# OLD FRIENDS AND NEW CHALLENGES ON THE SHIP OF HOPE

**Dr KEITH THOMSON**

This was the second visit of the Mercy Ship *Anastasis* [1] to the Republic of Guinea, a former French colony sandwiched between Guinea Bissau to the west and war-torn Sierra Leone to the east. The population is approximately 7 million including about 500,000 refugees, mainly from Sierra Leone and Liberia. Not only is Guinea one of the World's largest producers of bauxite, but there have been recent finds of gold and diamonds.

## Dramatic reunion

As I emerged from Conakry Airport into the humid West African heat I was greeted by a young refugee couple (Fig. 1) with their five-year-old daughter, Regina, holding up a placard which read "Uncle Keith – Thank you for saving my life and my mom's – you are very welcome". This was an emotional and special reunion for me, since March 17th 1993 while visiting the Princess Christian Maternity Hospital in Freetown, Sierra Leone, I met 19-year-old Catherine Conteh [2], who had been in obstructed labour for four days and needed an emergency Caesarean section. Not only had the local surgeon refused to operate without full payment in advance but he had also told her that she and the unborn baby would probably die before the end of the day. Meanwhile, her husband, Augustine, beside himself with anxiety, was trying, unsuccessfully, to find enough money for the surgery. I paid £70 for the operation and baby Regina was born.

*Fig 1.*
**The Conteh family, November 1998**

### Selection for surgery

In the street outside the John Paul II hospital, prospective patients were separated into male and female queues. This prevented men in this traditional Muslim country pushing women to the back. Equal numbers at a time from each line were then admitted through the gate and assessed by general physicians who decided whether they should see a surgeon (Eye, ENT or Maxillofacial) or go home after being offered counselling or prayer.

Those accepted for surgery had a history taken by a nurse assisted by a translator, the main languages being French, Susu, Fon and Malinke. A physical examination was performed by one of my team of four doctors, paying particular attention to the respiratory and cardio-vascular systems and any potential intubation difficulties. Blood was then taken for FBC, malaria, sickle, HIV 1 and 2 and RPR from all those who were to undergo surgery under general anaesthesia. In two hectic days approximately 480 patients out of 4000 were chosen for surgery. These included Mahmoud, an 8-month-old child with a cleft-lip and palate who was a mere marasmic skeleton of 2.4 kg, his translucent skin revealing every rib. I felt that he would die soon but after being enterally fed on the ship for two weeks his weight more than doubled and then four months later, weighing a healthy 7.6 kg, he underwent corrective surgery.

## The "O.R." team

I brought my own anaesthetic team, consisting of Graham, (ODA at The Berkshire Independent), and Dr Mark, (SpR at St Thomas' Hospital) who left after two and a half weeks and were replaced by Dr Andrea (SHO at Guy's). Dr Tony, a maxillofacial surgeon (Luton and Dunstable), flew out with me, he was staying for the whole five month outreach. I had also persuaded two of my surgical colleagues, Dr Simon, an ophthalmologist, and Dr Jonathan, an ENT surgeon, both from the North Hampshire Hospital to experience West Africa for a fortnight each.

The first ENT case was 11-year-old Rachel from the USA, whose parents were long term crew members. She emphatically told me before her tonsillectomy that she didn't want a sore throat or a pill up her "butt" (she got both!)

## New equipment

The recently donated air-conditioning units cooled the theatres so effectively that a Bear Hugger had to be used for longer cases. Each of the three operating rooms was equipped with a Drager AV1 Ventilator, Ohmeda Oxicap and a Propac monitor with ECG and non-invasive blood pressure. The ventilators, given by a hospital in Rotterdam, were simply converted to paediatric use by changing the bellows. In order to preserve limited stocks of isoflurane, Mark and I managed to lower the fresh gas flow in the closed c ircuit to 400ml/min. This was only possible after we realised that a capnograph removed 150ml/min which then needed to be returned to the breathing system.

## Airway challenges

During just over four weeks 168 procedures (100 ophthalmic and 68 maxillofacial) were performed on 155 patients. Seven required fibreoptic intubation either because of large facial tumours or jaw ankylosis as a result of fibrosis from burnt out cancrum oris (noma). Each of these, after premedication with intramuscular atropine, was carefully sedated with small doses of ketamine, morphine and midazolam. A cricoid thyroid block was performed, and the nose and oropharynx sprayed with lignocaine. None of the patients moved, nor did they stop breathing or obstruct, but an anaesthetist was in charge of sedation and monitoring.
Only eleven out of sixteen intubation attempts using an intubating laryngeal mask were successful, but we were all on a learning curve and often had no trained assistant.

## Massive facial tumours

**Fig.2. 40-year-old Malik, pre-op**

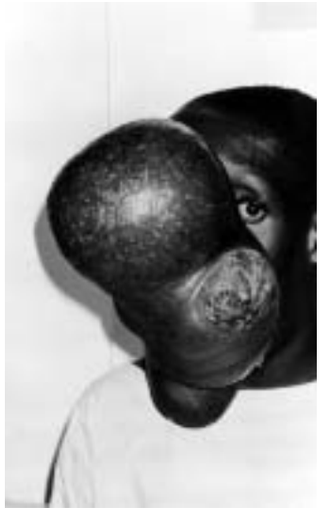

**Fig.3 18-year-old Ce, pre-op**

I had received photographs of Malik (Fig 2) and Ce (Fig. 3) two months before arriving in West Africa. They were sent by a missionary who worked 1000 km to the north of Conakry. These harrowing prints were used to help obtain generous donations of remifentanil from Glaxo-Wellcome and propofol (with a loaned TCI pump) from Zeneca. I first met 40-year-old Malik with his 3.05 kg ameloblastoma at the screening clinic. Trying to explain to him the role of an anaesthetist I said in my best French "Vous dormez bien avec moi" which caused his face and tumour to convulse with laughter! Ce was only 18-years-old and had suffered from progressive fibrodysplasia of his right maxilla and mandible for the past twelve years.

## Bleeding problems

Malik was nasally intubated using a fibrescope, his mandible resected and replaced with a titanium implant. He received a bone-graft two months later. All went well until the fourth post-operative day when, after his drain had been removed, he rapidly lost about 1.5 litres of blood onto the bed. It looked like he was auditioning for a remake of 'Saving Private Ryan'. After resuscitation he was carried on a stretcher upstairs to the operating room on the deck above, given ketamine, rocuronium and intubated. The wound was re-opened but miraculously no bleeding vessel could be found despite the effort of three consultant surgeons and head-down tilt.

Ce's surgery after an elective tracheostomy lasted over 12 hours, during which he required only 275 ml propofol and 2.4 mg of remifentanil. He lost about 10.5 litres of blood which was replaced by 14 generous crew units of fresh warm whole B+ blood. Just after midnight while we settling Ce on a ventilator in the High Dependency Unit, another patient was becoming increasingly agitated, with obvious breathing difficulties. Ketamine 50 mg IV allowed insertion of a Guedel airway and effective ventilation with an Ambu-bag, while Dr Tony, on his knees, performed a tracheostomy. An anterior osteotomy of his lower jaw and bilateral Carpansic flaps had been performed to recreate lips which had been obliterated by the ravages of cancrum oris. An enlarging sublingual haematoma was pushing his tongue backward resulting in progressive airway obstruction.

## Donka hospital

Imagine the challenge of performing surgery in an operating room with no suction, no diathermy, bizarre long-handled instruments and an operating table which is stuck in its lowest position. There is no clean water to scrub up with and totally inadequate lighting. As an anaesthetist you have only ketamine, thiopentone, halothane, atropine and oxygen at your disposal: no muscle relaxants, no ventilators, no monitors and usually no suction. The sad reality is that this describes the normal situation at the end of the 20th century at the main hospital in Conakry.

***A Caesarean section***. The patient was lying stark naked on the table in what I call the "horizontal crucifixion position" with both arms out on boards. She had an IV of 5% dextrose running into a vein in her right arm. There was no antacid prophylaxis, no pre-oxygenation and no cricoid pressure. A sleep dose of thiopentone was given and a Guedel airway inserted after the tongue had been pulled forward with Magill forceps. Anaesthesia was maintained for the duration of surgery by 0.5% halothane in oxygen via a facemask held on with a Clausen's harness. The anaesthetic nurse said that intubation was occasionally attempted under 1g of thiopentone in emergency cases. The breach presentation baby was eventually delivered after what seemed over enthusiastic pulling on its legs by the surgeon.

It was placed, immobile, like a lump of meat, on a bare metal trolley and wheeled to another room where a midwife attempted resuscitation with a suction catheter. No oxygen was given and when I mentioned tracheal tubes an unopened box was found (date 1982) by the anaesthetist showing me round, but he made no effort to assist the midwife. Tempted as I was, as a visitor I feel it would not have been appropriate to interfere in this situation, so I decided to leave. Apparently both mother and baby did survive.

***How does one improve things?*** The lack of anaesthetic equipment, drugs and expertise undoubtedly contributed to the frustration of the maxillofacial and plastic surgeons I met (trained in Russia and Hungary respectively). Apparently there were some relatively new anaesthetic machines still in plastic wraps, although some of the parts were said to be missing. Developing countries in Africa can become a graveyard for donated equipment, when there is no back-up service or training. Even providing drugs like muscle relaxants and opiates, could perhaps be dangerous for the patients when given by anaesthesia providers who are only theoretically familiar with their use.

## Late arrivals at the airport

The flight from Abidjan with 8-year-old Ruth Esther and her mother Bernadette on board was 6 hours late, so I needed to travel to the airport three times. For the first two I was driven there by Madame Pouponne, presenter of a local children's TV programme. Surprisingly, she insisted that I undid my seatbelt as no 'local' in Guinea wears one and it would make us a potential target for the police to stop and extract a spurious fine.

*Fig 4.*
**1-year-old Ruth Esther, pre-op 1991**

*Fig 5.*
**1-year-old Ruth Esther, post-op 1991**

I had last seen Ruth Esther on the *Anastasis* in 1991 (Figs. 4,5) when I anaesthetized her (aged 1½) for a bilateral cleft lip repair ~3]. Anaesthesia was complicated by a congenital cardiac problem which proved on investigation to be a double outlet right ventricle. Five years ago she underwent a Blalock shunt in Abidjan.

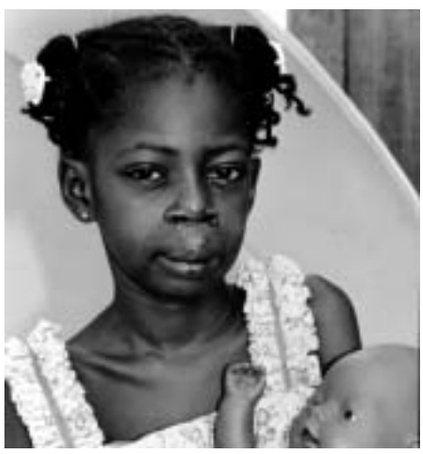

*Fig. 6*
**8-year-old Ruth Esther post-op 1998**

Now, seven years later, she seemed remarkably fit and the challenging operation to remove residual scarring from her upper lip was successful (Fig. 6). Once again I maintained anaesthesia with intermittent bolus doses of ketamine. Her $SaO_2$ ranged between 85% and 90% on 100% $O_2$ as opposed to a maximum of 70% on the previous occasion!

My daughter, accompanying Simon the eye surgeon and his son, arrived two hours later from Brussels; their delay had been caused by extreme weather conditions in Europe – at one time their plane was 10th in the de-icing queue – hard to comprehend when the temperature in Guinea was 35°C.

## Unwelcome shipmates

Apart from the heat and humidity the main hassle we had on board was an infestation not only by the ubiquitous cockroach but also by small red and black banded insects known as 'acid bugs' because of the painful blistering skin lesion which occurred if you inadvertently squashed one.

## Off the ship

Conakry was an interesting town with some excellent, mainly Lebanese, restaurants including Le Marrakesh, Le Petit Bateau and Le Cedre. The buffet and swimming pool at the Novotel were worth a visit as was the 'Ghana Bar' with main dishes at 50p each! Unfortunately our efforts to compile a comprehensive guide to the eating establishments of Conakry were cut short indirectly by the supposedly democratic presidential election. Sensibly the captain of the *Anastasis* imposed a dusk-to-dawn curfew on the crew. This did not stop Simon having his wallet containing $500 in cash pick-pocketed from his shorts one afternoon by a man pretending to shine his shoes.

The day we went to see the spectacularly isolated and scenic 'Roum Island', two days before the voting, serious civil unrest was occurring at the People's Palace. This resulted in several deaths from poisoned water and also some injuries as a result of clubbing and gunshots. The incumbent president, Lansana Conte, declared himself the winner with 56% of the vote, and then imprisoned the main opposition leader, Alpha Conde, on gun-running charges.

There was an excellent local craft shop which was an outlet for the adjacent wood carving factory. This was situated just off the main street near Le Gondole (a popular ice cream parlour) and the Sabena offices. Some hard bargaining was done there – one of my more successful tricks was to come back about 10 minutes before closing time and conclude deals started earlier in the day.

A splendid evening for 25 of us was spent at the elegant house of local businessman and long-term *Anastasis* supporter, Mr Diakite. A banquet of West African delicacies was accompanied by an amazing family group consisting of 'Kora' and xylophone players.

## Local church

I went several times to the 'L'Eglise du Bon Bergere' in a Sierra Leonian refugee area. The congregation including the Conteh family, were very welcoming and friendly. During the usual three hour service, the assistant Pastor's wife used to sit at the back with a big stick; when one of the children misbehaved, she hit or poked the appropriate mother! After I returned to the UK I heard by Email from the Pastor, David George,that his wife and four children were somewhere in Freetown which the RUF rebels had just attacked (January 6th). Amazingly they survived two days on the floor of a house with bullets flying around and eventually managed to escape on a helicopter to Freetown airport and thence to Conakry.

Sadly, in this violent conflict 5,000 so far have been killed and many more injured in Freetown alone. Reported rebel atrocities include the amputation of limbs not only of adults but also children.

## The epilogue

The ongoing story of Regina and Ruth Esther perhaps illustrates how 'individuals' matter. One cannot help everyone in need in Africa but perhaps, like the parable of the Good Samaritan, there are some occasions when one should not walk by on the other side but listen to that inner voice' of compassion.

After Guinea the *Anastasis* will return to East London (South Africa) to be fully air-conditioned prior to returning to West Africa in January 2000.

On March 25th 1999 Mercy Ships completed negotiations for the purchase of the 16,000 tonnes Dronning Ingrid from Scandlines AG of Denmark. The funding was an outstanding humanitarian gesture by Mrs Ann Gloag (Director of Stagecoach). Over the next two or three years the ship will be converted in the United Kingdom into an additional 'Great White Ship of Hope' to serve some of the world's poorest nations.

**References**

1. Mercy Ships UK, Highfield Oval, Harpenden, Herts, AL5 4BS. Tel: 01582 463303.
2. Thomson KD. Sun, Sea but not much SUX. *Today's Anaesthetist,* 1993; **8**: 160-161.
3. Thomson KD. Anaesthetic Adventures in Abidjan. *Today's Anaesthetist*, 1992; **7**: 45-46.

The next outreach for the ANASTASIS will be to Gambia from January 19 to May 23, 2000. Any anaesthetist willing to undertake a 2-3 week stint should contact: Dr K D Thomson, North Hampshire Hospital, Aldermaston Road, Basingstoke, Hants, RG24 9NA. Telephone:(Department of Anaesthetics) 01256-313461.