OVERSEAS SPECIALIST SURGICAL
ASSOCIATION OF AUSTRALIA

ROYAL AUSTRALASIAN
COLLEGE OF SURGEONS

Overseas Specialist Surgical Association of Australia (OSSAA)

Plastic Surgical team visit

Baucau, Timor Leste

28 November – 5 December 2015

Introduction

This plastic surgical team visit to the Baucau Referral Hospital continues a recent tradition of regular visits to this area of Timor Leste at this time of year. Whilst no longer funded through the DFAT / AusAID pathway, the team has been able to coordinate the mission with the local, resident RACS staff in Dili. Thus, the appropriate pre-visit notifications and approvals were obtained ensuring an adequate patient load to continue the teaching of cleft and plastic surgical principles and techniques to our counterpart surgeon Dr Joao Ximenes.

The first day of the teams visit coincided with a significant public holiday in Timor Leste- this was anticipated and the initial assessment clinic shifted from its usual time on Saturday to the Sunday morning, otherwise the working week proceeded with its usual pattern.

Pre-visit screening visits to some of the remote regions in Timor Leste by Dr Joao Ximenes and Mr Sarmento Correia saw a significant number of cleft patients present from these faraway locales. The issues for these patients in accessing treatment will be addressed below.

With this visit, the team has now collected data on almost one thousand patients with cleft lip and/ or palate, performed nearly 900 cleft procedures, including over 700 cleft lip repairs.

Team Personnel

The OSSAA visiting team was comprised as follows :

Dr Mark Moore	Plastic and Craniofacial Surgeon WCH and RAH, Adelaide
Dr Brian Spain	Anaesthetist Royal Darwin Hospital, Darwin
Sr Margaret Maloney	Theatre Nurse RAH, Adelaide
Dr Patrick Coghlan	Plastic Surgical Registrar QEH, Adelaide

Participating Local Staff and Counterparts

Local counterparts contributing to the clinical and teaching activities of the team included :

Dr Joao Ximenes	Plastic surgical trainee / counterpart surgeon
Dr Angelo H da Silva Belo	Doctor / Anaesthetic trainee
Mr Joao de Jesus	Theatre nurse
Mr Tomas Pereira	Theatre nurse
Mr Baptista Antonia da Costa	Theatre nurse
Mr Helder Maria Pereira	Theatre nurse
Mr Armando Ximenes	Anaesthetic nurse
Mr Valerio da Costa Boavida	Anaesthetic nurse

Mr Sarmento Correia , RACS Coordinator who with Dr Joao Ximenes undertook the pre-visit screening trip to Viqueque, Uatolari and Uatocarbau to identify and plan for the travel and transfer of patients from these remote locations.
Ms Kate Moss, Monitoring and Evaluation Officer, RACS , based in Dili who with Mr Sarmento ensured all the appropriate paperwork with local health authorities and customs was completed.

Overview

This OSSAA Plastic Surgical team visit to Baucau occurred 1 year after our last visit to this location and some 4 months since the visit to HNGV, Dili. This our 42nd surgical mission to Timor Leste continues the recent trend of an annual visit to Baucau. Our activities were centred once again at the old hospital where we have been coming since 2000. The new hospital which has been a project in motion since 2007, nears completion and all going to plan will be the site of our work next year. The old hospital remains much as it has since our earliest visits, with little apparent upkeep and only routine maintenance being performed in advance of the new hospital's imminent opening.

Our arrival in Dili on Saturday 28 November coincided with a major national holiday – the 40th anniversary of Fretilin forming an independent East Timor, and the 500th anniversary of Portuguese arrival in Timor. With these celebrations in full swing the team had previously arranged for our usual Saturday assessment clinic to be transferred to the following day. After briefly stopping at HNGV in Dili to meet Dr Joao and see 2 patients, we were able to travel onwards to Baucau. Several minor diversions were necessary to bypass the various celebrations in Manatuto and Lalaeia, but the drive was otherwise leisurely.

An outpatient assessment clinic was planned for early Sunday morning. On arrival a good number of patients were being registered

by Mr Sarmento. Most had been recruited on a pre-visit screening trip to the more remote south and eastern points of Timor by Sarmento and Dr Joao several weeks before. Some of these villages are 6-8 hours by road from Baucau, and the patients from these areas are among the poorest and most underprivileged in the country.

Some 30 patients were seen at the outpatients on Sunday, the majority of these having cleft lip and palate deformities. Over succeeding days a further 15 cases were assessed and surgical lists constructed for the first 4 days of operating. With those patients coming from such remote locations, and who may not have anywhere local to stay, every effort was made to place these patients on surgical lists early in the week.

From the total of 48 patients seen we were able to operate on some 34 cases – only about 3 were waitlisted or deferred because of other health issues (fevers, chest infections etc). There were 29 primary cleft procedures and one cleft lip revision performed during the 4.5 days of surgery. All were admitted the day prior to surgery, and remained as inpatients for 2 days before discharge. Most were housed in the general surgical ward, with some of the smaller children in the paediatric medical ward when the surgical ward was over capacity.

At the completion of this week our teams have now assessed well over 900 cleft cases in Timor Leste since the year 2000. Some 881 cleft procedures have been performed, with 779 of these being primary repairs. This major achievement in terms of both the improved quality of life for the individual patients treated, and the measurable financial return to the larger community by correcting the deformities and improving function, is increasingly being complemented by the training of, and expertise Dr Joao Ximenes demonstrates in performing cleft repairs. On this visit we were able to facilitate his first bilateral cleft lip and first cleft palate repair, this after he has very expertly performed many unilateral cleft lip repairs during previous visits. His challenge remains to continue this surgery during the times our team is not present to support, and also that he undertakes the surgery and not as has been reported a Cuban surgeon on a 2 year contract in Dili without any involvement of Dr Joao. He must also be assisted by his Timorese anaesthetic

colleague Dr Flavio, and the local nurses so that all aspects necessary to provide the best operating conditions are in place. Post-operative management of the cleft cases was again overseen by Dr Joao, with most cases discharged on the first or second post-operative day. This was possible even for those patients which presented from the most remote districts. Basic advice is provided to them by Dr Joao – this being a general recommendation to massage and soften the scar using readily available agents such as coconut oil.

Among the cases returning for review were a number of recently repaired cleft lips, ready for cleft palate repair, close to an age appropriate time. The excellent healing of most of these cases was dramatically emphasized with the review of an 11 month old boy with bilateral cleft lip and palate, who had undergone cleft lip repair in Dili on our August visit. His scar was almost imperceptible visually and by palpation, at 4 months after surgery, and despite his having had no specific aftercare other than what is detailed above. Unfortunately he had a chest infection and his palate repair was deferred till our next visit in 2016.

The challenges inherent in delivery of cleft care to this remote region was graphically demonstrated by the story of one young 6 year old girl with a unilateral cleft lip from the Uatocarbau area. Her father is a buffalo herder, and in order for him to bring his daughter to Baucau for surgery arrangements have to be put in place to look after the buffalo in his absence. As a subsistence farmer, he then has to have the funds to travel the 6-8 hours by bus, ideally arriving on the right day and time for the assessment clinic. If they present late, the operative times early in the week may already have been allocated. While every effort is made to place such a case early in the week sometimes this is just not possible and they must find family to stay with, or failing that sleep on the grounds of the hospital or wherever they can. The 30- 45 minute operation is followed by a 1-2 day hospital stay, before the 6- 8 hour return bus trip to village life. The success of the whole process requires all the “ducks to line up “

The local theatre staff were actively involved throughout the week in assisting the team. Whilst the most senior and long-standing staff were away, those remaining made every effort to facilitate our work.

Mr Anselmo , a nurse anaesthetist trained in Dili in the programme which Dr Spain was involved with, was present through most of the week. Dr Angelo, a young Timorese doctor with an interest in training in anaesthetics was also availing himself of the educational opportunities provided by working with Dr Spain. The high throughput achieved on this visit was largely attributable to the ease with which Sr Margaret was able to set up the cleaning and sterilising of instruments by the local staff – she successfully encouraged and cajoled them into a very efficient team , whilst also acting as a highly proficient recovery nurse. Local staff still see little role or need for formal recovery of anaesthetised patients..!!

Prior to the team's departure for Dili, we were very starkly confronted with the realities of healthcare in the developing world. As we finished our last case, Dr Spain was consulted about a young woman aged 19 years dying in the maternity ward after giving birth to a child earlier in the morning. Assisting the Cuban medical staff who were principally responsible for her care, all were at a loss to explain the exact cause of her deteriorating condition – possibly intracerebral bleed, or unknown underlying cardiac condition, all available options had been exhausted and she was likely to die quickly. In the immediately adjacent bed as the young women lay dying, a middle aged women gave birth – initially seemingly at least one happy outcome. A passing midwife tending to the newborn child motioned us across to see the child – revealing an infant with a severe midline cleft lip, hypotelorism / holoprosencephaly and likely associated with a poor developmental outcome and early death. In this short 10 – 15 minute window as these events unfolded we saw the consequences of the challenges and failings still present within this developing world environment – a 19 year old without access to the basics of antenatal care which may have identified and predicted / prevented her life threatening issues earlier in pregnancy, and the older lady giving birth to a child with a major deformity linked to advancing parental age, who with appropriate family planning advice may not have been having yet another child. Despite all the clefts and burns our team has treated, and the lives subsequently changed, the issues of poverty and lack of access to the most rudimentary primary health care remain a challenge for Timor Leste.

Summary of Clinical Activities

1. Screening

The pre-screening and arrangements to retrieve patients from particularly remote districts was expertly facilitated by Sarmento and Dr Joao. With most people in Timor now having or being able to access mobile phones communications to these areas is much improved. There was on this occasion almost exclusive focus on cleft lip and palate which suited the teaching aspects of these visits.

A small number of patients were unwell and waitlisted for the next visit, as well as a number who after there lip repairs need to be seen in 2016 for palate repair.

2. Surgery

The major achievement of this visit was to have Dr Joao perform both his first bilateral cleft lip and his first full cleft palate repair. He continues to demonstrate a finesse with his cleft surgery, and just needs to have the backing and support of his own anaesthetic, surgical and theatre nursing colleagues and community so that he is performing this surgery on a regular basis.

Comments about the work practices of the local Baucau theatre nursing staff and the running of the theatre complex are included in the accompanying nursing report. With some encouragement of local staff we were able to achieve rapid patient turnover in and out of the operating theatre, which made up for some of the limitations in the theatre complex.

3. Post-operative care

All cleft cases were managed in the surgical ward, which is standard policy here in Baucau. Due to some crowding in this ward several of the younger clefts were admitted pre-operatively to the paediatric medical ward. Dr Joao in consultation with his Timorese General

Surgical colleague Dr Evangelino oversaw the early post-operative care, discharge of patients and advice regarding scar management. One patient with lower limb burn scar contracture release was hospitalised for a longer period whilst her skin graft and flap repairs healed.

As is often the case with patients presenting from such underprivileged circumstances, several had intercurrent chest infections necessitating deferral to our next visit

Summary of Training Activities.

1. **Informal training**

a. Outpatient clinic

The assessment clinic at the weeks beginning remains the ideal opportunity to discuss the clinical aspects of the cases with Dr Joao, including the anaesthetic considerations.

b. Operating theatre

Since our last visit in August unfortunately Dr Joao has not had opportunities to treat further clefts – it seems several have been done by the Cuban maxillofacial surgeon in Dili, without involving Dr Joao! This seems counterproductive to the long term goal of having clefts treated locally by well trained Timorese surgeons. Despite this, on this visit he was able to progress to completing a bilateral cleft lip repair, as well as virtually all elements of a cleft palate repair. It is hoped that he can consolidate these gains by performing further cleft repairs before our first visit in 2016.

Dr Spain had the opportunity to work with Anselmo, anaesthetic nurse who had gone through the RACS sponsored training course some years ago, and also with Dr Angelo , a young Timorese doctor with an interest in anaesthesia.

Nursing teaching and training was somewhat difficult and is detailed in the accompanying nursing report. Each day the team had a

different local theatre scrub nurse, making it a challenge to convey advice regarding nursing techniques. Despite this the staff were reliable and reasonably focussed when present in theatre. As is the case in Dili, post-operative recovery remains a poorly understood and much underappreciated concept.

2. **Formal training**

Working as the team was in Baucau, no real opportunities for formal lectures / teaching were possible.

Equipment and Supplies

In advance of the visit our team was warned of potential shortages in Baucau of drugs, intravenous fluids and surgical supplies. The team accordingly came well prepared and effectively self–sufficient for anaesthetic drugs and surgical consumables. The theatre complex was in fact reasonably well resourced on this occasion similar to as has been the case with previous visits.

As on previous visits, those consumables which could be safely left with our local counterparts were. This included fine plastic surgical sutures and skin graft blades- the latter which are chronically in short supply and often get multiply re-used.

Visit Organisation

The team wishes to once again compliment the RACS staff in Dili, particularly Mr Sarmento Correia and Ms Kate Moss for their assistance with pre-visit preparation, planning and communication with the various Timorese health facilities and authorities. This set the scene for a very successful surgical mission.

Once again there were no issues with travel arrangements, excess baggage approvals or passage through Timorese customs.

Recommendations

The ongoing requirement is for Dr Joao Ximenes to actively perform elective cleft lip and palate surgery in Dili on a regular basis during the periods when our team is absent. Whilst he is active in acute burn management throughout the year, it appears there is not the impetus, nor support for him to be undertaking cleft repairs on his own. If resident Cuban surgeons in Dili are performing cleft surgery without involving Dr Joao, as has been reported this should be discouraged, as it is not helping his surgical development.

Our team will continue to provide twice yearly surgical missions in support of Dr Joao X ongoing training – these being arranged in consultation with both Joao and the resident RACS team. We also hope to provide short term training visits (2 weeks) for two theatre nurse to Adelaide in 2016 in support of the ongoing upskilling of operating theatre staff – this to be centred at the Royal Adelaide Hospital and directed by Sr Joy Booth and Sr Margaret Maloney.

Acknowledgements

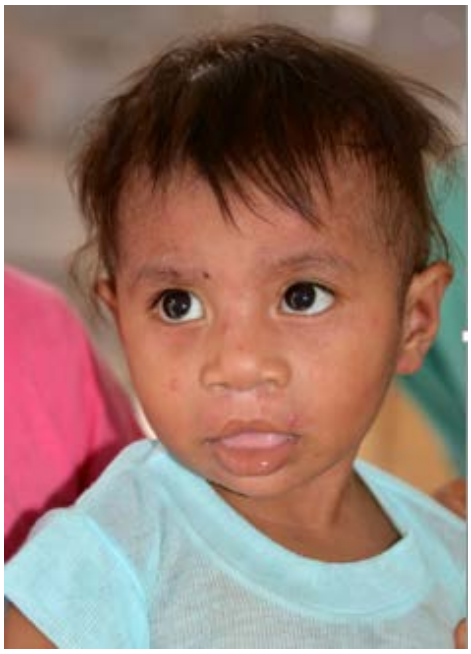
The staff of the RACS office in Dili and the medical and nursing staff of the Baucau Referral Hospital in facilitating our teams visit.

The various surgical and anaesthetic supply companies, and public and private hospitals in Australia who have directly and indirectly support our activities in Timor Leste over so many years.

The airlines Qantas and Air North who have consistently assisted our missions by the provision of excess baggage allowances.

Summary of Clinical Activities 29 Nov – 4 Dec 2015

Total Patient Consultations		**48**
	Initial	**36**
	Review	**12**
Total Surgical Procedures		**34**
	Cleft Lip	**25**
	Cleft Palate	**5**
	Burns / contractures	**1**
	Lesions / others	**3**

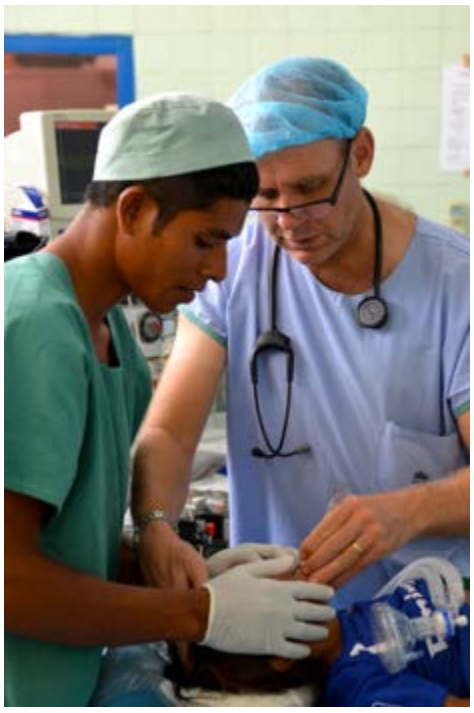



Bilateral cleft lip repaired in Dili during August 2015 visit, presenting for review and possible cleft palate repair 4 months later.

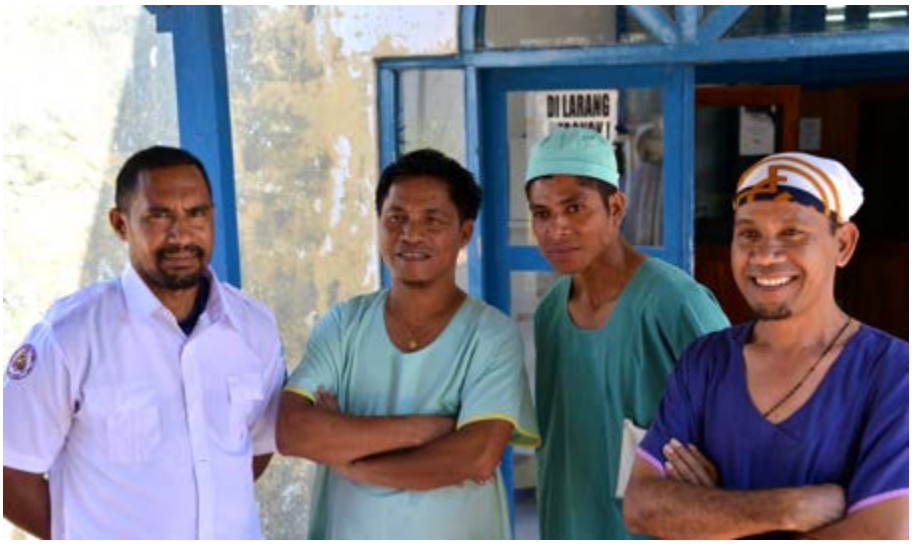
9 year old with left incomplete cleft lip, at completion of repair by Dr Joao, and one day after surgery eating breakfast.

Baucau Referral Hospital (above) – old hospital

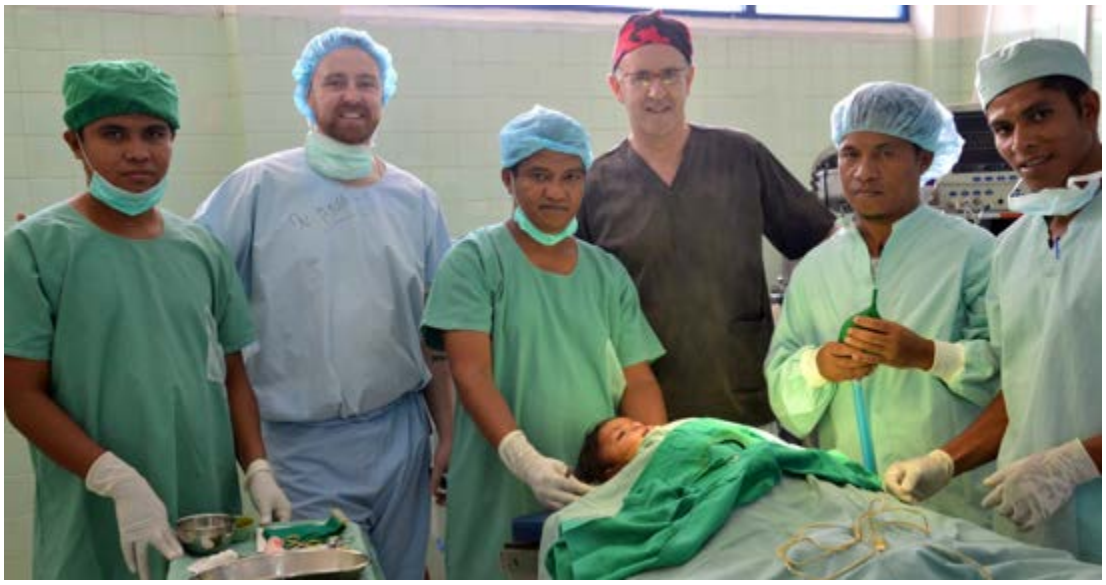
New Baucau Hospital – planned opening in 2016



Dr Brian Spain teaching Dr Angelo anaesthetic techniques



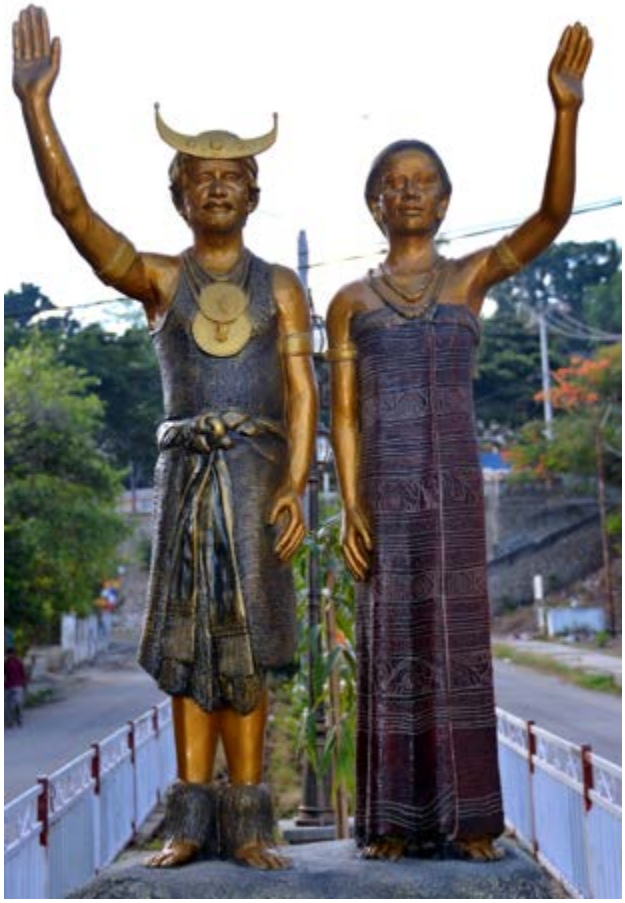
Operating room theatre staff at Baucau Referral Hospital



Dr Joao Ximenes and the surgical team after completing cleft lip repair

Map of eastern regions of Timor Leste, showing the remote locations from where patients arrived.

Longstanding statues outside the Pousada de Baucau recently renovated and painted in traditional clothing.



Nursing Report – Margaret Maloney

Baucau East Timor 28th November – 4th December 2015

After a brief stopover in Dili the OSSAA team drove to Baucau on the rugged and windy road. Saturday being a holiday the team had a day to explore Baucau and prepare for the week ahead.
Sunday the team proceeded to the hospital where Sarmento had organised the patients for consultation by Dr Joao, Mark Moore and Brian Spain.
It was well organised and the patients attended to promptly.

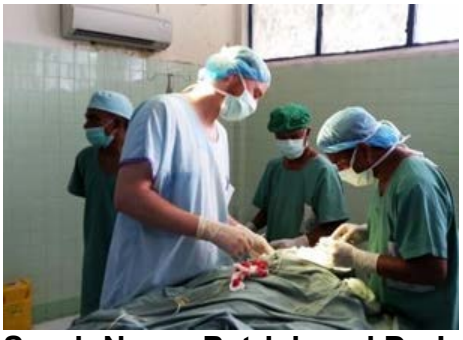
33 patients were placed on the operating list for the week, mainly cleft lips and some palates with one burn injury.

We reported to the hospital on the Monday at 0800 to set up and assess equipment and staff available. It was pleasing to see that most of the staff was already present and enthusiastic to start. There was some delay starting the operating list with some staff starting later and the team sorting out equipment needed for the day's list. Dr Patrick Coghlan was invaluable in fulfilling any role required. He made an excellent scrub nurse when the scrub nurse had not yet arrived. He transferred all the patients to the recovery area with care and efficiency.

Dr Joao Ximenes was as always extremely valuable with his assistance with translating with the local staff, dealing with all aspects of ward staff communication and contributing in the efficient running of the operating lists.
Dr Joao operated on many of the patients under the guidance of Dr Mark Moore. But it is very evident that Dr Joao has developed his surgical skills and very confident in his role.

Baucau hospital appears to be under resourced and lacking in many basic supplies. Fortunately the OSSAA team came well prepared. The theatre provided for the OSSAA team was satisfactory and of a reasonable size. There was a functioning air conditioner but it still became quite warm and humid by mid-morning making the wearing of surgical gowns not an option.

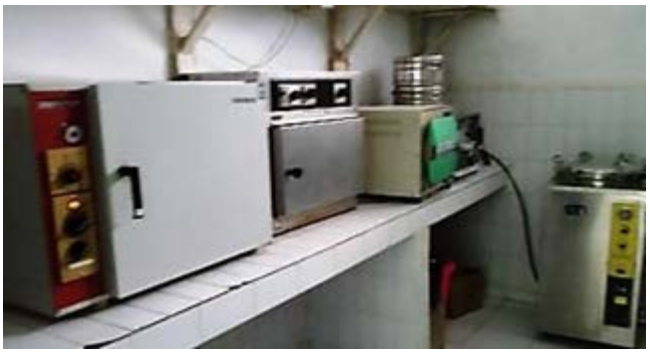
During the week it appeared that a different scrub nurse was allocated to assist which meant each day there was a slight delay as they became familiar with the surgical routine.
Instruments were washed and prepared for sterilisation fairly quickly with only the occasional reminder. The area used for washing the instruments was also used as the scrub sink an interesting combination.



Scrub Nurse Patrick and Dr Joao

It is worth noting that while there are many sterilisers one in particular is very hot and will melt the plastic instrument trays. This was avoided by transferring Dr Moore's instruments into Metal receivers.

Scrub sink/ Cleaning sink



Sterilising room.

Patient turn over time was very impressive so minimal time was lost and the list proceeded well and efficiently.

Brain Spain was assisted by Nurse Anaesthetists and of particular note was Angelo da Silva Balo who has just started to learn this role but was very enthusiastic and keen to learn during the OSSAA visit.

The recovery area was within the theatre complex area but a little distance away from the Operating theatre. It does not seem to be a high priority and staff are keener to be in theatre than recovering the patient. Oxygen and suction were available via cylinder and pulse oximeter provided by OSSAA. There does not appear to be much in the way of oximetry in theatre and the only pulse oximeter available was large and on a trolley. There was a small Nellcor pulse oximeter available in the draw of the resus trolley but it was not functioning.
It was left up to the OSSAA nurse to provide all the recovery but assistance was available if required. The area was kept quite cool with a functioning air conditioner so comfortable for both patients and staff.

The patient's parents were called into the recovery area once they were awake and ready for transfer to their respective wards.
The next patient and a parent were also waiting in the recovery room allowing a quick and efficient change over time.

This was a very successful and satisfying trip. All team members worked in harmony as did the Baucau hospital staff and they are all to be commended. The lists ran smoothly with minimal down time. There were no power shortages or lack of oxygen which did occur in Dili last trip.

As mentioned the hospital lacks basic supplies so it is important to bring all equipment and supplies required for the list. In particular wraps for the surgical trays were never enough to go round. It was valuable having Dr Coghlan as he filled the gap many a time and his assistance was greatly valued.

There does appear to be an opportunity for future education for the nursing staff in the areas of handling sharps and handling of instrumentation. There is no implementation of a local version of the WHO surgical checklist as seen in Dili. Hopefully this can be addressed in future visits.
Recovery education would also be very valuable.

I would like to thank all the nursing staff, nursing assistants and cleaning staff for their enthusiastic support without which the trip would not have been so successful.
In particular I would like to thank Joao (John) De Jesus Teater who was the acting in charge nurse who could not have been more helpful and supportive.