BENIN DIARY

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Introduction

The crew of the '*Anastasis*' [1] had an extremely rough sail from Dundee to Bremerhaven in Germany, five more days of pitching, rolling and vomiting through the Bay of Biscay and then at last calm seas. A day from Tenerife the engines stopped for 12 hours due to a problem with the fuel feed to the injectors, the ship just drifted at one and a half knots, fortunately in the right direction!

However nautical difficulties were not over – while attempting to manoeuvre into her berth in Cotonou harbour the ship made contact with the dock, an incident which will require future cosmetic surgery to the bow (Fig 1) and a new 100 tonne capacity fresh water tank!

Fig 1.
Splashy impact in Cotonou!

Before we arrived:

The screening (selection of patients) had taken place a fortnight before at the Halles des Arts stadium during which time over 5000 Beninois were examined in two days. The assessment and consequent management of tumour cases was dramatically improved by the presence of Dr Ed, a consultant histopathologist from Bristol and his microscope. He provided instant on-site histology reports after performing fine needle aspirations and biopsies. Some patients were sent to the ship for a CT scan returning with CDs of the results which were then viewed on a laptop computer by the surgeons.

Pathology services on board have been modernised by the acquisition of a 'Coolscope' which, via an internet connection, allows a histologist anywhere in the world to assist with diagnosis.

The presence of Dr Ed allowed 28-year-old physics teacher Alexandre to undergo 18 hours of surgery to his face to remove a huge cancerous growth. The histopathologist could define when resected tissue margins were clear of tumour. Alexandre was first seen in 1997 and inoperable cancer of the lip was diagnosed because of the presence of large glands in his neck. He then appeared once more in 2000 and was again deemed inoperable but four years later, when the Anastasis returned once more, he was still alive with a terrible cancer disfiguring his face [Fig 2]) but the glands had disappeared. Amazingly he was still working as a teacher, his face covered by a mask.

Fig 2.
28-year-old
Alexandre
pre-op

Surgery consisted of panfacial resection of squamous carcinoma, a right radial forearm free flap and insertion of a tissue expander under his scalp. Sadly two weeks later the graft became necrotic and had to be removed to be subsequently successfully replaced by a pectoralis major flap.

19th Nov-20th Nov: The Journey

Fortunately the four of us (myself [2], wife Fiona, Dr Margaret and Dr Tim) had all the correct visa documents at Heathrow Airport to present to the Air France check in staff. Apparently some volunteers from the USA, who did not have a copy of the protocol, only a the letter of invitation, had to spend extra days in the UK while the appropriate documents were sent. The flight from Paris to Cotonou was delayed by four hours for unexplained reasons. We arrived in Benin at 3am on the 20th to be met by a fit looking Gary Graham, our friend who had survived a VF cardiac arrest in Freetown in February 2003.

We spent an hour queuing to leave the airport and eventually got to bed about 6am after going through all the on-board arrival formalities. In the afternoon we took Dr Tim, an eye surgeon from Plymouth, to the local African market where we bought mangoes, avocados, papayas and a huge pineapple. I had met Tim in Plymouth the previous July when his wife had invited me to lecture to the Anaesthesia Dept. at Derriford Hospital. Currently the need on the '*Anastasis*' for eye surgeons is far greater than that for anaesthetists. I had persuaded Tim only a month before to accompany me on the flight to Benin!

21st Nov
We walked to a lively three hour church service in the local fishing village, not a long service by West African standards, a few litres of water is an essential accompaniment. As is often the case, the amplification of both the music and energetic preachers was much too loud. On the walk back to the ship I met a Ghanaian who had attended a training course in Tema, (Ghana) with my Sierra Leonean friend Augustine Conteh two years before. It's a small world.

Later I was talking to the 2nd Officer on board, and discovered that he came from Blairgowrie in Scotland and knew my mother who only lives a few miles away. Later that afternoon I went for a jog down the main road, not desperately clever in the heat of Africa but I did manage to fulfil my main objective to locate the Bangkok Terrasse, a Thai restaurant where I had enjoyed excellent meals during two previous visits to Cotonou.

It was a pleasure to see my old friend Dr Gary Parker again. He had just returned to the ship after a year's sabbatical in the Department of Maxillofacial surgery at the University of Washington in Seattle. I have worked with him many times since my first flight to Ghana to join the Anastasis in 1991, we have wonderful shared experiences and memories. The anaesthetic team had been augmented by the presence of Dr Patrick (Fig 3) from South London on his first visit to the ship.

Fig 3. Enthusiastic Dr Patrick!

He was not only doing a great job providing anaesthesia but also by spending hours reorganising the anaesthestic equipment store cupboard which had previously been in a state of chaos. The main social problem on board at present was the 'fluids only' rule for toilets situated in the bow half of the ship due to failure of a sanitation treatment plant.

22nd Nov.
Monday morning 0730 'devo' talk by dentist Rob from Nottingham – discussed various personal life issues using nautical analogies like the SS '*The grass is always greener*' and the SS '*Its not my fault*!'

My first day in the OR went well starting with a three hour cleft lip and palate repair on a 1-year-old girl followed by an inferior orbital rib graft on 30-year-old Angelle Kofi who featured in the *Reader's Digest* article about Mercy Ships by John Dyson a couple of years ago. She had a huge maxillary tumour removed in 2001. In contrast Dr Tim's introduction to African surgery started with what Gary calls a 'Welcome to Africa case' where problems with a cataract removal proved to be a great challenge as a result of a choroidal plexus haemorrhage. That evening we watched an interesting video 'The lost boys from Sudan' about the trials and tribulations of a group of orphaned Sudanese teenagers trying to settle down to a new life in the USA.

23rd Nov.
After a 6am pre-breakfast jog we attended the 0730 community meeting where details were given of the plans for the forthcoming visit of the '*Anastasis*' to Monrovia, Liberia in March 2005. Apparently the UN, at the cost of one million USD, have removed a sunken ship (Fig 4) which was obstructing access to the berth destined for the '*Anastasis*'.

Fig 4. Sunken ship in Monrovia docks.

The five strong advance team are planning to fly there via Lagos this week and are optimistic about support from the UN including the loan of some vehicles. I anaesthetised a man with several skin grafts round his neck the result of previous treatment for severe burns (Fig 5).

On examination he was unable to move his neck but could just open his mouth wide enough for an LMA. I decided to do an inhalational induction with sevoflurane and then insert an intubating LMA – one of the nurses

helpfully commented that she had never seen this technique fail – anyhow her 100% record was broken! I couldn't get the tube down although there was no problem assisting ventilation with the LMA and indeed with a mask and airway *in situ*, especially once he was paralysed. On direct laryngoscopy (which I should really have done first) the problem was the displacement of the epiglottis way over to the left. With some external pressure on the side of the neck I was able to insert a gum elastic bougie and *voila*!

Late that afternoon I accompanied Dr Tim on a visit to CHU, the local teaching hospital to assess a patient whose eyes had been damaged in a car accident. We were driven there by Dr Seraphim Gbenou, a local paediatric surgeon. The R eye was completely useless but the L eye just required the correct spectacle lens. Interestingly the local anaesthetist I met told me that there were now 10 medically trained anaesthetists at the hospital and about 30 anaesthetic nurses – a very good compliment in West Africa but then Professor Martin Chobli who is well known in WFSA circles is head of the department. On the way back to the Port, Dr Seraphim insisted we stop at a bar to sample the local Flag beer which was served in 630 ml bottles! Afterwards there was a fantastic photo opportunity of a young woman with a bowl balanced on her head containing at least 25 kilos of fish – quite remarkable (Fig 6)!

Fig 6. A fishy little number!

That evening Dr Tim, Dr Patrick and I walked for 27 min to reach the Bangkok Terrasse Restaurant and enjoyed a superb three course Thai meal with beer and wine for the equivalent of only £10 per head including the 15% Mercy Ships crew discount. The chicken in green curry sauce served inside a whole fresh coconut was as good as I remembered from 2001. As we walked back to the ship, Tim nearly fell down an unmarked manhole while speaking to his wife on his UK mobile!

24th Nov.

At morning 'devos' Dr Tertius, a brilliant South African plastic surgeon gave a challenging talk about the forces of 'Good and Evil'. Three paediatric cases with Dr Gary all went well.

It does take a day or two to get used to anaesthetising on the '*Anastasis*' with no trained anaesthetic assistant. This was especially true for my Basingstoke colleague, Dr Margaret, who was on the ship for the first time. At 3pm there was a practice fire drill on board and the ships crew apart, from those in the OR and the ward, evacuated to their alphabetically organised muster stations on the dockside. The alarm had in fact sounded prematurely in the OR after one of the translators had left his toast in the microwave for several minutes!

As I was on call that night I missed the OR 'team visit' to the Thai restaurant but had an interesting chat with Tertius who told me about his current working pattern where he spends six weeks as a privately based plastic surgeon in East London, RSA, then two weeks doing cosmetic surgery for the Harley Medical Group in Ireland. He has to pay for his own travel costs and medical insurance but still makes enough money to make it possible for him to spend at least six weeks annually on board the '*Anastasis*'. He obviously has a very tolerant family. I decided to nickname him 'Robin Hood' as he could be described as 'robbing the rich to help the poor!'

25th Nov.

Fig 7. Morning joggers

6am jog with Dr Tim and Ghanaians Lawrence and Jeffrey (Fig 7). The latter had accompanied me back to the UK from Freetown last year to have an episode of chest pain investigated. This was required not only for his own health but also to renew his third engineers licence. Happily his coronary arteriogram, performed in London by a Basingstoke cardiologist colleague, was normal. Certainly his running ability was impressive unlike Dr Tim, who found the pace and the heat rather too severe, or mine as I managed to trip over a large brick on the pavement in the dark, fortunately only sustaining a bruised rib. That morning I anaesthetised 28-year-old Didier for Tertius (Fig 8).

A year previously a local surgeon had excised a lesion on the right side of his mouth but there was now much scarring and disfigurement.

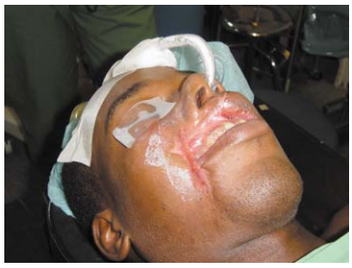

Fig 8. 28-year-old Didier pre-op

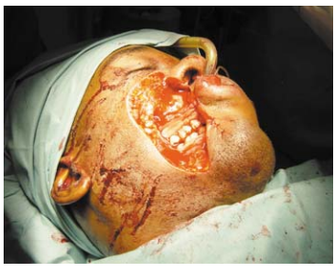

Fig 9. Didier per op

Tertius performed a radial free flap from his left forearm to his right cheek. I induced anaesthesia with fentanyl, propofol and atracurium and then controlled the blood pressure as appropriate with isoflurane, morphine and labetalol. I made sure that he was kept at nearly 38°C with a Bair hugger and fluid warmer. The nine hour operation went well (Fig 9). After insertion of CVP and A lines by Patrick he was transferred down the stairs to the HDU, a deck below. He was ventilated until the following afternoon.

Then I had to anaesthetise an 18-year-old boy with terrible neurofibromatosis for biopsy of a huge leg tumour which definitely looked and was subsequently shown to be malignant. Induction with 200mg of propofol had little effect, more had to be found from the drug fridge down the corridor – not very smooth anaesthesia!

Excellent talk at the evening community meeting by Pastor Forbes from the Gambia who is the current Segue (five months bible based training) teacher on board and also main speaker for a local pastor's conference.

26th Nov

Another jog, this time rather slower with similar aged and long term friend Johnny from RSA. Some interesting cases for Dr Tertius – children with congenital bent legs (Fig 10) – one with a tissue band between heel and buttock. Extreme pain post-op which was only controlled by the use of intramuscular ketamine 5mg/kg in recovery. Then it was back to theatre with Alexandre to have his necrotic free flap removed.

Anaesthetic colleague Dr Patrick and I differed slightly in how we performed various procedures like caudal anaesthesia – of course the epitaph to any UK consultant anaesthetist is 'I did it my way.' I had not closed the filler cap properly on the isoflurane vaporiser this went unnoticed until it was more than half empty in a relatively short time! It is perhaps good to do procedures for oneself which are usually done by skilled anaesthetic assistants in the UK.

27th Nov.

Didier's free flap was doing well, Tertius over the succeeding few days repeatedly made slashes in the graft to test the vascularity and encouraged the HDU nurses to rub the surface every 20 mins with gauze dipped in hepsal to promote venous decongestion (Fig 11) – bleeding is an important sign of viability but Didier did eventually need a blood transfusion when his haemoglobin fell to 6.5 .

In the morning my wife and I visited the local craft market where we haggled over various carvings and other *objets d'arts*. Then we were taken by friends to the Hotel du Lac 50m swimming pool where we met Mark with his family and Rachel, all from the UK who were the advance party for the Mission Challenge Team arriving the following evening.

Mercy Ships Mission Challenge brings groups of people from the UK out to Africa to take part in a building project, in this case an extension to a Maternity unit and to experience what life is all about for people in West Africa seeing at first hand the work being done on board the Anastasis. The two week programme seemed to have been well planned. People I know who have participated in Mission Challenge have found it a life changing experience.

Fig 12. Zemidjans - scooter taxis

Dr Tim and dentist Simon had an interesting time on zemidjans (scooter taxis) the most popular mode of public transport (Fig 12). Firstly after leaving the market on this rather dangerous, and definitely not recommended mode

of transport they were taken to the airport rather than the port! After rectifying the misunderstanding Simon nearly ended up under a large 4x4 when his driver swerved to avoid a pothole. They then decided to take a 45 min trip in a local 'beaten up' taxi, already filled with at least four other passengers and probably a few animals, to Ouidah – a former slave port – which stands as an impressive monument (Fig 13) to the hundreds of thousands of Africans who were forcibly removed from their homeland over several centuries. A poignant reminder of man's previous atrocities to his fellow man.

28th Nov.

7am run with my South African friend to the Hotel du Lac and then into a nearby village to locate a restaurant called 'The German Beer Garden' – it did not seem very enticing as it was situated on the beach and its prices stood in dramatic contrast to the average income of people living nearby in seemingly very impoverished conditions. Another 3hr church service complete with drums and several offerings during which one danced around the collection box before depositing one's donation. On-call so a quiet afternoon on board writing this report. The galley did not star this evening; tough beef and even harder boiled potatoes but dining with friends transformed our meal and then attended an excellent on board Advent service.

29th Nov.

Four hours of surgery and anaesthesia on Alexandre went well. He had a right pectoralis major flap to his chin, further surgery will include a scalping flap to reconstruct his upper lip in about two weeks time. He was ventilated overnight on HDU using infusions of morphine and midazolam for sedation. I was called to assess him just before midnight because his blood pressure was 80/48. His saturation was 100% on 30% O_2, CO_2 normal. Heart rate 90 but good urine output of 100ml/hr. His Hb on a Haemacue was eight, so we decided not to give him any blood at that time to avoid one of the volunteer crew donors being dragged out of their bed! On the basis of an excellent urine output and lack of response to fluid loading, I started dobutamine at 2.5ug/kg/min once the staff nurse had translated the instructions from German! It increased the systolic to over 90.

Next morning after the sedation was reduced he was taken off the ventilator (Fig 14).

30th Nov.

I gave a brief Powerpoint presentation at the early morning crew meeting of two promotional efforts which I had organised recently in the UK for the charity. Firstly a team of 20 runners (Fig 15) who all finished the Great North Run from Newcastle to South Shields, although not quite as fast as the winning Ethiopian who completed the half marathon in 59min 37sec. Secondly I showed some photos of the Mercy Ships float in the Lord Mayor of London's Show on Saturday November 13th (Fig 16).

Fig 15. Great North Run Team

Fig 16. Lord Mayor's Show Float

This consisted of an open top red London bus (AEC Regent) with the Beechcroft Chapel Choir on top singing gospel songs. Fifty former Mercy ships volunteers and other supporters, dressed in OR scrubs, some carrying billboards with before and after photos surrounded the bus. I also showed the 72 sec video clip of Lord Ian McColl being interviewed by the BBC presenter for this year's show sports commentator Claire Balding. The videoclip can be viewed on my website. (**www.africansmiles.com**)

Dinner at the Livingston Bar with the Grahams. Apparently the crew were not recommended to go there because of a very slight risk of a terrorist attack as it was popular with ex-pats, I'm not sure why as the service was slow and some of the food tepid.

1st Dec.

Dr Tertius told me that 30% of the 40 million population of RSA are now HIV+, what a terrible problem although more drug treatment is now available. It is against the law for private insurance companies to refuse to cover

the costs of HIV/AIDS treatment; this has led to a doubling of premiums.

We also discussed the issue of corruption in Africa; he said that the difference compared to Europe is that if you get away with it then it is OK! He also feels that ritual ceremonies like circumcision are tied up with demonic and cultish ideologies and are a real entrenched problem. Out to dinner with surgeon Gary and his wife Susan. Gary joined the ship in Mexico for a month in 1987 and he is still on board! When asked why, he will say that of the six billion people in the world nearly 25% have no access to modern medical care – no doctors, no nurses, no drugs, that is why he is doing what he is doing. Initially we went to the 'Three Musketeers' restaurant but it was very hot inside with no air conditioning and very high prices so we returned once more to the predictable and cool Bangkok Terrasse!

2nd Dec.

I had started doing most of the peribulbar eye blocks for Dr Tim. In one particular patient the pressure in the right eye was too high for him to safely remove the man's cataract. Two hours later he performed a similar injection beside his left eye which then developed the same problem. The man then said 'why is my right eye still numb' – so Tim operated (Fig 17) on the R eye whose pressure was now normal! Another of the eye cases had to be cancelled after the block had been inserted because she was too deaf to understand that she had to lie still. She was rescheduled for a month later under GA.

After the end of surgery I took Dr Alex, who had replaced Dr Patrick, to experience the haggling with the local vendors in the craft market. On the way back we stopped a taxi with a young lady passenger already inside. I tried to apologise to her in my best French for possibly taking her out of her way but the driver then said 'don't worry' she is my wife!

3rd Dec – our final day

At the regular Friday 7am Medical department meeting Tim said that he had had to cancel 17 patients scheduled for surgery during the past fortnight mainly because they did not have cataracts. A discussion took place how to prevent this happening in the future if an eye surgeon was not present at screening to select his own cases.

Dr Tim's final operation provided another challenge, the end 3mm of the phaco tip breaking off inside the eye. He eventually fished it out with a 27G needle just before it disappeared through the posterior capsule. My final day provided an unusual problem which occurred while trying to change one of the large 'H' size O_2 cylinders. The metal cap covering the valve was jammed (Fig 18) and while trying to lever it off with a spanner I accidentally released the O_2 valve inside! I then had to quickly remove the cap and close the O_2 valve in spite of the large amount of noise caused by he decompressing contents (Fig 19)!

Fig 18. Jammed 'H' cylinder cap

Fig 19. Cylinder crisis resolved

Took some photos of the damage to the ship's bow being repaired by a team of engineers from Ghana. Excellent barbecue on aft deck for supper because the dining room was reserved for a reception for the local medical community but the formal presentations were delayed because the Minister of Health arrived 1½ hours late. We arrived at the airport with three hours to spare before our flight was scheduled to depart. There were no problems except an American called Bonny whose luggage was 6kg overweight and had after much discussion to pay nearly £50. Unfortunately her travel documents did not state a weight allowance even though the rest of us were allowed 23kg, the official insisted that as she was flying to Amsterdam rather than London the allowance was only 20 kg.

4th Dec.

After an uneventful but sleep interrupted flight to Paris (took off 1am, dinner 3am, breakfast 5.45am, landed 6.40am) we just caught the connecting flight to Heathrow slightly anxious that our baggage might not be on the plane. But we need not have worried as when we left passport control, there were our cases going round the nearest carousel!

Epilogue

Another remarkable two weeks on board the vessel sometimes referred to as the 'Great White Ship of Hope' by those she serves in West Africa – whose name '*Anastasis*' is also Greek for 'resurrection'.
In President Don Stephens new book, '*Ships of Mercy*' scheduled to be released towards the end of 2005 to coincide with the commissioning of the latest vessel,