Urolink: Zanzibar trip report

'How would you like to come on a Urolink trip to Zanzibar?' my boss, Guy Nicholls, Paediatric Urologist at Bristol Children's Hospital, asked me one day in theatre in early 2002. Guy explained that Dr Mohammed Jiddawi, a urologist at the Mnazi Mmoja Hospital, had approached Urolink with a view to identifying a Paediatric Urologist who would be willing to travel out to Zanzibar, and Guy had been proposed. Dr Jiddawi was particularly keen for the team to perform hypospadias and urethral fistula surgery, as their local experience had been poor, with high complication rates.

Whilst Guy turned his attention to communicating with Dr Jiddawi over the next few months ironing out the precise details of the proposed trip, I did a bit of background reading about the island, perhaps most famous as the birthplace of Freddie Mercury.

Zanzibar comprises 2 large islands (Unguja, usually called Zanzibar Island, and Pemba), plus several smaller ones, about 40km off the coast of East Africa, in the Indian Ocean, about 6º south of the Equator. Our destination was to be Zanzibar Island itself, which is about 85km long and between 25 and 30km wide, with an area of 1500km^2 (about 640 square miles). The current population of the island is approximately one million, with the Mnazi Mmoja hospital situated in the largest settlement, Zanzibar Town, which has about 150,000 inhabitants.

The monsoon winds that blow across the Indian Ocean had allowed contact between Persia, Arabia, India and the coast of East Africa (including the islands of Zanzibar) for over 2000 years. The first European arrivals were the Portuguese, who reached Zanzibar at the end of the 15th century, although they were ousted by the Omani Arabs at the end of the 17th century, and during this period, Zanzibar became a major slaving centre. In 1840, the Omani Sultan Said moved his court to Zanzibar, and the island became an Arab state and important centre of trade and politics in the region. Many European explorers, including Livingstone and Stanley, began their expeditions into the interior of Africa from Zanzibar during the second half of the 19th century.

Zanzibar was a British protectorate from 1890 until 1963, when the state gained independence. In 1964, the sultan and government were overthrown in a revolution. In the same year, Zanzibar and the newly independent country of Tangyanika combined to form the United Republic of Tanzania.

The date for the trip was eventually finalised as June 2002 and it was proposed that we scheduled 5 days operating. Dr Jiddawi arranged to advertise our trip on television and radio and in the newspapers so that parents were aware, and then organised a number of outpatient clinics prior to our arrival in order to identify appropriate children. On our part, Guy assembled an array of vital equipment for us to transport out, as they had very little to offer us locally, and we underwent an arduous process of immunisation including Hepatitis A, typhoid, diphtheria, polio and yellow fever!

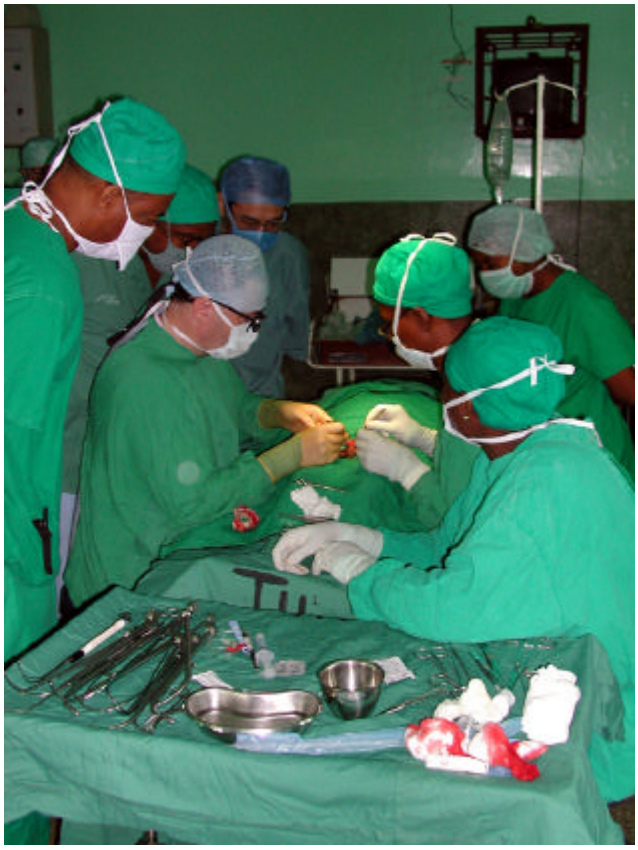
We flew out from Bristol on the 7th June, via Amsterdam, arriving in Dar es Salaam, the capital of Tanzania, late that same day. The following day we took a taxi to the port, an incredibly busy bustling scene with innumerable 'official' porters fighting over themselves to carry our luggage in exchange for a few US dollars, where we boarded the ferry for Zanzibar Island. After an idyllic two hour crossing, we were met by Mohammed Jiddawi, and were taken onto our accommodation and for welcoming coconut cocktails. Later that day Mohammed took us on a walking tour where it became apparent that he seemed to know most of the male population of the town by first name, partly because he was born and bought up on the island, but also, I imagine, because of his skill at open prostatectomy!

The following day bought our first visit to hospital which was a major culture Shock. Although aware of the situation, as much as any one who has never been to Africa can be, I really was shaken by the incredible level of poverty. They are very proud of their children's ward, with good reason when compared with the adult wards, but by Western standards the whole hospital was in desperate need of major investment, which of course will never happen.

We then conducted an African-style surgical outpatients, rapidly assessing 17 children ranging in age from 2 to 14yrs. We examined 6 children with hypospadias (two of whom had had previous surgery) and then, distressingly, 11 children with urethro-cutaneous (UC) fistula. These were of varying degrees of severity and were all traumatic fistulae related to religious circumcision. According to Dr Jiddawi this is an extremely common problem throughout Tanzania, and presumably throughout Africa, as circumcision can be performed by anyone, irrespective of training. All 17 children were suitable for surgery and we distributed the cases over the week, aiming to finish by Friday lunchtime, to allow time for any overrun.

A number of more major cases were discussed, but, as this was the first trip of its kind, Guy Nicholls elected to focus on the cases above. We then had the opportunity to inspect the array of available surgical instruments and were able to assemble 2 separate sets, having to use an artery forceps as the needle holder in the 2nd set.

The following day, Monday, was our first operating day and we were joined by two surgeons from the University Hospital in Dar es Salaam, Charles Mknony, Professor of Urology and Moussin Aboud, Associate Professor. Although our start time seemed fairly relaxed, once the team got going they were incredibly quick and efficient. There were no portering delays (i.e. no porters) and we were lucky to have two anaesthetists dedicated to our theatre for the whole week. This pair, a Chinese and a Russian, gave the most rapid anaesthetic I have ever seen: IM ketamine followed by spinal local anaesthetic. With the quick application of a saturations probe and no time-wasting for any other form of monitoring, we were ready to go. At the end of the case, one of them would recover the child, whilst the other would anaesthetise the next. I did, however, on several occasions worry about the complete lack of supervision once the child was deemed to have 'recovered'.



That day Guy Nicholls performed a 1st stage Bracka hypospadias repair, 2 Snodgrass hypospadias repairs and closure of a large UC fistula, with me as first assistant, observed by the three Urologists, a few trainees and assorted theatre staff, with no technical problems. Encouragingly, the scrub nurse picked up the routine very well as the day progressed. I think the particular points of technique that the local surgeons noted with interest were the interposition of a dartos waterproofing layer in both the hypospadias surgery and the fistula repair, the suture selection (6/0 or 7/0 and vicryl rapide to the skin, whereas their previous attempts had been with 4/0) and the use of rotational skin flaps for fistula repair.

That evening to celebrate the successful day we were taken out for a meal by the Dar es Salaam surgeons, which was a lovely gesture but also made me feel very awkward when I realised that they were all only earning £350-400/month. The following day, we had a similar rapid turnover performing three hypospadias repairs, two of which I did, with the local surgeons taking it in turn to assist.

Wednesday marked the start of the UC fistula surgery and over the next three days, Guy Nicholls repaired four and I repaired six UC fistulae, of varying degrees of severity, again with the local surgeons as assistants and also performing various steps of the repair as the cases progressed. In addition, from Wednesday onwards, when we had finished operating we took a trip around the ward to remove the compressive dressings from the cases from 48h previously. Although we had initially been concerned that sepsis would be a problem, we were delighted to see that with a single peri-operative dose of

Augmentin (thanks to Beecham Research for providing this) there were no early infections.

With the work finished by Saturday, we spent a relaxing weekend seeing some of the sights of Zanzibar. A trip to the Jozani Forest Reserve to see the Mangrove swamps and a distinct species of Red Colobus monkey unique to Zanzibar, and a boat trip (not) swimming with dolphins, were interspersed with key England world cup games and trips to the hospital to remove dressings and urethral catheters (all promptly recycled!). We sailed off the island on the Monday evening, having provided Mohammed with the list of dates for removal of remaining catheters, returning to Dar es Salaam for an overnight stay. The following day, Moussin Aboud and Charles Mkony kindly gave us the tour of the University Hospital in the morning, followed by the sights of Dar itself, before we headed off to the airport for our flight back.

I think overall the trip was a great success and the objectives were achieved. By performing a limited repertoire of operations repeatedly, all the local surgeons really felt they had learnt something useful and were keen to go off and try the techniques themselves. From my point of view, the clinical experience was outstanding (we only see 4-5 fistulas a year in Bristol), the exposure to a different culture was incredibly interesting, and I have made some new friends in the world of urology. We were delighted to hear from Mohammed by email recently that all the catheters were removed successfully, only one child had a wound infection that settled with antibiotics, and (as yet) there are no recurrent fistulae.

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