Overseas Specialist Surgical Association of Australia (OSSAA)

Plastic Surgical team visit

Dili, Timor Leste

17-24 September , 2016

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Plastic and Craniofacial Surgeon

INTRODUCTION

Commencing in early 2000 our teams have provided a continuous, consistent volunteer plastic and reconstructive surgical service to Timor Leste. Whilst the early years focussed on clinical service delivery, the latter period has seen an increasing attention to teaching and capacity building. With changes to funding support from the Australian Government about 2 years ago, our work is now solely financially supported by charitable donations through OSSAA, although administrative assistance is still generously provided by the RACS staff in Dili.

With our long term focus on the management of cleft lip and palate, and burns / burn contractures, our local counterparts have in recent years undertaken screening assessments pre-visit to ensure appropriate triage of patients and the most efficient utilisation of the team's skills for both service delivery and clinically based teaching.

The team also took the opportunity of this visit to bid farewell to one of our long term counterparts Sr Susan Gubbins, a Maryknoll Sister based in Aileu for 25 years who first worked with Dr John Hargrave in the early 1990s.

TEAM PERSONNEL

The OSSAA team comprised as follows:

Dr Mark Moore	Plastic and Craniofacial Surgeon Women's and Children's Hospital and Royal Adelaide Hospital.
Dr Phil Blum	Anaesthetist, Royal Darwin Hospital
Sr Joy Booth	Theatre Nurse / Educator, Royal Adelaide Hospital

PARTICIPATING LOCAL STAFF AND COUNTERPARTS

Local counterparts involved with the teams clinical and teaching activities included :

Dr Joao Ximenes Plastic surgical trainee / counterpart , HNGV

Dr Jonatas Maria dos Reis Madeira Anaesthetic trainee , HNGV

Dr Maria Jose Anunciacao da Piedade Anaesthetic trainee, HNGV

Dr Helena Soares da Silva Anaesthetic trainee, HNGV

Dr Fernanda Margareta da Silva Anaesthetic trainee, HNGV

Mr Cornelio M Mok Freitas Theatre nurse, HNGV

Ms Kei Francelina Viera Volunteer theatre nurse, HNGV

The team once again relied heavily on the support and staff of the RACS office and team based in HNGV, Dili – including

Ms Kate Moss

Mr Sarmento Correia Faus

Dr Eric Vreede

OVERVIEW

Our teams visit to HNGV in Dili represents the 43rd volunteer plastic and reconstructive surgical mission to Timor Leste since early 2000.

Pre-visit planning and liason was facilitated by communication with the RACS office based at the hospital in Dili. After confirmation of the visit timing arrangements were made via Ms Kate Moss, RACS team leader in Dili and Mr Sarmento Correia for outreach screening visits. These were performed by Dr Joao Ximenes and Mr Sarmento to the Maliana and the western regions approximately one month prior to our visit.

This ensured that a very manageable 53 patients presented for formal review at our screening outpatient clinic on the Saturday morning after our arrival. Most patients were clinically appropriate to the skill set of our team. There were a further 14 cases seen in Aileu on the Sunday – these being a more diverse group of diagnoses, with a number more appropriately reviewed by orthopaedic or general surgeons. One further case of cleft lip and palate presented later in the week from Iliomar, having heard from a relative working in the hospital of our presence. By weeks end we had assessed 68 patients, from which a surgical list of 40 cases was prepared – 2 cleft patients with cardiac complaints were subsequently deferred after paediatric assessment, and on older patient failed to attend on her nominated day of surgery.

Cleft lip and palate remained the predominant diagnosis in the patients assessed. 41 cleft patients were reviewed ,of which 29 were new. Of the 12 review cases six were returning after previous cleft lip repair to have their cleft palates treated. One infant with a wide unilateral cleft lip and palate was too young and small for treatment on this visit and was waitlisted for the next team. One other child seen in Aileu with a previously repaired cleft lip was similarly waitlisted, due to shortage of operating time. Overall however the balance between number of cases referred and operating time available was successfully achieved, and no case was unnecessarily denied treatment.

The cleft child from Iliomar mentioned above is an interesting example of the challenges in providing and accessing treatment in this world still. Having received notification of the potential for treatment from family members working in the hospital, the family then have to make the 12hour or more bus trip to reach Dili. For the three adults accompanying the child the total bus fare is US$39 one way – for a family in a subsistence living situation the total cost of US$78 represents a major financial obstacle, and reason enough to ensure surgery on this visit.

Some 31 cleft surgical procedures were possible on this visit. The incomplete unilateral cleft lip repairs were performed almost exclusively by Dr Joao Ximenes, whose early surgical outcomes are the equal of any number of first world cleft surgeons. Anaesthesia for these cases was provided by the team's anaesthetist Dr Phil Blum in concert with 3-4 local Timorese anaesthetic trainees- these cases providing an excellent exposure to paediatric anaesthesia. Two local theatre nurses Mr Mok (his third time working with our team) and Miss Kei provided dedicated scrub nurse assistance for the team throughout the week, staying much later than required and performing their duties with the utmost expertise. At the end of the week Kei, who was a volunteer nurse, received formal confirmation of employment in the operating theatre complex – just recognition of her skills.

Dr Joao continued as on previous visits to assume responsibility for pre- and post-operative management of the cleft cases – there were no specific concerns in this area. A number of our cleft lip cases from this visit will be waitlisted for upcoming missions in 2017.

At the completion of this trip our teams have now completed 912 cleft surgical procedures since 2000. Of these 810 are repairs on child who have not previously had surgery – primary repairs. Reviewing the operating theatre record in Dili, it is apparent that the Cuban oral and maxillofacial surgeon resident in Dili has performed 10-12 cleft cases this year – in conversation with Dr Joao, it appears none have been done with him in attendance / assisting / operating. This represents a great waste in terms of teaching and upskilling of Timorese surgeons !!

A small number of burn contractures were presented for assessment – Dr Joao treats all the acute burns in HNGV. One such case of an epileptic adult male from Aileu had sustained deep burns to his face, hand and other areas earlier in 2016. His face had been successfully split skin grafted , but he had persisting exposure of his right eye resulting in early scarring of the cornea. He underwent release and full thickness grafting of the eyelids under general anaesthetic late in the week. Upon our return to Australia we sadly learned of his death in the hospital some 24-36 hours after surgery – the circumstances of his death are being investigated, but have not yet been detailed to us.

Our day in Aileu was both interesting and challenging, but also tinged with some sadness at seeing Sr Susan there in Aileu for the last time. The road to and from Aileu proved exciting as the rain started. The major road constructions which have commenced left the road somewhat treacherous , with even our four wheel drive vehicle slipping and sliding as we descended into Dili through the mist and rain. The clinic in Aileu was overseen by Doroteia , a local nurse / clinic organiser trained by the sisters in Aileu and who now runs the antenatal , TB and other health services in the area. Doroteia accompanied a patient to Adelaide many years ago to have treatment from our OSSAA team, and it is wonderful to see her now in charge of the clinic. Finally farewelling Sr Susan was somewhat sad – she has been in Timor Leste for 25 years, and before that 16 years in Indonesia. I have know her since 1999, and John Hargrave worked with her for some years prior to that. She has championed the cause of the Timorese for much of this time, and was key to helping us establish our team as the ongoing provider of plastic surgical services to Timor Leste as it emerged as a new nation. Her great sense of humour, compassion and commitment will be missed by us all – her legacy however lives on in the shape of the clinic in Aileu, as well as in people like Doroteia who now run it. Sr Susan leaves for good in December, returning to her order’s home in upstate New York.

SUMMARY OF CLINICAL ACTIVITIES

1. Screening

Screening of patients was, as has become the routine planned and overseen by Dr Joao X and Mr Sarmento – these patients were largely derived from a pre-visit triaging process. The smaller group of patients assessed in Aileu were collected by the staff there and comprised several old patients for long term review. The triaging here was not perhaps as accurate – a number of the cases were not really within our field of expertise.

Almost all cases suitable for surgery were treated on this trip, with few waitlisted for other than clinical reasons.

2. Surgery

The surgical environment in HNGV remains much unchanged, other than our learning that Dr Joao Pedro , general surgeon and long term supporter of our team and our work , has recently left for Vanuatu. It is to be hoped he is not lost to the Timorese surgical workforce for too long.

The team was well supported at all levels on this occasion . Dr Joao X was present with us all week, and performed most of the unilateral cleft lip repairs , whilst assisting with the more severe bilateral cleft lip and wide cleft palate procedures. Anaesthetic support in the form of the four local candidates for the anaesthetic diploma course meant Dr Phil Blum had trainees with him throughout the day, assisting with almost all cases. Finally the two young local theatre nurses were outstanding in their commitment to working with our team, and gained a lot from their time with Sr Joy Booth.

3. Post-operative care

Post-operative management of the cleft cases was uneventful – all spent only 1-2 days in the female or male surgical ward, with the care and discharge process being overseen by Dr Joao X.

The situation in regard to the epileptic patient with a facial burn skin grafting who died 24- 36 hours after surgery whilst still an inpatient is still being investigated.

SUMMARY OF TRAINING ACTIVITIES

1. Informal training

a. Outpatient clinic

The outpatient assessment clinic remains at the centre of the clinical evaluation of cleft and burn patients, reinforcing with Dr Joao X the pathways and timing of management in these specific conditions.

Once again Alotu, the local Timorese speech pathologist attended the clinic , and it was possible to work with her in identifying cleft cases she could be involved with in the management of both feeding and speech issues.

b. Operating theatre

As has been the standard for such visits in the past the operating theatre is central to the ongoing teaching of Dr Joao X cleft and burn surgery. To date he has performed, as primary surgeon more than 100 cleft repairs – mostly incomplete unilateral clefts.

Anaesthetic training was possible for the four local medical trainees in the diploma course in anaesthetics – this is detailed in the attached report from Dr Phil Blum.

Similarly the training of the theatre nurses is explored in greater detail in the accompanying report from Joy Booth.

2. Formal training

With the heavy clinical workload on this visit, there was not sufficient time to participate in any formal teaching.

EQUIPMENT AND SUPPLIES

In advance of our visit, we were warned of supply shortages in a number of areas both in the operating theatre and the wards. We made an effort to bring the requested supplies and have provided these to the medical and nursing staff in the theatre complex. Our team was otherwise self sufficient in terms of our equipment and consumables.

The transport of this equipment into Timor Leste was facilitated by documentation from the Timorese health authorities, ensuring uncomplicated passage through the airport customs area.

VISIT ORGANISATION

All the pre-visit organisation was facilitated by the RACS team staff in Dili – in particular Ms Kate Moss, the acting RACS team leader and Mr Sarmento Correia , the RACS local coordinator. They organised pre – screening of patients, airport visa arrangements, airline baggage waivers,and all the team accommodation , and in country travel arrangements.

RECOMMENDATIONS

That Dr Joao X does now attempt to perform as many cleft cases as he can without our team being present. There are now anaesthetic staff and nursing theatre staff well versed in the team based care needed for proper cleft surgery. The few cleft cases that the Cuban oral and maxillofacial surgeon has been doing, are those that should be managed by Dr Joao.

A cleft database of newborn cleft cases should be established – ideally overseen by Dr Joao X, and possibly managed through the RACS office. We have the resources to assist in setting this up. There is the opportunity to develop a national registry for cleft lip and palate, with the availability of database software from a colleague in Australia.

ACKNOWLEDGEMENTS

As with all trips the success of our teams work is very much attributed to the support we receive from the RACS staff in Dili.

Similarly the staff of the theatres and wards of HNGV, Dili were crucial to the delivery of our team’s services.

Finally Qantas and Air North for their baggage waivers, and the various medical supply companies who assist with consumables and surgical supplies.

SUMMARY OF CLINICAL ACTIVITIES – PLASTIC SURGERY

TOTAL PATIENT CONSULTATIONS		**68**
CLEFT LIP/PALATE	**41**	
New	**29**	
Review	**12**	
BURN	**8**	
TOTAL SURGICAL PROCEDURES		**37**
CLEFT LIP	**24**	
CLEFT PALATE	**7**	
BURNS / CONTRACTURES	**5**	
SCAR REVISION	**1**	

ANAESTHETIC REPORT

Providing anaesthesia and teaching for the week, as always, was challenging and rewarding. 18 infants under 10kg were anaesthetised safely. On this mission, four local anaesthetic trainees were near completing their 18 month Diploma of Anaesthesia at HNGV. Maria, Helena, Fernanda and Jonatas were very enthusiastic and skilled. The case load of predominantly small children presented a learning opportunity that they keenly embraced. There was one or two trainees present all day for the whole week. The days were long, often finishing after 6pm, but the trainees were keen to stay until the list finished. One of them was actually on maternity leave and heavily pregnant but still came to work and spent a day and a half in theatre with us. They refined their advanced paediatric airway skills and intubated all the infants and children under supervision.

Before the mission a list of short answer questions about paediatric cleft lip and palate repair was prepared and forwarded to them. During the week the answers to these questions were reviewed as part of their preparation for their final exams in November. It was encouraging to see the widespread use of the WHO surgical safety checklist. The checklist was performed by local staff on all patients operated on by the team.

NURSING REPORT

Introduction

A total of 37 surgical cases were undertaken by the OSSAA team during the week September 19 - 24 at the Hospital National Guido Valderes Dili East Timor. Local nursing staff were allocated to the team to undertake the role of instrument /circulating and recovery for the duration of the teams visit.

Observations

Unlike previous visits where a rotational nursing staff roster was implemented this trip had two local staff members allocated to the team for the duration of the week, Mr Cornelio M Freitas (Mok) and Miss Kei Francelina Vieira. Mok had specifically asked to be allocated to the team and when questioned about his request he responded that working with visiting teams was the best way to improve practice and learn correct techniques. Mok had worked with the team in 2015 whilst Kei was a volunteer nurse on unpaid work experience. The consistent allocation of the same two staff each day supported the development of strong collegial working relationships and focused practice improvement. A highlight was the commitment displayed to patients and the visiting team by Mok and Kei who volunteered to remain after their rostered finish time and have a shortened lunch break to help complete the surgical list.

Throughout the week opportunistic education was undertaken in response to direct requests for education from Mok and Kei. As with previous visits this included experiential learning and reinforcement on closed gloving technique, surgical scrubbing, aseptic techniques, draping, basic infection control practices, sharps management and correct transfer of instruments to the surgeon. Basic practice issues were reinforced with Kei, these included setting up in order of use, preparing instruments in a logical sequence and watching and following the procedure rather than events occurring around the theatre. Kei followed directions and sought clarification when unsure; she embraced the role of the instrument nurse and demonstrated aptitude for this role.

A major focus of this trip was providing role modelling in leadership, situation monitoring and list management to Mok; this included organising the team, checking consumables, planning the workload and actively promoting and facilitating good teamwork behaviours. As the week progressed Mok demonstrated increasing leadership skills and utilised good communication processes to accurately exchange information with medical, ward, sterilising and cleaning staff.

Although the junior staff group appear to support each other, mutual supportive behaviours and task assistance from senior staff was noted to be absent. Staff rostered in adjoining theatres that had no cases did not offer assistance to Mok and Kei. The exception to this was Lucio Leo Mali & Teo (both junior staff) on an afternoon shift who offered to help so Mok could go home. Despite decreased activity in adjoining theatres nursing staff were not observed undertaking any housekeeping activities. Mok articulated insight that role modelling by some senior staff conflicted with good work practices.

It was pleasing to note that evidence of clinical improvement from previous visits was maintained in sharps management with all contaminated sharps removed before the instruments left the theatre. Mok was observed instructing Kei to discard her sharps before handing over her instrument trolley to the cleaning/sterilising team.

Focus on aseptic principles included practices issues reinforced on the last visit such as s having a waterproof base under the instruments, and keeping gloved hands on top of the trolley. Surgical counts were embedded into practice with Mok and Kei routinely counting and documenting the count on the white board for all procedures.

Even though the theatre list challenged the usual workload; improvements with the sterilisation team noted during the 2015 visit appeared to have lost some momentum. Staff washing instruments needed reminding to wear eye protection, numerous occasions saw staff washing instruments with eye protection sitting on top of their head. All instruments were manually cleaned immediately after use, rinsed and dried prior to sterilising. Even though sterilising timers were available they were not used and when staff were questioned re sterilising times the answer varied between staff from 14 minutes, 30 minutes and 40 minutes. Work processes varied considerably between staff. The issue of correctly drying trays in the bench top steriliser was again revisited as staff incorrectly removed damp loads and placed them on top of the steriliser (unsterile surface) to dry potentially contaminating the tray as the moisture from condensation results in contamination by capillary attraction. Education was focused on leaving the trays in the steriliser untouched to allow the moisture on the trays to evaporate as the retained heat is dissipated. Eating whilst preparing and wrapping stock for sterilisation was observed on multiple occasions.

Once again discussion was undertaken with sterilising staff concerning the overloading of sterilisers and the ability of steam under pressure to permeate in and around all items in the chamber of an incorrectly loaded steriliser. It is acknowledged that only one steam autoclave was functioning and staff had concerns re having adequate sterile stock available for emergency procedures. Highlighted in previous visits the issue of overloading of trays continues .Overweight trays wrapped in one layer of paper wrap were unsterile on shelves due to the paper wrap being torn from the weight of the tray contents when placed on shelves.

Stock rotation still remains unresolved: nursing staff still place and remove sterile stock from the storeroom with no concept of stock rotation practices; once again this was observed when staff restocked the shelves with gowns and drapes.

General housekeeping and consumable inventory management was noted to be poor with nursing staff unaware of what stock was held and where to locate supplies. The team was requested to bring diathermy plates yet a box of a 100 plates was discovered in the sterile store room hidden under packets of catheters. Staff from other theatres consistently popped in to find a mask and gloves rather than source and restock the adjoining theatres.

Management of Electrosurgery was a patient safety issue that required prompt intervention and education; nursing staff in the adjoining theatre were witnessed forcing incompatible cables and plates into diathermy machines and one staff member was prevented from cutting a diathermy plate to fit the wrong connection. Compatible plates

were locked in a room with staff having no key to access. Issues in adjoining theatres with diathermy plates and cables arose on a number of occasions, with nursing staff requesting support.

Concerns with the education of cleaning staff were again addressed. The operating table, theatre equipment and operating lights were not cleaned on a daily basis and there is still no structured schedule for in between cases and end of day cleaning. Discussion centred on Mok understanding the importance of encouraging nursing staff to oversee and plan the cleaning as part of nursing responsibility to the patient. The cleaning staff are employed by an outside contractor and appear to manage their role unsupervised and independently. Once again there appeared to be a wide variation in what cleaning was undertaken depending on who was allocated to the role. When asked the cleaners were happy to scrub sinks and spot clean walls but appeared not to self-initiate cleaning above mopping floors and bin emptying. The floors within the suite were immaculate; however dust was obvious on all vents and ledges in every theatre.

Recovery practices were not a focus for this visit however there was noted to be a broad range of knowledge and skills varying from very limited to satisfactory amongst staff. Recovery is an area that could be significantly improved with focused education and clinical role modelling.

Recommendations

- Continue to build on solid foundation of support and encourage supportive relationship with Mok who is on track to be a leader of the future. (Since the teams departure Mok has already requested information on equipment and practice standards).
- Allocate 2 nurses to travel in the OSSAA team. This would allow for extended opportunity to support a wider range of learning opportunities for local nurses and support practice improvement in Recovery such as monitoring patients in recovery, recognising potential complications and planning appropriate management. A second RN in Recovery would also aid in supporting change-over time allowing the Anaethetist to return to theatre with confidence in the monitoring of patients in recovery.
- As highlighted previously focus areas for future visits need to include consolidating knowledge and skills for sterilising staff; it could be anticipated that as the junior staff develop skills to run the theatre list that a more focused approach to the sterilising team could be undertaken. This should include role modelling and education on basic infection control practices, loading sterilisers, tray weight limits and stock rotation.
- The novice workforce are the target group that should be supported to undertake learning opportunities and all efforts should be implemented to explore options to support their ongoing professional development. This group have a positive vision to improve local practice.

Mok and Joy Booth

Extract from an email sent by Mok following the teams visit highlighting that Mok understands the value of his role in teamwork and the importance of planning and preparing collectively with the surgeon for a procedure.

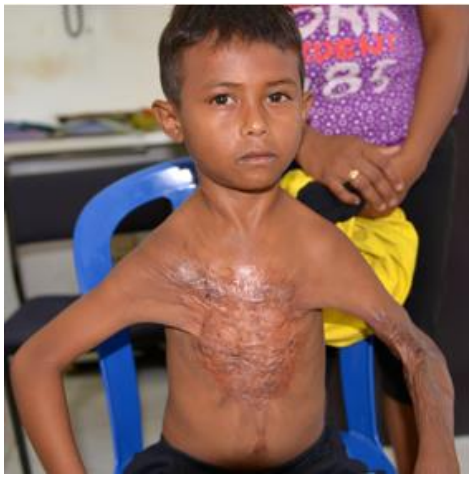
…….*Joi I have some interesting history about last week, you know what I have scribing for the one interesting case is a GB stone exploration we work like on team, dr. Stephan is Surgeon this case did it by three Surgeon because we have used 2 instruments is a laparoscopy and instrument for like usually when we used, before we did operation the first time I ask to Surgeon procedure the operation and what instruments to use,dr. Stephan from Singapore he is good man he he explained for me about this operation, i am very happy, the first time I am with the interesting case, I am so happy,*

I always wanted to do something in the operating room with the standrt and condition aplay. and i have learned the standards and condition from you, I am so happy and so proud because I have being work with you and with dr. Mhark MOre.this is the work i want to do it every time or every day because there is good nurse organized with steep by steep planning is the best.i a I will be ask you if have something problem…….

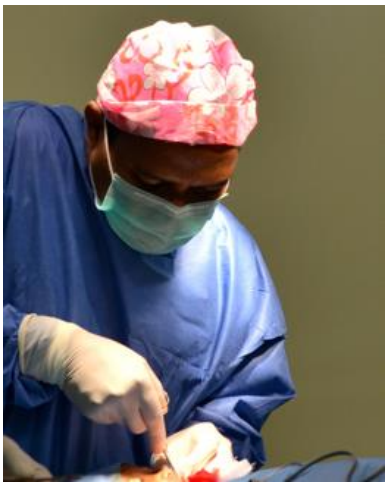
The Gallery


Bilateral complete cleft lip and palate in 8 year old girl – image at rest and on smiling.
After surgery she will have a new smile


Brother (unrepaired) and older sister (repaired)
with bilateral cleft lip and palate

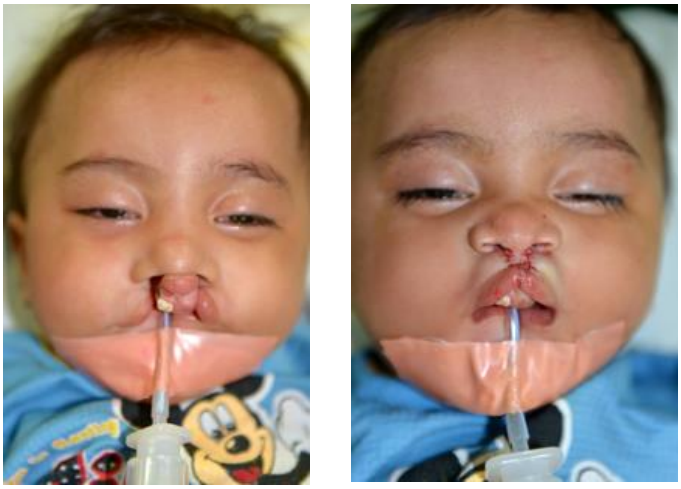



Long standing burn scar contractures of the anterior chest and bilateral axillae



Dr Joao Ximenes performing cleft lip repair

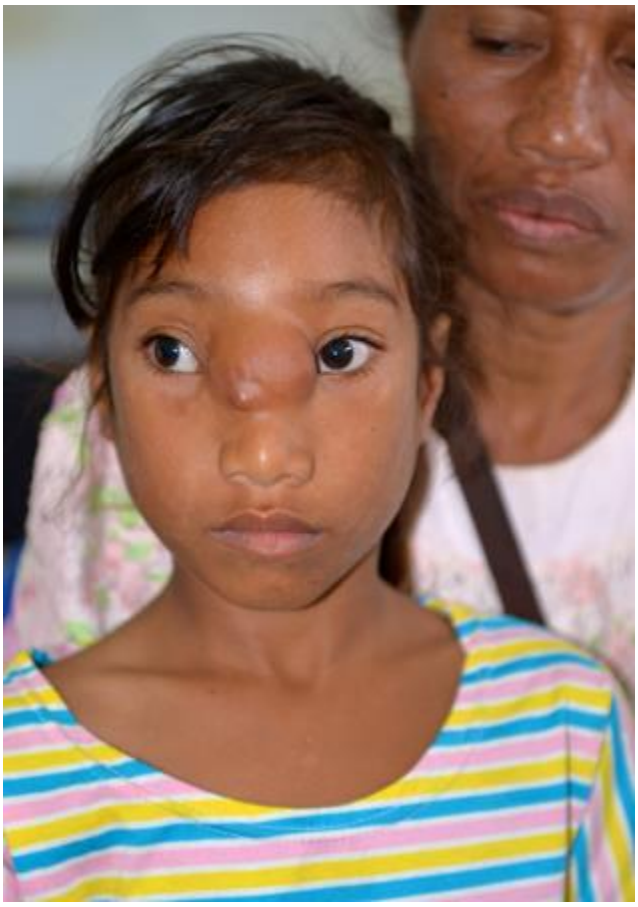
Operating theatre nurses Mok and Kei



Bilateral cleft lip and palate child with early postoperative result

Joy Booth and Phil Blum with Sr Susan and members of the staff at the Aileu clinic.

Travel on the Aileu to Dili road in the rain- local transport



Young girl with Fronto-ethmoidal meningo-encephalocoele amenable for treatment at a craniofacial unit in Australia , if suitable sponsorship can be obtained.