Kibogora update 3!

After my last newsletter I am overwhelmed at the response I have received from you all! My goal with these newsletters is to tell the stories of very real patients, their suffering and their healing journey through their time at Kibogora hospital.

One of Tesfa's roles whilst visiting a hospital is to share knowledge. Each and everyone of us has something good to share and build up in others.

Malin, our nurse anesthetist, brought a simulation dummy with her to practice aorta compression on. This is useful in the case of severely bleeding patients where one can compress the upper abdomen and stop the blood flowing distally to it. This has a particular use in postpartum haemorrhage (severe bleeding after giving birth). Postpartum haemorrhage is a life threatening condition. It requires fast diagnosis and treatment if the patient is to survive. Most often the cause is the uterus failing to contract after giving birth, thus it becomes floppy, and floppy well circulated tissue bleeds a lot. It's why there are wellies available next to the operating theater door. Here Malin is teaching aorta compression on our dummy Omogora (woman in Kinyarwandan).

We had a group of GP's, midwives and nurses turn up to hear Malins presentation and practice on Omogora. Two days later we put practice into action with a real life situation. It makes me think of how useful knowledge and skills are in Kibogora, once you know something it is almost immediately put into practice!

Burn surgery is one area where I have very limited experience. The management is very challenging and it requires specialised plastic surgeons, experienced burn nurses, intensivists and nutritionists to name but a few professions all of which we are lacking here. The nearest burn center is 6 hours away and refuses to take the majority of our patients. Each morning we round on the 6-8 bed ICU. One day I noticed that a young boy had been lying there for a while but nobody had informed me about him. "oh a burn, not too bad" someone mentioned, fair enough, some admissions from the previous night are put in the ICU before moving them to the ward. It's not uncommon for small burns to be treated like this. However as i took in his situation his urine collection bag was nearly empty with a very dark colour. Hmmm, low urine output, this could be something BIG or the nurses have just emptied it. Don't jump to conclusions, I thought.

I pulled back his sheet to find sporadic bandages covering half of this poor boy's body. HALF. That's not a small burn, that's a BIG burn, and actually like 35-40% total body surface area. Plus he wasn't producing urine, this is BIG and looking BAD.

Uway, had been egged on by his friends to climb up an electrical pylon where he unfortunately grabbed the conducting wire with his left hand. The current flowed down his tiny fingers, through his arm to his chest leaving a lightning-like streak across his torso continuing past his abdomen, to the groin and thighs.

You can't imagine his pain.

Uway needs aggressive resuscitation and the team of professionals mentioned above. The burn center refused transfer (10% body surface burn is the referral standard world wide). Thus it was upto myself as a vascular surgery registrar and Venuste the general surgery registrar to take on these roles, which became personal for both of us. ”He is going to make it” declared Venuste. Our plan included various calculations based on weight, fluids (thanks to Mr Parkland, another erroneous medical name drop for you), drugs, antibiotics, nutrition and when to start operative treatment. It took up a whole A4 sheet. Healing is a very energy intensive process. Thus we wanted to feed him every other hour and the best way would be via a nasogastric tube (a tube in the stomach). However, it is aggressive fluid resuscitation that is the most important step in the management of big burns to counteract fluids lost by the burn weeping and to keep him physiologically stable. Simply put the better he is resuscitated the better his urine output and the lighter the colour.

Black muddy urine? This doesn't look good.

I took it upon myself to take pictures of his urine bag and my watch every time I walked past the ward so I could quantify his urine output and thus the level of resuscitation. Goodness knows what his grandmother thought of me. Surgeons can be odd types. Where are the parents you might ask? A 6 year old boy all alone but for his grandmother. His mother has left him and works as a prostitute. His father hasn't shown up.

BUT we haven't given up on him. The risks are great, hypovolemic shock, overwhelming infection, malnutrition, death. We have this Hope as an anchor. Even for a child with a 35% burn.

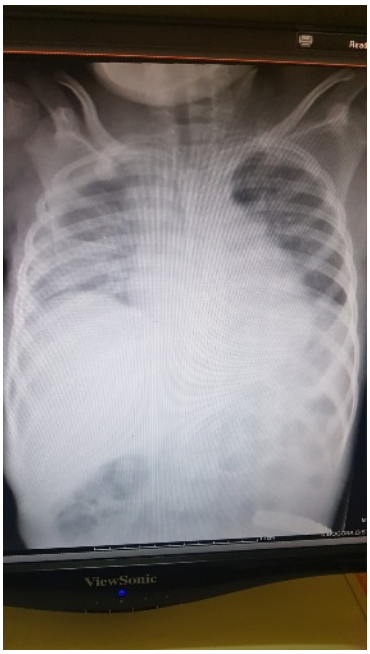
Checking the urinary hourly output

Vascular surgery trainees might as well have an ultrasound machine taped to their hands. We use them all the time to visualise and puncture blood vessels. Likewise here I have made friends with the sole radiologist, Xavier, at the hospital and have on many occasions stolen his beloved ultrasound machine. Uway had become grossly swollen because of the high fluid volume required to keep his kidneys running. A consequence of this is that his IV lines started to pop out as the swelling increased. “Matteau, if a burn doesn’t have IV, they die”. Bernard, our consultant, has a way with words. He also has volumes of experience in treating burn patients, including doing a burn rotation in Colorado. There was a week-long period when I was called day and night to replace Uway’s IV lines with “my " ultrasound machine as and when they stopped working.

The burn ward at Haukeland (my hospital in Norway) is just 20 steps from my own. Damn, why didn't I spend some time there before coming here!? There a child would have had a central line (a big secure cannula entering the chest to give fluids/drugs) which could be kept for weeks. Not small ones that fail every day. However we don't have one. I checked. Optimal doesn’t exist. But what do we have? Throughout the past few weeks I have tried to take stock of the donations the hospital had received and I randomly found some PTCA 0.014 guidewires (wires used in treating a heart attack in a super high tech cardiology lab) gathering dust on a shelf in the consultants office. Who on earth brought them here of all places?? Hmm well that's something, if only we had a catheter we could place over the wire... then wait a sec I bet neonatology has some umbilical vein catheters! These are thin mobile catheters placed in the umbilical vein after a baby has been born. An idea, hope, a possibility was born.

The first *improvised* central line was placed in Kibogora 03.11.21 made out of a 3.5F umbilical vein catheter over a cardiac 0.014 guidewire, over an 18G green standard peripheral IV with a stolen ultrasound machine (sorry Xavier).

Placing the improvised central line with Venuste holding the guidewire



Chest x-ray confirms good placement ☺

We could now resuscitate through the central line and his kidneys responded a few days later! Under anaesthesia we regularly examined, debrided and dressed the burn. Early on he was still unstable so we had to be quick, he wouldn't tolerate much surgery and could potentially die if we operated too much. A couple days after the injury his left palm was a dusky grey but his right a warm pink. Could this be compartment syndrome? The swelling was not only due to us giving him fluids but also because of damaged muscle from the electrical burn. When the swelling in a compartment exceeds the blood pressure in a compartment then the blood supply is diminished causing ischemia and ultimately loss of the limb. We decided to open, this means a rather morbid procedure called an escharotomy when one cuts through a burn to relieve the pressure below.

Despite our cocktail of pain medication we cannot alleviate all pain. However God's healing hand has been almost visible in Uway. His strength in spite of suffering has captured the hearts and minds of the staff at Kibogora hospital.

During the last few weeks as we round on the intensive care unit Uway has started to close his eyes as we pray. I came to realise he is praying with us! Christ's hope in us, shone out to others, created hope in them.

It was a joyous day when I saw this colour! His kidneys have recovered!

Matthew 7:7 says "seek and you will find" and one late evening as I passed through the ICU I heard Uway say "I need you Jesus and his Father". He's calling on Jesus to be comforted, to not be alone, to give him strength to endure. It's enough to make you cry and I indeed have on occasion. I would completely understand if Uway and I were not friends. Children take pain very personally. He could associate the tall white guy with bringing pain in the form of a dressing change or a needle prick. However earlier today as i sat by his bed he said "im happy to be with you". This child is wrecking me.

It is with great happiness that I can say that Uway has not only survived his burn but is now on day 25 of being admitted. He is a testimony to the healing work being done at Kibogora, body and spirit being ministered to by the nurses, doctors and chaplains.

HALLELUJAH

We opened from hand to shoulder with a scalpel and his left hand turned pinkish and warm again. Hope.

Please pray for the nurses and doctors who continue to care for him

Pray for full restoration

Pray for strength

Pray for him to run and climb again

Pray for his parents to return

Pray for him to play with kids again

Pray for Jesus' presence to comfort him

God is not most glorified in us when we go out to prove something, or win the approval of others, or to become satisfied with ourselves. He is most glorified in us when we lay aside earning and serve His people, where His passion truly lies.

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Insta: Mattspreadbury / tesfa is hope.

Romans 15:13 "Now may the God of hope fill you with all joy and peace"

All pictures are taken with written consent. Where applicable names and details may have been changed to protect patient confidentiality.

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