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ORIGINAL

BLOOD, BIBLES AND A "BARMY" ON A BOAT IN BENIN

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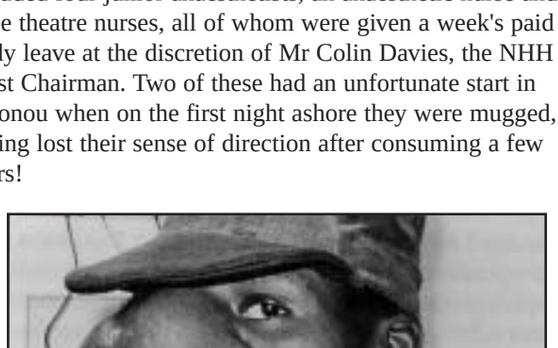
Introduction

There are many reasons for missing a Monday afternoon operating list, but to escort a Dutchman who was 6'8" tall and suffering from acute paranoid schizophrenia (possibly induced by Larium malarial prophylaxis) back from West Africa to Europe is perhaps a unique excuse. The journey was made even more difficult by the fact that he thought God had told him he must not speak in English. The brief stopover at Ouagadoudou was complicated by his attempt to leave the plane. Then he refused not only to return to his seat for landing at Brussels Airport but also to leave the aircraft, preferring to remain on the floor of the connecting passage between the twin aisles of the Sabena Airbus. He, sadly, was ultimately placed in a secure psychiatric unit in Rotterdam. As a result of this I missed my connection to London Heathrow.

Benin

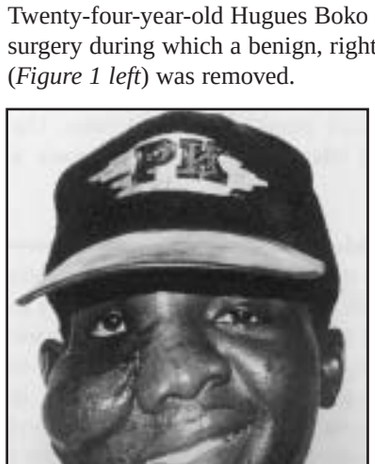
The Mercy Ship *Anastasis* [1] returned to West Africa after an absence of nearly two years, during which time she had undertaken outreaches, both to Madagascar and East London in South Africa. Benin, the former French colony of Dahomey, gained its independence in 1960. It is a key-shaped slip of a country with a population of almost 5 million, jammed between giant Nigeria to the east and tiny Togo to the west. Like every other African nation it has lived through its share of governmental regimes with 'Democracy', under President Kerekou, supposedly reigning at present. The people are extremely friendly and the capital, Cotonou, has excellent restaurants and crafts markets selling beautiful carvings in both ebony and soapstone.

Eight more staff from the hospital in Basingstoke went for periods of two or three weeks to Cotonou in addition to the three of us who had worked previously on the ship. These included four junior anaesthetists, an anaesthetic nurse and three theatre nurses, all of whom were given a week's paid study leave at the discretion of Mr Colin Davies, the NHH Trust Chairman. Two of these had an unfortunate start in Cotonou when on the first night ashore they were mugged, having lost their sense of direction after consuming a few beers!



Surgery On-Board

During two weeks on-board, 62 operations were performed: 29 ophthalmic – mainly squint correction, cataract extraction and evisceration. Twenty maxillofacial operations including cleft lip or palate, plastic repairs for cancrum oris, two mandibulectomies and one maxillectomy, fourteen ENT cases including tonsillectomies, mastoidectomies, removal of a giant nasal polyp and repair of a severely traumatized larynx. Twenty-four-year-old Hugues Boko underwent 12 hours of surgery during which a benign, right-sided maxillary tumour (*Figure 1 left*) was removed.

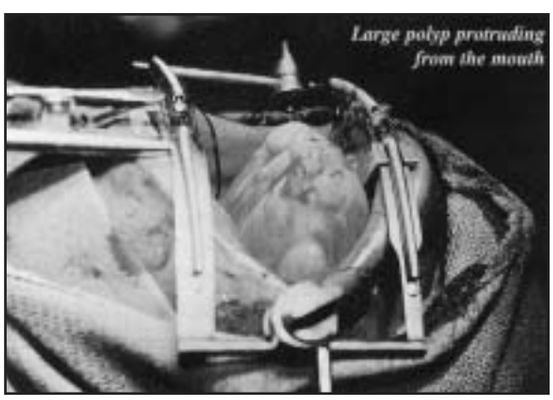


His face was rebuilt using titanium mesh to support the orbit and a temporalis pedicle flap to reconstruct the lateral nasal wall, palate and mid-face. During the procedure he lost about 8 litres of blood which was replaced by nine generous units (approximately 600m1 each) of fresh, warm, whole blood provided by willing crew volunteers. He was sedated with midazolam and alfentanil infusions and ventilated overnight on the HDU. Postoperatively (Figure2) he looked dramatically better.

A 42-year-old man had been found slumped in a car two days after his throat had been cut. He was taken to a local Mission Hospital where a tracheostomy was performed. Dr Mark Richardson from East London (South Africa) spent 9 hours reconstructing his larynx and vocal cords; afterwards he was able to talk but his tracheostomy may be permanent.

Another fascinating case was that of a 28-year-old man called Asaie who had a retropharyngeal tumour which obstructed his airway if he lay flat. I attempted an inhalational induction using halothane with him in the sitting position, but I was unable to achieve a sufficient depth of anaesthesia, either to insert an LMA, or attempt to visualize the cords. Following discussion with the surgeon, I woke the patient up and a tracheostomy was performed under local anaesthesia.
With a restless patient this turned out to be a tricky procedure. The more supine he lay, the more he became obstructed, so the LA was supplemented with 25mg boluses of ketamine. The result was a decrease in respiratory drive but this unwanted effect was reversed by intermittent doses of doxapram 40mg.

After a size 8 Shiley tracheostomy tube had been inserted, propofol, fentanyl and rocuronium were given and the patient was ventilated with 1% isoflurane in oxygen and nitrous oxide. The surgical findings were excellent news for Asaie because he had, arising from the right sphenoidal sinus, a large polypoid tumour which had hung down the back of his pharynx to the level of the larynx. The inferior part of the tumour was delivered into the oral cavity (Figure 3).



The soft palate was then divided in the midline allowing the polyp to be dissected off the base of the skull with its pedicle attached to a small piece of sphenoid bone. The tracheostomy was removed after two days and he made a dramatic recovery.

Anaesthetic Critical Incidents

Long hours of work without the benefit of a trained anaesthetic assistant can lead to problems. Firstly, I was called urgently to one of the theatres where I found a bradycardic and apnoeic patient who had apparently been given fentanyl prior to induction. She required rapid anaesthesia and intubation as suxamethonium had been given by mistake instead of fentanyl because the syringes had similar coloured labels. The next day I made the same mistake but luckily my patient, the 6-year-old child of a permanent crew member, was already anaesthetized and intubated for a tonsillectomy!

My first ever experience of expired air ventilation (rescue breathing) occurred after I had anaesthetized and paralysed an 18-year-old patient for extraction of a congenital cataract and found that there was absolutely no pressure in the breathing system. I rapidly checked all the tubing connections of the soda-lime absorber but could find nothing amiss. I asked a nurse to locate an Ambu-bag, having failed to notice the one which was hidden behind the reserve oxygen cylinder. Meanwhile with the SaO_2 below 40% 1 commenced 'mouth-to-mouth' which proved to be easier than on a "Resusci-Anne". The problem was totally my fault for not checking the breathing system beforehand. If I had done this I would have discovered that the plastic covers for the inspiratory and expiratory valves on the circuit leading from the absorber had been removed to get rid of condensation. I realised the patient was not brain damaged when in 'recovery' he responded appropriately to my rather bad instructions in French.

Perhaps it is good for one to have an occasional reversible mishap to act as a reminder of what a serious business providing anaesthesia is.

Tony Giles, the surgeon, had a different problem when he fell on his back while operating after his seat slid away unobserved following the list of the ship.

Off the ship

One of the distinctions of Cotonou was its main form of public transport, consisting of thousands of tiny scooter taxis (Zemidjans). These buzzed around like angry wasps spluttering blue exhaust everywhere and producing a haze which hung perpetually over the city. One risked life and limb riding on the back of one of these. No-one wore any protective headgear and as traffic lights changed to green about twenty of them would weave in and out trying to do a local 'Le Mans' start. I did not see or hear of any accidents, but apparently the zemidjans and their passengers have right-of-way and if one of them is hit by a car then other scooter drivers surround and beat up the occupants of the offending vehicle.

Fascinating excursions included one to the village of Ganvie where 12,000 descendants of the Tofinu tribe all live in bamboo huts built on stilts (Figure 4) in the water of Lake Nokoue, up to several kilometres from the shore. The first stilt village was constructed in the 18th century to protect the tribe from the warlike Fon, whose religious customs banned them from entering water.

The town of Abomey, where the palace of the former kings of Dahomey is found, was reached after an interesting 3-hour bouncy train journey. A first-class ticket was £1.50 and the carriage not only had the luxury of a bar but also of a toilet. The train stopped at small villages where women vendors would rush onto the platform bearing all sorts of vegetables and fruit in baskets balanced on their heads. The visit to the palace was fascinating. We saw the former King Ghexo's throne which was mounted on four human skulls from vanquished enemies. We visited the tomb where, in 1894, forty-one of the many wives of the last king, Glele, were buried alive to provide him with home comforts in the after-life. We also viewed tapestries depicting, in battle formations, some of his 6000 women bodyguards, known as Amazons.

The day was completed by a hair-raising 2-hour taxi drive back to the ship. The driver used his horn almost continuously and seemed to be involved in a race with two other vehicles, one with Lagos number plates and the other a Peugot 405 with the name Ali Akhbar on the side.

Ali Akhbar arrived in Cotonou first but eventually caused a major traffic-jam when he ran out of fuel and had to fill his petrol tank from a litre bottle.

Ouidah, which used to be the largest slave port in Benin, was reached via an interesting sandy coastal track requiring rally-driving skills. We saw the evocative monument to the slave trade which was mainly to Haiti, Brazil and the Southern USA. As many as 10,000 slaves were dragged away annually from Ouidah during the several centuries of this previous inhumanity of man unto his fellow man. We travelled along the slave route from the coast into the town and visited a Portuguese fort with its museum. It contained memorabilia and pictures, one of which illustrated the degrading position in which the slaves were chained on board ship with the men lying on their fronts and women on their backs so that the white slave traders could take advantage of any of them that they fancied.

An hour further westwards was the village of Grand Popo (another former slave port), where we lunched in a delightful beachside restaurant. The guidebook advised against swimming because of the powerful rip tides. The return journey to Cotonou was slow due to numerous large potholes in the road and then during the final five miles we had to avoid the massed, weaving ranks of the scooter taxis. All in all, 137 miles in a fairly clapped-out Mazda on Benin roads gave us a day to remember.

My last day in Cotonou

This began with a standard three-hour church service attended by about 350 people. Christianity is having an increasing impact in Benin but the most popular religion is still Voodoo. Our main preacher was Tony Giles, the maxillofacial surgeon (from Luton), resplendent in his recently acquired African clothes. At the end of the service the whole congregation prayed aloud for the work of the *Anastasis* and those on board. This was an extraordinarily uplifting experience.

After visiting the vicar's house for soft drinks, I was accompanied by one of the assistant pastors to the Halle des Arts market to bargain for a superbly carved, ebony gazelle that I had previously failed to purchase. Eventually, I sent my guide out of the room and paid the equivalent of nearly £60 – an embarrassingly large amount in a country where the annual *per-capita* income is about £250 per year. I then returned to the *Anastasis* by scooter taxi. This proved to be a rather worrying journey attempting to avoid stabbing my chauffeur in a painful part of his anatomy with the sharp, pointed horns of the gazelle, which protruded from a plastic bag.

The local government hospital

That afternoon I visited the local hospital which was one of the best that I have seen in West Africa. There was nitrous oxide in the operating theatres and an intensive care unit with working ventilators. The wards were clean and the staff were friendly, but an appendicectomy cost approximately £200, probably beyond the means of many of the local population.

In 1997, 2088 women delivered babies in the Maternity Unit, of which 581 were born by Caesarean section. 137 babies were stillborn. The usual anaesthetic technique for Caesarean section consisted of no antacid therapy, thiopentone, gallamine, intubation, removal of the baby followed by intravenous diazepam and morphine. No inhalation agents were used as the local anaesthetists considered that these might cause too much bleeding, especially as there was only a limited availability of oxytoxics. I wonder what the incidence of awareness was with this technique?

After returning to the ship I was confronted with the news that my companion on the flight back to Europe would be the 6'8" tall psychotic Dutchman who was refusing to take any sedatives.

Mercy Ships UK – The Future
The amazing life-changing surgery performed on board this "Great White Ship of Hope" is only made possible by individuals, groups or companies responding to the challenge of helping some of the most needy people in the world.

This can be done in three main ways:
- Giving of time and skill
- Donating (or encouraging others to give) money or supplies
- Helping others to work on the *Anastasis* through prayer or financial support.

Mercy Ships UK has a vision to reach many more people. To attain this goal plans are being made to purchase and convert another vessel into a British Mercy Ship.

References

1. Mercy Ships UK, 13 Highfield Oval, Ambrose Lane, Harpenden, Herts, AL5 4BX, UK. Telephone: 01582 463303.