INTERPLAST HOLLAND
surgical camp
Zanzibar, Tanzania

12 March – 24 March 2023

Team members:

Jurjen Oosterhuis	anaesthetist
Dirk Jan Langeland	anaesthetic nurse
Jolanda Eskes	operating theatre nurse
Liam McCarthy	paediatric urologist (Birmingham)
Elmarie van der Merwe	paediatric urologist (Birmingham
Ed Hartman	plastic surgeon
Tallechien Tempelman	plastic surgeon (teamleader, report)

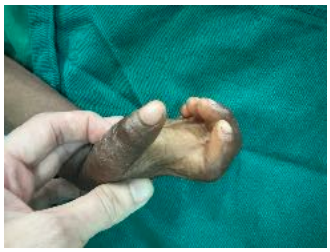
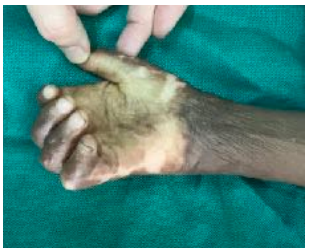
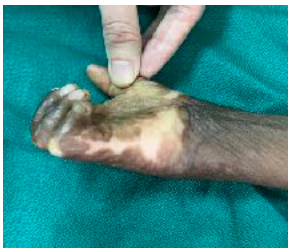
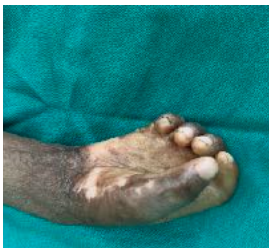
After two years of absence from the Interplast surgical camp at Mnazi Mmoja Hospital because of the COVID pandemic in 2021 and 2022, we were really excited to go again.
The team was familiar with only a few changes. Unfortunately, Maura Neervoort could not join us this year, and Dirk Jan Langeland came along in her place. From Birmingham, Liam, who has joined us for quite some years now, brought a colleague of his, Elmarie van de Merwe.
The flight schedules had changed, and therefore we would go a day later, arriving on Sunday evening instead of Saturday morning, which gave us 8 operation days instead of 9, as it was in the former years.

At Schiphol, we met each other, including the two new team members. We departed on a day flight from Amsterdam directly to Zanzibar. The flight was quite convenient, and we arrived in Zanzibar at the scheduled time. During the flight, we had to give some medical care to a passenger who was not feeling well, so we did work a little bit during the flight. Luckily, we could help, and it was nothing serious.
After landing on Zanzibar, the adventure started, as two suitcases were lost. One with the dermatome (the machine to take skin grafts with) and some instruments for sterilization, and Jolanda's personal suitcase. Luckily, we brought a Humby knife to take skin grafts, but I realized that for the very big surfaces that we are used to seeing on this camp, it is quite hard to harvest a lot of grafts by hand with the Humby knife. For the missing instruments for sterilization, I thought that things should be fine, as the other 50 weeks in the year our local colleagues also have to sterilize their instruments. So at that time, the personal suitcase was more worrisome, as it is not nice at all to miss all your personal belongings.

After a long wait to get through customs and fill out the forms for the lost suitcases, we met our colleagues. There was a familiar face, colleague Rukiya, and a new colleague we didn't know yet, Rashid. They escorted us to the hotel, where we checked in and had a good night's rest.

entrance Mnazi Mmoja Hospital

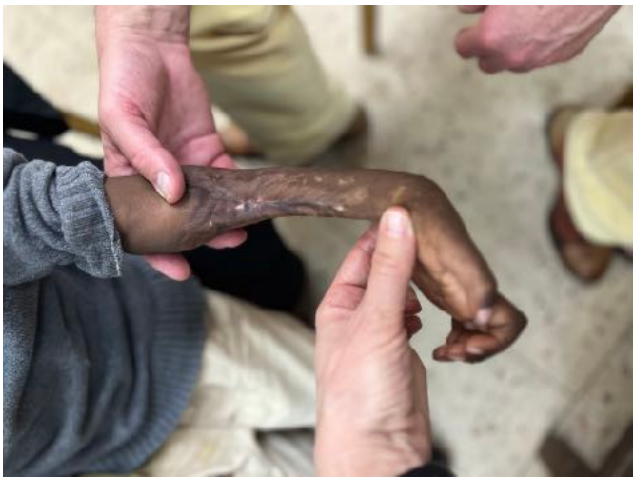
On Monday, we did the screening. The process was very smooth, as it was very well arranged by the local doctors. We saw, screened, and listed many patients. During the day, colleagues from the past would pass by to say hello. During the whole camp, the local doctors organized everything very well, including the preoperative preparation and the aftercare.
We (plastic surgery) saw 53 patients that day and listed 33. Most striking was the extremely high number (16) of burn contractures of the fingers in children, with mostly 3 or all 4 fingers severely contracted.

I thought that this could be a nice opportunity to teach our local colleagues how to operate it. Although this is a situation that could be prevented, In the first place by prevention of the burn wound itself and otherwise post-injury by better wound care and hand therapy. Our colleagues told us that they are very aware of this; they know how important extending the fingers is in the post-burn period and do emphasize the importance of hand therapy to the parents. But people often leave again and don't follow the instructions. And then the children keep the fingers bent (less painful), and the skin contracts.

left: People waiting patiently
above: putting on the bracelet with the patient number

Another example is the Volkmann contracture; again this year, we saw some cases. This is also something that might be preventable. Volkmann ischemic contracture is the end result of prolonged ischemia and is associated with irreversible tissue necrosis.
Our colleagues told us that it is common knowledge that a cast of POP should not be circular in the first few days. But in villages further away, they tend to cast semicircularly (which is good), but then put on a bandage that has no elasticity, and then it acts like a circular cast. The tissue has no room to expand. A compartment syndrome can occur. The injury itself can also cause



left: one of the children with a Volkmans contracture
above: close up of the arm

compartment syndrome, which has to be recognized and treated directly to prevent a Volkman's contracture.

The colleagues from urology saw many patients as well, some of whom they had already operated on and were included in a second-stage operation.
After a full day of screening, we went to the OR to have a look. There, we saw that some things

The hospital, with the OR on the second floor

have changed a bit. The OR was cleaner than before; there was less trash around. The OR lamps had been replaced by better ones. All the power points have been replaced. The doors were covered with metal plates, so there were no holes in the doors anymore like last year, and everything was freshly painted. So the operating theaters had been improved recently.

2019

2020

2023

During the two weeks, there were no power cuts. But we've been told that it was pure coincidence, and power cuts still occur regularly.

The old OR lamps in all the former years, were either working or not working at all

The new OR lamp, working perfectly fine

Then I heard that the drapes for the sterile work field we used were the best ones; normally they have a lot of holes. The same accounts for the surgical gowns; they were clean and without any holes, which is not normally the case. I also remember that there were indeed quite a few holes in the surgical drapes and gowns in the years before. I think the OR area might indeed have been slightly modified for our visit. So we felt very honored that so much effort was put into improving things for our arrival.

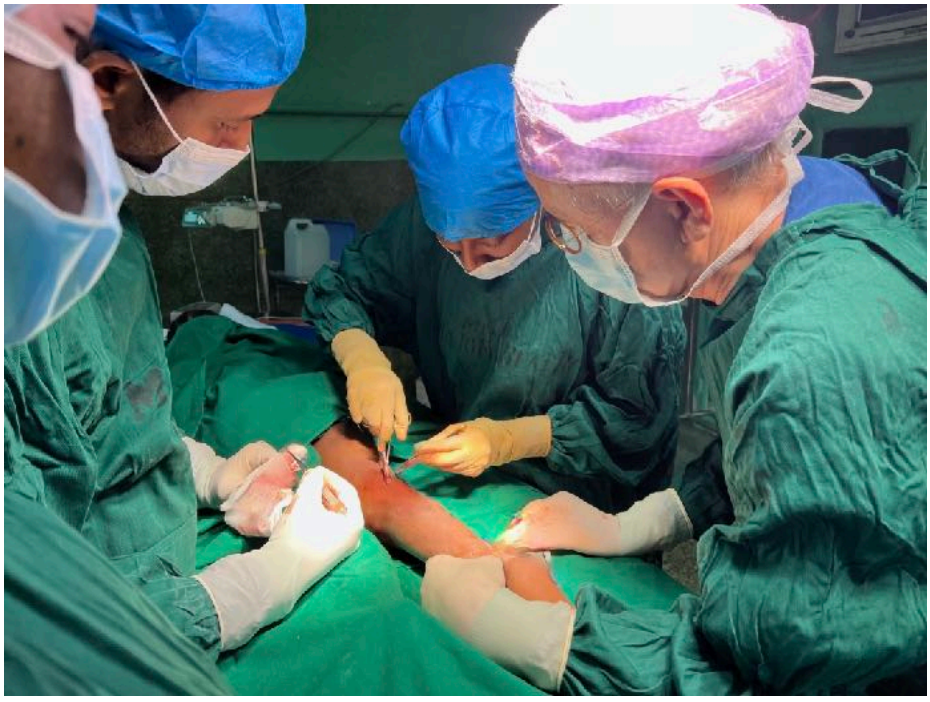
Other parts of the hospital were still poorly maintained. When I saw the disabled toilet in the adult department, it was clear that there is still room for improvement. People there are certainly aware of this, and more good news about this will come later.

I also sensed a slight change in attitude. People seemed to be more motivated. Because we always work with our local colleagues (scrub nurses, assisting nurses, and anesthesiologists), we also depend on their presence and workflow. In the past, we sometimes looked around and were surprised when there was nobody around all of a sudden. That has happened much less this year.



Left: toilet at the ward Middle and right: toilets for disabled

Colleagues were really eager to learn and showed to be capable of doing some operations or parts of operations themselves. So they could easily act as a resident who is in training, like we are used to having in the Netherlands. Which means operating together, sometimes assisting, but preferably, whenever possible, changing the roles so that they operate and we assist.



Our local colleague, Rukiya operating, Rashid assisting, and Ed supervising (operation area retouched)

planning and drawing a Z plasty

Rukiya and Said operating, Ed and I are assisting

Another novelty was that there were two anesthetists; previously, there were only anesthesia assistants at our surgical camp.
In the former years, we had quite some empty space in our operation schedules, which tended to be filled up by patients that were passing by in the weeks after. This year the schedules were quite full already directly after the screening, so we had to be more selective, and later we even removed a few patients (possible burn contractures of the fingers) from our list to make room for more urgent and bigger cases.

Elmarie checking on a child during the ward round

We were taken to the ward by the orthopedic surgeon. In earlier years, this happened a little bit later, mostly in week two. But this time there was a child who had an accident that resulted in a femurcondyle that was missing good soft tissue coverage. So we operated on him and covered the defect with a gastrocnemius flap. Then we had another case with a child who had an arm injured so badly that it needed an amputation. The mother refused to give consent, and our colleagues asked us to have a look as well, more or less as a second opinion. After that, she did agree, which was good because the child was in danger because of the badly mingled arm without any possibility to restore function (after an accident and infection), and she had quite severe bleeding every now and then. Next to that, she was in a lot of pain. We assisted with the operation and performed an arm amputation below the elbow. This particular child would walk towards us every day after she was operated during ward rounds to say hello with a happy smile on her face, probably because she wasn't in that much pain anymore. She would even wave at us in the morning, being on the first floor when we arrived.

Above: the child and her mother next to her waving a us in the morning when we arrived at the hospital

Left: the child at the ward

After two days, we were in a good rhythm with a nice collaboration with our local colleagues.

Jurjen and Dirk Jan giving plexus anesthesia, guided with ultrasound

Every day we operated on about 8 patients, ranging from minor procedures to somewhat larger and more extensive operations. Also on Saturday, we saw two more extensive cases when we were taken to the adult department by our colleague Mwanabaraka. One patient could be treated with skin grafts, and the other was a more complicated case; it was best to stage the operation in two stages. We performed debridement and skin grafts, and the second stage was discussed and prepared with the local colleagues, who were planning to do the second stage within a few weeks. In this particular case, orthopedics and surgeons have to work together in a multidisciplinary approach. Because these new cases had a certain urgency, we had to discard more patients from our list.

Above: Elmarie operating, Liam watching
Left: me assisting Rashid

recovery room

Above: Dirk Jan with one of our patients

On Friday evening, we had dinner with 21 people from the hospital, which was very nice again. The atmosphere was very good, and at the end we were dancing together: the staff of the restaurant, the people from the hospital, and us. It was really nice to see a big group of people dancing the famous choreography on Jerusalema, the song that was a big hit during the Corona pandemic, and the choreography that was danced by hospital workers all around the world and shared through social media.

Dinner

Group picture on saturday, with only 5 local colleagues

On Saturday we did wound dressings only and after that we had a group picture with a selection of the hospital staff, as some were not working on that saturday, they had a day off.

On Sunday, we had one day off. Just like the previous two surgical camps, it rained a lot on this day. We still don't understand exactly how that works. On all other days, it did not rain, except for the last day.

Walking to the hospital

On Monday, we had a slow start; people had to come back a bit. Once started, everything ran smoothly again. We finished early that day, and I saw an ICU patient being operated on in our operating room right after we were finished. That made me realize that if we keep the operating room occupied, other hospital patients will have to wait for treatment. So it was good that we finished early; this was a situation with some urgency to it.
Ramadan started on Thursday, and everything went even more smoothly since there was no break for food. On Friday, the last day, we finally got an appointment with part of the board of the hospital. The director himself could not come, and scheduling an appointment was difficult. But that Friday I managed to speak to a representative of the board, Dr. Hafidh S. Hassan, director of medical services. Also present from the board were Mayasa M. Salum, director of pharmaceutical services, and our direct colleague, Mwanabaraka Saleh, head of the surgical department and leader of our surgical camp.
We had a very interesting conversation. They indicated that they were very happy with our arrival.

From left to right:

Mayasa M. Salum
Dirk Jan
Tallechien
Jurjen
Jolanda
Hafidh S. Hassan
Elmarie
Liam
Mwanabaraka Saleh

Same group now on the official picture

There are several surgical camps per year at Mnazi Mmoja Hospital, which they appreciate very much. They find our camp very pleasant, not only because of the good cooperation and the training part, but also because we are the only camp that brings our own material.
We told them that at the moment, as we see it, the local doctors have a lot to offer. They can technically perform all kinds of operations very well. But they lack the right tools and equipment. An example is that their thinnest suture is quite a thick suture, which does not allow for fine sutures as is required in pediatric hand surgery or pediatric urology. They don't have the right equipment to collect large skin grafts, while the indication comes along regularly. As far as we are concerned, this would be a first step in improving healthcare.

They also told us the good news that a new hospital was going to be built. The idea is to temporarily move to another building just outside the city and completely renovate the current hospital. This is going to be a huge project, and the idea is that along with the renovation of the hospital, other things will also be improved, such as instruments and materials.

All in all, it was again a very successful camp. We listed 38 patients and operated on 33, and there was only one no-show. We did 42 dressing changes. The urological colleagues operated on 47 patients. So in total, we were able to operate on 80 patients. Unfortunately, a number or our had to be postponed to next year because of a lack of space. The idea was that our local colleagues could do some of these operations after we were gone, but the question is whether that will work because of the lack of fine instruments and materials.

In this context, I also thought it was intriguing to see a new device appear in the operating rooms on the last day; there was a lot of activity and curiosity around it. It was a Storz scope device. This is quite an expensive device. When I saw people working with it, I was not only afraid that they did not know how to use this device, but especially what the state would be after a few months or a year. There is no proper specialized sterilization for this specific device, and there will be no maintenance. I'm afraid this very expensive device will end up in a corner after a few months, not being used. And then I can't help thinking how many fine sutures, finer instruments, and dermatomes could have been bought for the amount the scopic tower did cost. Anyway, for now, those are my thoughts; hopefully I'm wrong, and it's organized in such a way that the device can be used for many years, helping many people.

After this appointment, we went to the operating rooms and did many dressing changes. We discussed the follow-up with Rukiya, who kept a very close eye on everything and will arrange the aftercare, including the many hand therapies.
The dressing changes and aftercare, of course, continued after we had left. We charged our colleagues with a lot of aftercare and extra work. I have close contact via WhatsApp, especially with dr. Rukiya, who keeps me informed almost weekly about the patients that she is following up on. This collaboration is very pleasant. She is a very dedicated and motivated colleague who is so enthusiastic that she ordered magnifying glasses herself and fine instruments to be able to do the

contractures of the small children's hands, for example. So some of the cases might not be postponed until next year. It would be great if the hospital would keep its promise and invest in better material that is relatively simple and can be used immediately by our local colleagues so that they can help many patients in the near future and significantly improve their quality of life.


10