to tell them a) I'm alive, and b) I don't think I'm making my 2:02pm flight back to the States today. Bernie was also telling me that she didn't feel safe driving with such heavy rains, so the trip wasn't going to be made back to Guatemala City to drop me off and to fetch her husband Jack that day anyway.

T'zutzuhil has so many Spanish words in it, that I was jokingly calling it "Tzutzunol" or "Espanjil" (kind of like "Spanglish", but mixing Tzutzuhil and Spanish) days before the mudslide. I vividly remember an older woman in a shawl and traditional clothing, chanting and praying at the side door, in completely unintelligible tongue outside of "Espiritu Santo" occasionally thrown in ("Holy Spirit" in Spanish). Then she was gone.

As dawn broke at about 5:30am, Rigo and Jacinto ventured out, an hour or more having passed since the mudslide broke down the door and entered the hospital. The ability to see if more was coming (and not just relying on the ebbing and flowing dull roar, a sound that did not go away as the heavy rains continued) gave all of us slightly (though only slightly) more confidence.

I was content, however, to stay in the hospital. Even if we were buried, I thought, we could still use the oxygen to survive while someone came out to dig us out. We made plans to fortify the sterilization room (with the door, with a blanket covering the small window of the door, and a stretcher to absorb the brunt of the mud if it happened to get that far). Mud and dirty water seeped its way all down the corridor to the Sterilization Room, soaking everything (including my luggage) that was on the floor.

The family of the child with asthma began to make intimations about moving next door, to the 2-story complex of buildings that made up the George Soros Department of Justice just over the fence across the way from the hospital. I had seen people milling around over there, but felt that we were safer for the moment at the hospitalito (but unsure of myself in that decision). Rigo ventured over, and went as far as bringing an oxygen tank over, but was turned back by someone as they thought that there were too many people and the oxygen wouldn't be safe unattended. By now, with the sun up, I could see scores of people at the Municipal Building mulling around with mud and water up to their knees. I also ventured out to survey the area as much as I felt safe to do. The mud had essentially stopped at the end of the hospital building, by the delivery room. I had no idea how quickly it rose beyond that, where it came from, where it went to, and if another one was coming right behind it.

In the middle of this, a random phonecall from Cathy Roach, our nurse manager extraordinaire, asking for Dr. Juan Manuel Chuc's phone number because there was a woman in labor at Rx'iin Tenamit (a local clinic in Santiago Atitlan proper) and they needed supplies that were locked up and a doctor to be there as well. SOMEHOW, telephone service was still up and running. So, 2 calls to Juan Manuel without answer. Then a call to Dr. Irene's house, leaving a message with her husband telling her to get to Rx'iin right away. No word until 2 days later on how that all turned out.

So, decisions on whether to stay at the hospital or to move. I felt moving to be too risky at that point (if another slide was to hit), and was almost relieved to feel that the Oxygen canisters weren't safe, that there were too many people at the Municipal Building anyway, and that we had oxygen, food, and large shelving to hide under, in case another big mudslide came in and buried us.

Leah had called me back at about 5:30am. Not the easiest phone conversation in the world: "LEAH, BIG \*%\$ MUD SLIDE HERE. DO NOT COME HERE. PLEASE DO NOT COME HERE". Then her phone ran out of batteries, unable to be recharged because of the power being out in town.

We had ½ of a loaf of bread, a ¾-gone jar of Welch's Grape Jelly, some Skippy creamy peanut butter that I had brought from the States, and three large jugs of purified water.

When there was more light outside, I got to see more of the mudslide from outside the delivery room, the first window on the left in this picture. It took my breath away. I remember Jacinto (the nurse) telling me to be careful as I surveyed the destruction off the front of the hospital.



I also remember the continued ebb and flow of the dull roar; like a large dump truck passing right outside the window, only it didn't let up. It was very scary.

At 8am... a friendly voice.  
"Hola Mark".

Francisco, 'bombero' (fireman) extraordinaire and president of the Comité responsible for the decision-making for the hospital, climbing over the fence on the untouched side of the hospital. Never so happy to see someone in my entire life.

I ushered him into the hospital, got him some water, surveyed the damage with him.

“Mark, hay heridos allá”. INJURED PEOPLE.

In my self-preservation mode, I didn't even fathom that there would be injured people close-by that needed help. I should have thought of it, but sadly didn't.

Jacinto and I both started gathering supplies in large black plastic garbage bags to bring next door: sutures, needles, local anesthetics, casting materials, suture kits; who knew what we would find over there.

Then Leah showed up.

“I TOLD YOU NOT TO COME!!” as I tearily hugged her and yelled at her at the same time. A couple more things thrown in bags, then off to the Municipal Building.



We came in over the fence and through the gate that is straight ahead in this photo (the hospital is to the right, not pictured). There were 2 buildings full of refugees fleeing the mudslide. We split up, me taking the building on the right in this picture, and Leah heading into the building from where this picture was taken.

“¿Dónde están las heridas?” (“Where are the injuries?”), I yelled as I entered. An ankle fracture. Heart and lungs ok. I could tend to

her later. Then brought to the last row of chairs on that first floor, to two huddled masses, both covered in drapes.

The 18-year-old boy seated on the end of the row of chairs had a towel over his face. I first saw his left ankle, severely swollen and scratched up. I'll never forget taking the towel off of Felipe's face, seeing his bottom lip in 3 pieces, his face shredded. Quick heart and lung exam, breathing ok and good heart sounds (I didn't even have a blood pressure cuff), so on to the next huddled mass, the woman sitting next to him—his mother. Barely responsive, could not open her eyes as her face was also shredded and severely swollen. There was a hole at least  $\frac{3}{4}$  of an inch deep on the right side of her face. Heart and lung exam wasn't reassuring. I could barely hear heart tones, and her pulse was thready at best (at worst, non-palpable). She needed help fast.

“¿MÁS HERIDAS?” I yelled again as I moved on to quickly survey the building. I was pointed upstairs, ran up, to a mass of more people, all milling around listlessly, getting in my way as I looked for more injured. “Dónde están las heridas? ¡AHORA MISMO!” (“where are the injured? NOW!”) as people weren't responding to me (perhaps because of the language barrier, perhaps because they were in such a state of shock, I do not know). I was brought to a child, looking weak and sad but awake and not obviously harmed. No actively

bleeding injuries, heart and lungs ok. “Utz.” (Tzutzuhil for “bien” or “ok”). A man to my left, standing up talking to me (which made him better off than the other 3 people I had seen), “my chest hurts; my chest and my neck. It hurts to breathe. Something fell on me”. Heart and lungs ok, no stridor, nothing visibly broken, standing up and walking. He could also wait for later.

No other seriously injured, so I made my way to the building where Leah had been doing similar triage. Another 200 people were gathered there, also listlessly milling around, unsure of what to do next. “Con permiso” (‘excuse me’) as I rushed by people, and upstairs where I was told I would find Leah and the injured.

Upstairs and to the back room, where I found Leah with 3 severely injured people. “I think I have a guy that needs a chest tube,” she said. Another with “a fractured femur or pelvis or both”. And a baby with a head wound.

Leah (brilliantly) felt that everyone should be brought to one room so we could care for them at one time, together. I ran back to the hospital to where I remembered there were chest tubes lying around. I had about 5 seconds to absorb the destruction out the back of the hospital where I had spent some time digging out the back wall on my prior trip to Guatemala last November. There had been a soccer field and many laughing people and houses last time I saw it, now only a flat muddy wasteland with 2 or 3 rivers of mud passing through it, for at least 1/3 of a mile. No trees, no people, no nothing.



By the time I got back, Leah had already put things into motion. 1 or 2 of the patients had IVs, and the 2 patients from my building had just arrived and were being placed on desks (our new, very hard hospital beds).

To Diego—the man who needed the chest tube—who definitely was the most severely injured. Leah was at his side, had an angiocath in her hand and felt that she couldn’t hear breath sounds on his right side (he was also complaining of shortness of breath, right sided chest pain, and severe abdominal pain). With the angiocath (and no numbing medicine), a needle went into his second intercostal space. There was too much noise in the room to have been able to appreciate the escape of air (we were highly suspicious of a tension pneumothorax, and the needle should have helped to relieve that).

Breath sounds didn't really change, so on to his chest tube. In residency, chest tubes were my favorite thing to do... but it had been 3 ½ years since I had been a resident, and I hadn't done one since.

This man also had rather severe subcutaneous emphysema: air tracking in his skin, a 'snap-crackly-pop' feeling under the skin, often a sign of the rupture of some air-containing structure: air in the pleural space (the space between the lung and the ribcage which usually doesn't have air in it unless a rib is popped, perhaps causing a tension pneumothorax which is what we were suspecting), or air in the mediastinum (where the heart, esophagus, and trachea and bronchi reside). So some numbing medicine under his armpit, quickly, while he's telling me that he can't breathe.

Needle was a 25-gauge, way too small to draw up the Lidocaine, but I hadn't brought over any larger needles. Took FOREVER. Too slow, dangit.

Leah off in the corner, for 10 minutes, with 5 Tzutzuhil men trying to help her get her rubber boots off (she had mud up to her underwear, and mud makes for good suction). She was in a ton of pain as well from all the rocks that had gone in.

Meanwhile, more numbing medication because Diego was FEELING too much as I got closer to getting his chest tube in. "Man are you slow," said Leah, and I agreed. Too slow. "No puedo respirar," from the patient ('I can't breathe'). Work FASTER.

Finally, ignoring his loud grunts of agony and pain, success. As I got through the muscle/fascia/pleura into his pleural space, a large gush of air that I heard and felt against my finger. Some relief. Now getting a tube in that hole. First tube was much too large for the space I had made. Tried to make a bigger space, more yelping from the patient, more local numbing medication (Lidocaine).

I found a smaller tube, Leah finally got her boots off, came over and managed to get it in. It didn't go in very far, but he coughed and a gush of air came out. It was in the right place. Then, a couple of tacking stitches, and at least his tension pneumothorax was taken care of for the moment. IV Fluids running at full speed.

A couple of minutes later, "I feel the air going out of me. It's too hard ... to ... breathe". He started to try to sit up, and I was extremely reluctant to let him. I thought he was going to die, and I would rather him die lying down than sitting up. He insisted, and we tried it ... successfully. A ton of grunting, but a bit (just a little bit) of relief. I was sure at that point that he had fractured ribs, a tension pneumothorax (converted to an open [and less dangerous] pneumothorax by the chest tube), and possibly an intra-abdominal injury (liver laceration?). I don't know why I tried Valium first, but I think it was truly an effort to alleviate his suffering as I was pretty sure that he was going to die. First 2.5mg of Valium, to no effect (or, perhaps, to detrimental effect). Leah had also brought over the tray of emergency medications which I had put together the week before. It included Fentanyl (a potent but very short-acting narcotic pain medication), which I decided would also be merciful to this dying man. What I should have been thinking is that it could save his life.

After the chest tube, Valium, and Fentanyl, and after sitting him up, trying to lie him back down (which he did not tolerate at all), then sitting him back up again, I moved on to Felipe, on the desk next to him. Felipe had the most severe facial injury I have ever seen. His bottom lip was nearly ripped off of his face, and his gums (gingiva) was completely avulsed off the bone, across about 8 of his teeth, all the way to the bottom of the mandible. He also had deep scrapes across his forehead, nose, upper lip, and scalp.

So began the slow process of trying to clean his wounds (which were imprinted with mud), anesthetize him, and sew him up. I tackled the easier, simple wounds first, using inappropriately thick suture (3-0 Ethilon) but it was all we had brought over.

Intermittently, Diego (the man with the chest tube, and Felipe's brother in-law) would feel more asphyxiated and needed constant support to see if, in that moment, he would die and see if there was anything we could do to prevent it. At one point, desperate, I thought he may have had another pneumothorax on the other side, so I needled the right side of his chest as well (which, retrospectively, he did not need, and hopefully it didn't do him more harm than good). Sadly, we learned that his wife had been killed in the mudslide. Leah, meanwhile, had sewn up his son's head, and Diego was made aware that his son had survived, even if we felt that Diego would likely not be making it through the night. For the most part, as time went on, he proved himself to be knocking on death's door but not going through that door.

My abdomen by that point (?10:30am, about 6 hours after the slide) was really starting to hurt me. The lack of food, plus the stress, gave me left upper quadrant pain that felt as if my stomach was eating itself. But we had to press on. The pain got worse when I would bend over the patients to suture their wounds. I'd intermittently have to stand up and stretch to try to make it better. It wasn't at all comfortable.

I finally had to tackle his lip. Unfortunately, there was nothing to attach his lip to. No gingival/gums or mucosa, only bone and teeth.

I did my best. I started inside as far along the injury as I could suture, and worked my way out. As I had learned during residency from Ventura's plastic surgeon, Dr. Starr, during a cleft lip repair, I had to find the vermilion line and line that up as well as I could. It was challenging, but somewhat like connecting the dots. I worked my way to the outside of his lip, then found the corner of his lip (ripped downward), and brought it back up. It was terribly swollen, but I had recreated his lip.

Every once in a while, a still louder dull roar. Hoping that it was just the water and not Big Brother of the first mudslide that could still perhaps wipe us out, even on the 2<sup>nd</sup> floor of the Municipal Building.

Leah, in the meantime, continued to mobilize supplies and care for the others that I wasn't tending to... including our inpatient with asthma, still stuck back at the hospital. Also at about this time, the multitude of refugees fleeing the mudslide and patients who were waiting for medical attention in the 'not-so-severely-injured' place outside the door of our makeshift hospital suddenly began to file out. Up until that time, there were about 50 people seated to the other side of the room, across from the gate that split the room in two, which made me think that our makeshift hospital was some sort of courtroom before the slide. I'd

occasionally ask for a volunteer to help look after Diego and let me know if he got worse. These volunteers were vital.

I was just finishing Felipe's lip when Jared made it to our makeshift hospital. Jared is a pre-medical student, who had just finished college, taken the MCAT, and arrived in Guatemala to offer whatever help he could around the hospital. He had arrived about a week before I had gotten to the hospital. I couldn't believe that he also had risked his life to make it through the mud to get to the hospital. I couldn't have been happier to see him and his extra pair of hands, his body covered with water and mud.

Leah returned, with news that the family with the child with asthma wanted to leave, but that the child was doing much worse, with a respiratory rate of 100 and that he hadn't had a nebulizer treatment in some time. A couple of Tzutzuhil volunteers helped to bring the oxygen tanks, nebulizer, albuterol, and nebulizer bear (the orange bear that the child seemed to tolerate getting nebulized medication from as it spewed the nebulized medication out its belly) from the hospital to our makeshift 2<sup>nd</sup> floor hospital. Finally the child was transferred over and Leah continued to take care of him on the makeshift 'pediatric ward', across the room/across the fence from where the critical patients were.

Then we started on Felipe's mother. She must have lost a ton of blood from all of her injuries. By the time I met her, she was no longer bleeding, but had a non-palpable pulse. She perked up and sounded much better after 2 liters of IV fluids, but had so many wounds imprinted/filled with mud to clean out. I set Jared on her numerous leg wounds (the largest and deepest of which was 10cm x 5cm and all the way down to tibia). Despite vigorous (and painful) cleaning (which she barely complained about), we were unable to get them free of dirt. We left 2 of her wounds open and packed them with saline-gauze, to hopefully clean them out and close them at a later date. I, with more belly pain, reluctantly started on her shredded face.

Again, I saved the most difficult for last, sewing up her eye and her forehead first. There were three large shreds of skin lateral to the gaping hole on the right side of her face, which I attempted to tack up back towards her nose. I had no idea if the flaps were at all viable; I suspected not. 3 deep stitches (despite it also having imprinted mud in the wound), then a bunch of superficial stitches while I leaned on the fence in the middle of the room (which was in the way and made it difficult to get to her, but that the same time it actually helped my belly pain to lean against it). It took about 30 minutes to close up that hole (would have been quicker if I didn't have to stand up because of the pain so often).

The child with asthma, after 2 one-hour nebs of Xopenex, was doing better, with his respiratory rate having come down to 60 (still high, but better than 100). Still had terrible wheezing, however.

With 5 of us (me, Leah, Jared, and 2 men from the family of the child with asthma), we lifted Felipe's mom off of her muddy and wet clothing and wrapped her in some blankets we brought over from the hospital. Everybody was complaining about being cold to the bone, all except Diego who was too close to death to be very preoccupied about his body temperature, despite shivering.

Intermittently throughout the day, the bomberos (firemen) came into the hospital to check on us, often with words of encouragement but with no way to evacuate these patients. We were in for the long-haul.

Leah and Jared had brought over what food, water, oxygen, and blankets that were left at the hospital, and we needed every last bit of it. Our nurse, Jacinto, who was so critical in getting IVs started in our 4 most critically wounded patients, at that point had to leave. He fled the area with some friends, unable to get to his home in a nearby village until the next day. He was of crucial help.

The story of our sole uninjured patient is a bizarre one, the sole ray of humor in all of the tragedy we were dealing with. He had shown up on the second floor of the Municipal Building as everyone else was leaving, and sat outside the 'courtroom' where our makeshift hospital was, on the second floor. When asked why he didn't leave also, he told a Tzutzuhi translator that he had no home to return to, so he would stay here. I thought that was pretty odd, as everyone else's home had been destroyed also and they had all left. There was also some mention of a surgery, but more on that later. Anyway, he continued to smile a very toothy smile at all of us, making perhaps jokes in Tzutzuhi which I did not understand.

On our first lull, I distributed lunch: a piece of bread 2 inches by 3 inches (about 1/3 the size of a regular slice of bread) with a slap of peanut butter on it.

Our friend I mentioned above got a piece. As did the man with the crush injury on his leg, from a car falling on him. We didn't want to let Diego eat, and, indeed, he did vomit later that evening despite having nothing in his stomach. Neither Felipe nor his mother were able to eat either, because of their injuries. We continued IV fluids for all three.

At this point, the family members of the child with asthma began to get restless. They asked Leah to give them her own rainjacket (a request which she correctly denied). Three of them left, promising to return the same day or in the morning. All had wanted to leave, but Leah managed to convince the parents for the time being that the child would die if they left, and that we were (relatively) secure (at that moment) on the 2<sup>nd</sup> floor of this building. We fed the parents our meager lunch and began to organize our makeshift hospital. Still, Diego was holding on to life (I'm still not sure how), requiring Fentanyl every hour or 2. I was starting to worry a little less about his abdomen, and also started to believe that splinting of his broken ribs (and not breathing because of the pain) was perhaps his biggest issue. Alleviating his pain with Fentanyl was perhaps saving his life.

Back to our strange gentleman. Roberto, a gringo of perhaps 55 who has lived in the area for years, also had made it to the hospital building from town, and decided to spend the night. He was extremely helpful in scavenging the entire municipal building, collecting everything from coffee (which he offered to all; I've never enjoyed instant coffee so much in my life) to curtains (which turned into a bed and covers for Diego) to computer covers (to protect our meager food supplies from bugs). Anyway, Roberto took interest in our smiling fellow sitting in the next room, and felt that between Spanish, sign language, and a small amount of Tzutzuhi, he would be able to figure out why this man was here. Jared also felt inclined to help. As best they could figure out, this man WAS waiting to see a doctor. He had been operated on a month earlier by the visiting surgeons, Celia and Will von Weise from across the Lake, to relieve a HUGE hernia that had gone into his scrotum. Unfortunately he had run

into post-operative complications, as the scrotum had filled back up with blood. He received a second surgery and was improving. He was told to return on Friday (2 days after the mudslide) for a post-op check. From what Roberto and Jared could gather, he was waiting around to see one of us for his post-op check.

The happy conclusion to the story was that he lifted up his shirt to show Jared his abdominal incision (which had healed fine and looked perfect from day 1), and did not even show him the scrotum. Jared said, “Utz,” gave him a smile and a thumbs up. The man, apparently satisfied, said “utz”, lowered his shirt, and retired downstairs.

The family of the asthma child returned near dusk, while Leah and Jared were at the hospital getting supplies before we hunkered down for the night. They told me, “Doctor, we want to leave”. I told them that it was a horrible idea, that there was plenty of water, electricity (from a generator), oxygen, and electricity where we were, all of which the baby needed or else he would die. We saw what would happen with 3 hours without a nebulizer treatment (though still on 2 liters of oxygen; his respiratory rate went up to 100). I assured them that the baby would live if they stayed and probably die if they left. Their response:

- 1) “No, the baby will be fine”.
- 2) (from the baby’s father): “My parents are worried about me. They want to see me. I have to go.”

I could not have been more fed up with their reasoning. I ran over to get Leah at the hospital, to get some medications for the baby and to have her try to reason with them (since my reasoning wasn’t working). She had admitted the child the day before and nearly had to intubate him then. Perhaps she had better rapport, or more credibility, than I did.

Despite our pleas, despite both Leah and I assuring them that the baby would die if they left, they fled just before dusk with the baby.

We passed around dinner—Tortillas that Roberto or Leah had found somewhere for the one patient who could eat, water for Felipe and his mom, nothing but IV Fluids for Diego, and a little more peanut butter and bread for the rest of us. The 3 policemen who had stayed around to protect us from looters (one of the looters had thrown a large stone through a window earlier that morning, with thoughts of robbing us later that night if we were unprotected) had their own supply of food, and were gracious in sharing some of it with us as well.

We made pain medication rounds (Tylenol for the 3, Fentanyl for Diego), antibiotic rounds (IV Ancef for Diego, Felipe, and Felipe’s mom, for all of their likely very infected and dirty wounds), put some Bactroban on Felipe’s and Felipe’s mom’s faces (both of which were starting to develop pus), washed Felipe’s mouth out with Chlorhexidine (surgical soap) swish and spit (which he drooled all over himself; the lip had lost much of its muscular integrity, I believe), and began to set up beds on the floor for us to get some sleep. After he vomited, Diego was moved to a corner so that he could sleep sitting up. Every time he would attempt to lie down, he became extremely short of breath.

Leah and I set up our beds on the floor of the ‘pediatric ward’, within earshot of the patients to be able to tend to their needs. The neediest turned out to be the least injured—the man with the crush injury of the leg, who was hungry constantly (to the point that the next morning, I handed him a bag of 1 ½ tortillas, said ‘this is the last of the tortillas, we have no idea how

long we're going to be here, use it wisely'; to which he (for the first time) said 'thank you'). The others needed pain medication, help up to the bathroom or a bedpan, or more blankets, through the night. Leah and I split the shifts, which allowed us to get a little sleep each.

6 October 2005

Up at 6:30am. Rumor from the police that there was no evacuation of the patients for another 24 hours. A meager (and for me, somber) breakfast, and back to work. Next dose of Ancef for three of the patients, which Leah took care of. Clean up the wounds. Diego had enough strength (with assistance) to hobble to the (quite foul by that time) bathroom, with no running water. More Chlorhexidine swish and spit for Felipe.

At this point, I started taking photos with my Palm Pilot—I had killed my camera's batteries in my trip to the Mayan ruins at Tikal prior to arriving in Santiago, and thankfully the Palm Pilot camera had started to work again (I think it was waiting for the spotlight; it hadn't been working for the last 2 months). A couple of dark pictures of our makeshift hospital. I did not want to violate the privacy of the patients in their suffering:



Then, at 9:30am, the miracle of 6 men and a stretcher coming into the makeshift hospital. The evacuation plan.

We were still busy doing all of the above for the patients when they came. Our least-injured patient went first, as he was easiest to transport and needed the least amount of preparation.

We were assured that the patients could get to the National Hospital in Sololá, and not just brought to less-sophisticated medical care in Santiago itself, despite rumors of a mudslide in Sololá as well. We were told that the Panajachel bomberos could take them up to the area of the slide, walk them across, then pass them to the Sololá bomberos for the rest of the trip. A mad rush to clean up Diego's back and foot wounds (the skin was completely ripped off one of his heels, and his back wasn't much better), and to secure his chest tube with more tape so it would survive the trip. I finished charting on them—2 pages each, with descriptions of what we did and diagrams, medication doses and timing, and gave it to the bomberos to give to the doctor(s) who would be assuming their care.

Next to go was Felipe, who limped to the stretcher and was gone. Then his mother. Finally Diego, but not without much pain and difficulty. He could not lie down. They initially tried to carry him out in a chair, which was extremely cumbersome and difficult. They later transferred him to a stretcher, which he straddled as 4 men carried him out.

At 11am, the cleanup. Everything had to be moved back to the hospital, as the rain had finally started to let up to a drizzle that morning. Numerous townspeople had returned to Panabaj to survey the damage and start to dig, despite rivers where there used to be roads. A couple of pictures of the makeshift hospital as the cleanup neared completion:



As we moved things downstairs and out the back, I had to avoid stepping on a small body that was laid in the doorway, covered with a traditional cloth. It was not the last corpse I would see that day.

Then surveying the damage. The amount of mud everywhere, as far as the eyes could see, interspersed with trees, logs, debris. On top of the bodega/water tower building, the man pictured here, whose house was buried under mud, with 5 of his family members probably dead. Some more quick photos of the hospital, then departure from the area.



I followed Francisco, Leah, Jared, Susie (the owner of the Posada, the hotel that has been Leah's home since January). The walk back was treacherous, but I imagined not nearly as bad as when Leah, Jared, Francisco, and Roberto had walked in 28 hours earlier. Planks of wood, metal screens, and logs which would slip, slide, and sink when you step on them were strewn in a haphazard pathway in front of the school, the first difficult area to cross. Then relatively firm ground until the second difficult crossing—where ropes were needed to help us get across. I remember walking on a tin roof (with mud on it) thinking it could collapse at any second and thanking my lucky stars that I had lost about 7 pounds since arriving in Guatemala, probably 2 or 3 of those since the mudslide. More boards, more unsure footing. Then the end of the mud. I was walking rather slowly by that point, and was passed by 4 people carrying 2 corpses, both young children, both covered with traditional blankets. Two men carrying large Peavey speakers, perhaps from a church.

Five minutes later, hanging onto a pole inside the back of the ambulance, not wanting to step in with Francisco, 2 other people, and the corpses (covered with traditional drapes) of a mother and her two children.

The ambulance dropped us back to Leah's house, to find a puddle (from the defrosting of her freezer – the electricity had gone out) and finally a meal. Best burritos and quesadilla I've ever had.

#### 7-10 October 2005

Much of the following days were a blur, with much exhaustion. The afternoon of my return to civilization, a meeting held by the head of the Health Center in Santiago Atitlán proper by Dr. Chumil, the head of the Centro de Salud. Also present were Dr. Juan Manuel Chuc (who did not get to that delivery), Leah, Kathy (the nurse who called me about the delivery), Dr. Irene (who DID make it to the delivery, and all went well, despite the mother being covered in mud).

It was decided at this meeting to centralize the services of the 9 doctors in town at the Centro de Salud (health center) and create a roster of call. It was also discussed that many people wouldn't seek care, and would remain in the shelters, the churches that were housing upwards of 5000 refugees from Panabaj (where the hospital is) and the nearby (higher up) village of Sanchac, which was not as badly damaged by the mudslide. However, there wasn't enough manpower to go to all of the shelters, and it was hoped that the sickest would get referred in (or at least we would hear about them).

Leah stepped up to take call the following night, which I thought was a little crazy, so I decided to join her. Lucky there were 2 of us there.

I spent the day on Friday, October 7<sup>th</sup> seeing patients with Bernie at the Centro de Salud. There were quite a few injured people who still hadn't seen a doctor: a 16 year old girl with scratches all over her legs and face, a number of young children with diarrhea that was just beginning. A blind man with a broken humerus with a poorly-placed sling that I replaced in better position for him. A baby with a broken left leg that we casted. A baby with scabies. I took a break in the afternoon, then returned in the evening to see 40 patients between 6:30 and

10:30, the majority with “asusto” (literally translated, “a scare”). A 21 year old man described it to me: “It’s like, I’ll hear a loud noise, the dull roar of a car or the wind, that sounds like the sound of the mudslide, and I know it’s not the mudslide but my heart starts pounding and I break out into a cold sweat.” I also diagnosed myself with ‘asusto’ that night.

Leah went off at one point to see a badly injured child with a wound infection, when about 15-20 people with asusto came in at once. Also saw 2 kids with the beginnings of pneumonia, as well as a man also badly scratched on his face and back from the mudslide. I cleaned up his wounds, gave him a tetanus shot and some Keflex. The people with asusto, I could only give sympathetic nods and an antihistamine to help them get what little sleep they could in the shelters.

The last patient of my night was a screamer: a 15 month old with “everything” according to the mother: diarrhea, not eating or drinking, fever, the works. She turned out to be fine, but it made me happy she was the last patient of my evening.

To bed in the back of the Centro de Salud in a sleeping bag. Leah woke up a couple of times to tend to emergencies that came in.

I spent Saturday the 8<sup>th</sup> (my post-call day) going back to the hospital to take a lot more pictures: Leah, and I:



The Peace Park, a Memorial to the 12 Tzutzuhil people killed by the military back in 1991, now nearly covered in mud: The villagers kicked the military out at that time, and the hospital people left with the military. The hospital was closed for almost 15 years, with no overnight services on this side of Lake Atitlán. It was reopened in February thanks to Leah, Bernie, Jack, the Comité, and Pueblo a Pueblo ([www.puebloapueblo.org](http://www.puebloapueblo.org)).



The walk out to the hospital:



The school, just down the road from the hospital (the hospital property shares a wall with the back of the school, on the other side of the basketball hoop):



Views uphill from the hospital, towards where the mudslide came from. In a couple of these shots, the smell of death (first time I have ever been near it) was pervasive. You can also, in the distance, see where the mudslide cut through the trees.



Then, a phone call from a friend of Leah's. Betty worked for the bank and was expecting donations of supplies via helicopter from Guatemala City. Weather permitting, they would come, drop things off, and head right back to the city with me. A picture of Leah and I at the Turicentro, a new hotel opening this month in Santiago, with a small helipad.



Unfortunately, weather did not permit.

Nor did it permit the next day, despite the helicopter making it all the way to Chichicastenango. It was forced to turn back because of turbulence. I had the biggest send-off I've ever had (which turned out to be a false alarm, but still): all eight people who were at Bernie's watching "Where the Heart Is" (Kathy, Leah, Bernia, Maria Elena, Luke, Laura and Jared) joined me at the helipad that day as well. Tended to a woman with biliary colic at the Turicentro. Heard from Don Mario that he might be headed to Guatemala City by car the next day. Also heard stories of violent robberies on the roads.

Spent much of Sunday October 9th sorting random donations of random medications that started to arrive by boat and by helicopter (but not from Guatemala City, where I needed to leave from). Also, the first appearance of the Red Cross, a contingent of Cuban doctors, and Doctors Without Borders.

Finally, Monday, 10 October 2005. Blue sky for the first time in 3 weeks. For sure it would be today.

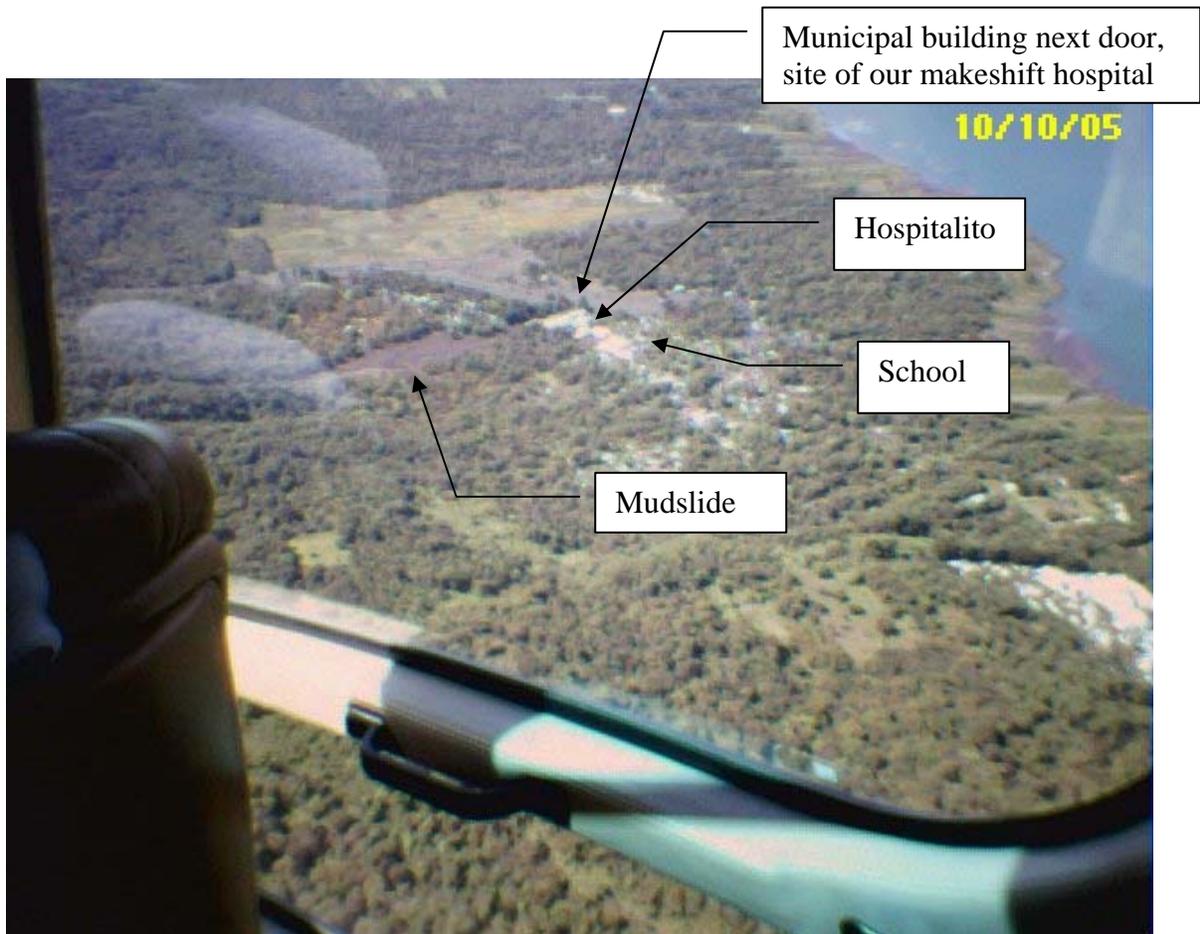
And so it came to be. The Red Cross sent a helicopter with medications and other supplies from Guatemala City, and were planning on leaving the Red Cross volunteers in Santiago to help out. My ride out of town.

Hugs to my smaller send-off party: Leah, Juan Manuel, Maria Elena, Kathy. Then ushered out to the helicopter in the main town square, and airborne.



I did not realize until this helicopter flight out of Santiago how narrowly I avoided death. The helicopter slowly made its way up the Volcano Toliman, to survey the area and be sure that there was no water left in the crater at the top of it (which could have put the area at risk for more mudslides). The topographic map shows some of what I'm talking about. Though the pictures aren't great, they show the mudslide starting at the top of a 3000 foot volcano, on a beeline for the hospital that I was in.





The Volcano Toliman, with the mudslide seen coming down from the peak:



The crater left on top of the Volcano Toliman by the mudslide.



Were it not for the dip in the road in front of the hospital, a sturdy front wall, the large tree in front, and stone walls of the hospital, I may have been killed. Indeed, the house just across the street from the hospital, which Leah had wanted to rent but was denied by the wealthy owner, was obliterated, killing the two people who were sleeping there that night. Had she rented it, she or I would be dead right now.

Were it not for the existence of the hospitalito and the supplies it had that Leah and I were able to utilize, I believe that at least 2 more people (Diego and his mother-in-law) would have perished from their injuries.

Were it not for Leah, who risked her life to come help, I do not believe I would have been able to help the 4 critically wounded patients alone. The true heroes are Leah, Jared, Jacinto, Robert, Francisco, the bomberos, the policement who did not abandon us, and the countless villagers whose tales I have not heard. I was just fortunate enough to survive and be able to bear witness to it all.

The people of Panabaj, in Santiago Atitlán, have suffered immensely. Between 300 and 1000 people are still missing. The area may be declared a cemetery for health reasons, as bodies could not be exhumed fast enough. Decomposition has likely set in by now anyway. There are 5,000 homeless people living in churches and schools. Sanitation is terrible. Potable water is needed. Food is hopefully arriving, finally. Diarrhea and respiratory infections are on the rise.

My hope is that this testimony brings attention (and needed, LONG-TERM aid) to the plight of the unfortunate and lovely people of Panabaj, Santiago Atitlán. See [www.puebloapueblo.org](http://www.puebloapueblo.org), the Red Cross, or Doctors Without Borders for more information on how to help.

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