Training in Togo

(Lome 29-31 March)

Dr K D Thomson
MB BS, DRCOG, FRCA
Consultant
Obstetric Anaesthetist
Basingstoke and North Hampshire Hospitals Foundation Trust

Introduction

I took a team of nine to Lome (fig 1) to run a three day anaesthesia conference for 99 Togolese anaesthesia providers from 23 different hospitals. This consisted of six UK based anaesthetists (including three trainees) a neonatologist and two translators. One of the team, Steve had run a conference in Togo two years before with the Cardiff-based "Mothers of Africa" charity. Stephanie had translated at a previous conference I had organised in Cotonou and Matt had worked on board the Mercy Ship five times but the others had never been to West Africa before.

Fig 1. The team and delegates

The team

Dr Keith Thomson, Consultant Anaesthetist Basingstoke,
Dr Stephen Morris, Consultant Anaesthetist, Cardiff,
Dr Matt Walters, Consultant Anaesthetist, Derby,
Dr Greg Boden, Consultant Neonatologist, Reading,
Dr Rob Broomhead, SpR Anaesthetics, London,
Dr Shiny Shankar, SpR Anaesthetics, Basingstoke,
Dr Louise Young, CT2 Anaesthetics, Basingstoke,
Mrs Stephanie Bazin, translator,Ottawa, Canada,
Mrs Therese Prunet-Brewer, translator, Windsor.

Planning of the conference

Preparations began by email and phone four months in advance with Dr Kadjika Tomta, the head anaesthetist in Togo who was also the President's personal physician and a colonel in the army. At the first meeting with the organising committee, Dr Moussou Tabana and Mrs Aicha Bissang (President of ANTART – Association Nationale des Techniciens en Anesthesie du Togo) on board the *Africa Mercy* 12 days before the conference I was informed that the date had been advanced by a day. This was not a major problem apart from the t-shirts were printed with the original date and the team would not have a day for final preparation. The venue was to be the country's main teaching hospital CHU Tokoin. We agreed on the budget available for food and travel expenses for delegates (in Africa people usually have to be paid to attend a conference!)

The programme which had been arranged by Dr Tomta and myself (see **www.africansmiles.co.uk** under TOGO) consisted of seven 40 min presentations each morning and three parallel workshops in the afternoon followed by a quiz based on the topics covered that day.

Sponsorship

We wish to thank the AAGBI, the WFSA and the Shalimar Trust for contributing towards costs associated with the conference and travel. Accommodation, local transport and attendance certificates were generously provided by Mercy Ships (fig 2) under the supportive guidance of Keith Brinkman, Programs Administrator on the *Africa Mercy*. Special thanks must also go to our excellent translators, Stephanie and Therese. Their role was made slightly easier by Steve being able to deliver his presentations in French. I shall not forget his lecture on spinal anaesthesia when

Training in Togo
(Lome 29-31 March)

Fig 2. The team dockside

he mentioned using marcain and morphine 'sans preservatif'. This produced raucous laughter from the audience as the word 'preservatif' in French means 'condom!'

Fig 3. Roadside condom advert

Anaesthesia staffing in Togo

For the whole country of six million there are only six medically trained anaesthetists, three of whom are in the private sector, the other three work at CHU Tokoin. There are another five who work permanently in France. The hospital has 40 trained anaesthetic nurses out of only 100 for the whole country and provides the only training school for nurse anaesthetists, about 20 in each year of a three year course.

Teaching hospital visit by Keith and Matt

CHU Tokoin is the largest in the country. An unusual feature was the presence of motor bikes, owned by staff, parked and being ridden in the corridors (figs 4/4a). The hospital has eight operating theatres but, as is common in Africa, much of the workload consists of obstetric and general surgical emergencies and trauma.


Fig 4. Staff transport!


Fig 4a. Parked bikes

The emergency theatre has a very basic Boyles machine with a Mapleson A circuit attached to a back bar held together by dirty tape. A flow of 6L/min O_2 was from an H size O_2 cylinder, the refilling cost of which was $100. There were a limited number of 'disposable' plastic tracheal tubes and LMAs which were routinely re-used. A filter usually lasts one week but sometimes up to 2 months. Suction was available. We saw a hernia/varicocele repair on an adult male being performed under spinal anaesthesia with about 17 people in the theatre, the majority of whom were student anaesthetic nurses.

Monitors

Manual BP and the presence of the anaesthetic nurse were all they had available (fig 5). There was no ECG monitor, no capnography, no automatic BP measurement and no pulse oximetry. But I remember that was all I had when I started anaesthesia at the Royal Free Hospital over 30 years ago.

Drugs: ketamine, thiopentone, diazepam were available but the only muscle relaxant was pancuronium, but what was particularly worrying was the absence of neostigmine. There was halothane and a limited amount of isoflurane.


Fig 5. Minimal monitoring

Post-op analgesics consisted of NSAIDs, IV paracetamol and occasionally morphine for "very serious" cases. IV fluids consisted of normal saline, Ringer lactate, blood at $12/bag and plasma at $4/bag.

Maternity Department

There were five obstetricians and a number of trainees for 6000 deliveries per year with a 25% caesarean section rate. Up to ten caesareans (each patient has to pay $100) were performed daily with a13% mortality due mainly to very late presentation and lack of blood products. Oxytocin, ergometrine and misoprostol were all available. The maternal mortality was said to be 485 per 100,000 but this seems rather low as it is usually about 1000 in sub-Saharan Africa.

A spinal using 2ml heavy bupivacaine + 25mcg fentanyl was the preferred anaesthetic technique for caesarean section. Ephedrine was available and given in 6mg boluses as required. Left lateral tilt was performed with a bag under the right hip. Induction for GA was with thiopentone 4mg/kg but ketamine + diazepam is also used occasionally with Intubation facilitated by pancuronium (suxamethonium being unavailable). No volatile is used but further doses of thiopentone are given if the surgeon is slow. Fentanyl 100mcg is given after the baby is born.

Training in Togo *(Lome 29-31 March)*

Criteria for extubation, about one hour after a dose of pancuronium, included head raising, opening eyes, putting out tongue, regular ventilation at 20 breaths/min, and a strong grip. In one of the two maternity theatres a hysterectomy for post-partum haemorrhage had just been completed (fig 6) but the patient still looked partially paralysed with jerky abdominal respirations.


Fig 6. Post TAH

Each patient remains for 24 hours in the "reanimation ward" before going to the post delivery ward where they stay for five days before discharge unless 'complications' occur. There were about 25 women in the reanimation ward almost all of whom were lying flat on their backs.

Matt had arrived a week prior to the rest of the team with the idea that he and I could job share on board the *Africa Mercy* so one of us could work at CHU but the facilities there were so lacking that we decided there was too great a risk of a sick patient dying in our hands due to inadequate monitoring and lack of drugs and fluids, including blood.

Travel problems – Togo via Morocco!

Steve and Stephanie arrived on schedule but the main challenge to the success of the conference was provided by Air France. Five of the team had a journey which lasted 48 hours rather than the anticipated 12. First of all a baggage handling dispute at Heathrow delayed their arrival in Paris then very slow French security resulted in their arrival at the departure gate five minutes after it had closed. The half empty plane took off 30 minutes later, after their bags had been removed. An alternative arrangement resulted in a taxi journey to Orly airport to catch a Royal Air Maroc flight to Casablanca where they almost boarded a flight to Cotonou in Benin by mistake. After winning the battle to be given free overnight hotel accommodation they spent a frustrating but eventually successful day queuing at the airport for boarding cards for the evening flight which landed at Lome airport at 5.30 am on the first day of the conference. It should be noted that poor Louise had started her journey in a bad way, vomiting frequently on the way to Heathrow!

The Conference, Day 1

The opening ceremony was performed by Dr Tomta and a representative of the Ministry of Health. As the lectures were all on obstetric topics it was no problem for us three obstetric anaesthetists already present to give all the morning presentations (fig 7).


Fig 7. Morning presentation

After a morning's rest the team arrived just in time for the daily lunch of chicken and rice in a disused operating theatre which was at least cool (fig 8).


Fig 8 Lunch in theatre

The afternoon consisted of workshops on neo-natal resuscitation, maternal collapse and obstetric case history discussion. The previous day at a local church service, three of us had a practical reminder of the ABC when we had to resuscitate a pastor who fainted while translating the sermon. The last session was a quiz projected in PowerPoint. At past meetings the format has been for delegates to stand up if they thought the answer was true and remain sitting if false. In a room crowded with over a hundred people this became chaotic, so the response was changed to standing with hands on head for true (fig 9),or hands by the side for false.

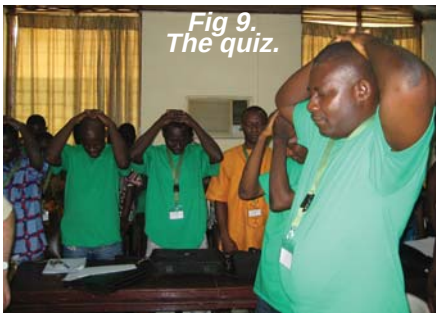
Fig 9. The quiz.

But delegates started looking at the most intelligent for guidance. This was prevented by making everyone close their eyes while questions were being translated into French.

Day 2

The presentations were on paediatrics and airways with workshops on neo natal resuscitation, paediatric resuscitation and airway management using a trainer head kindly lent by the Department of Anaesthesia in Basingstoke. All delegates were encouraged to wear their green t-shirts and group photos were taken at lunchtime (fig 10).

Fig 10 The team and banner

Comments by workshop leaders

1. Greg – 20 midwives attended the neonatal resus sessions, all of whom were eager to learn (fig 11) and then to practice their newly acquired skills.


Fig 11. Neonatal resus

Training in Togo *(Lome 29-31 March)*


Fig 12. Neonatal intubation

The anaesthetic officers showed excellent airway management (fig 12) but were hampered in their attempts at resuscitation by lack of suitable equipment – neonatal self inflating bags, appropriate sized masks + ET tubes and no umbilical catheters. We looked at using feeding tubes for umbilical access and I left a supply of neo-natal bags and masks.

– all delegates were hopefully convinced that routine suction was unnecessary – resuscitation drugs were available for use and we were able to work through guidance on using them for neonatal resuscitation whilst stressing that if drugs were necessary the outcome was often poor and therefore prolonged resuscitation with repeated doses of adrenaline was to be avoided

– we were able to discuss intra-osseous access before allowing candidates to practice on the mannequins. We demonstrated how spinal or large bore needles could be used as substitutes.

2. Steve – with the help of two intubating mannequins covered aspects of airway management including LMA insertion, laryngoscopy and the use of the bougie. Most of the delegates showed good manual dexterity and were able to explain what they were doing but there were a few whom Steve had serious concerns about them going back to their hospitals to work unsupervised.

3. Matt – was involved with maternal and paediatric resuscitation. His ALS-G videos were particularly well received. He promoted a structured ABC approach to resuscitation.

Matt also organised a survey of delegates which demonstrated that in 23 different hospitals only between eight and nineteen of a list of 21 anaesthetic drugs, said to be essential in a paper [1] published by anaesthetists in Benin, were available. He concluded that a supply of suxamethonium and neostigmine may reduce morbidity and mortality in Togolese hospitals. Matt also handed out questionnaires every day which gave feedback on relevance, clarity and difficulty of both individual presentations and workshops. The data obtained showed that presenters, workshop organisers and translators had done a good job.

Day 3

Presentations covered aspects of post-operative care with the final lecture given by Louise on management of head injuries. During her talk which was attended by Donovan Palmer, MD of the *Africa Mercy*, she showed MRI scans of cerebral haematomas and stressed the need for the wearing of helmets while riding motor cycles to be made compulsory (fig 13).


Fig 13. No helmets

The afternoon began with a lively 'question and answer session' (fig 14) followed by the quiz which was even more raucous than usual with eventually the two remaining contestants answering seven questions before there was a winner.


Fig 14. Q and A session

The closing ceremony began with a presentation to every delegate of an attendance certificate (fig 15), 20 USD for travelling expenses and a CD containing copies of all presentations. Dr Tomta and I then gave final speeches and the conference was closed.


Fig 15. Dr Moussou receives certificate

Learning Points

- Useful African experience for UK trainee anaesthetists
- Difficult to assess effect of conference
- The use of feedback forms
- Financing and organisation of the conference
- Challenging travel

The final 24 hours

The team enjoyed an excellent dinner at Le Triskell restaurant (fig 16) to which we also invited the two local organisers.


Fig 16. Le Triskell

They were very complimentary about how the conference had gone. The next morning we met some Togolese friends, who had agreed to act as our guides and guards in the market. They organised taxis at local African rates for our journey into town. Any trip by vehicle around Lome can be an adventure. Just being amongst the myriads of over laden motor cycles, bicycles and other vehicles jostling for position is an experience. We saw billboards advertising everything from banana flavoured condoms to 'Al Donald's' burger bar (fig 17).

Training in Togo *(Lome 29-31 March)*

Fig 17. Al Donald's

The market itself almost gave one sensory overload with a huge variety of stalls, a myriad of sounds and colours (fig 18) and women carrying staggeringly large and heavy loads on their heads (figs 19/19a).

Fig 18. Togo colours


Fig 19. Local bag sales woman

We also went into a multi storey building where women known as 'Nana Benz's' sold cloth. They were so named because some of them drove a Mercedes, the symbol of success.

After lunch back on the *Africa Mercy* the team relaxed for their final afternoon beside the 50 metres swimming pool at the best hotel in Lome the Sarakawa (fig 20).


Fig19a. The team bag handler!


Fig 20 50m pool at the Sarakawa

The 20 minute walk from the dock gate was only safe for large groups but the much nearer Seaman's Club had cheaper drinks and a musical duet (fig 21) who serenaded us using lyrics like '*my boney lies over the ocean*'.


Fig 21. Duet at the Seaman's Club

It is important to choose a team for a conference in Africa who not only work hard but also can relax together and have fun (figs 22-25).


Fig 22. Les girls


Fig 23. The 3 monkeys!

The return flights from Lome via Paris to London were uneventful – Casablanca did not feature on the agenda again!


Fig 24. Canadian test for sobriety!


Fig 25. GAT representative inTogo

Reference

1. Lokossou T, Zoumenou E, Chobli M *et al*. Anesthesia in French-speaking Sub-Saharan Africa: an overview. *Acta Anaesthesiologica Belgica*. 2007; **58**: 197-209.