ROYAL AUSTRALASIAN
COLLEGE OF SURGEONS

AUSTRALIA TIMOR LESTE PROGRAMME OF ASSISTANCE

SPECIALIST SERVICE (ATLASS)

TEAM VISIT - DILI, TIMOR LESTE

June 15 - 22, 2013

TEAM LEADER'S REPORT

MARK MOORE AM, FRACS
Plastic and Craniofacial Surgeon

Implementation of Dr John Hargrave's Mission in Timor Leste and Eastern Indonesia: Providing a specialist service to the disadvantaged where the service is not available or affordable.

AIMS AND GOALS:

This volunteer specialist plastic and reconstructive surgical team aimed to:

1. Continue the teaching and training of our counterpart Timor Leste plastic surgical colleague Dr Joao Ximenes in the assessment, management and surgery of cleft lip and palate and burn deformity.

2. Maintain an ongoing role in the teaching and education of surgical and anaesthetic registrars, anaesthetic nurses and operating theatre nurses at HNGV.

3. Deliver ongoing management of patients with cleft lip and palate deformity as the initial phase in developing a local multidisciplinary cleft team in Timor Leste.

4. Introduce the role of a speech pathologist in the multidisciplinary team management of cleft lip and palate, and identify an appropriate local counterpart practitioner.

INTRODUCTION

The visiting Plastic and Reconstructive surgical team last visited the Hospital National Guido Valadares (HNGV) in Dili in March 2013. Following this visit about 26 patients were waitlisted for further surgery – many of these requiring cleft palate repairs, having already had their cleft lip primarily repaired. This coincided with the wish to proceed with the training of our local counterpart plastic surgical trainee in cleft palate repair – a further step in his education in cleft surgery.

Recognising the multidisciplinary team approach, basic to cleft lip and palate management we also took this opportunity to introduce a speech pathologist to our team and explore the options of a local Timorese counterpart who could contribute appropriately.

Finally all team members were invited to contribute to the ongoing teaching / training provided by the wider resident RACS team to their respective local counterparts.

TEAM PERSONNEL:

The visiting team was comprised as follows:

Dr Mark Moore	Plastic & Craniofacial Surgeon (Women's & Children's Hospital and Royal Adelaide Hospital, Adelaide)
Dr David McLeod	Anaesthetist Flinders Medical Centre
Sr Joy Booth	Theatre Nurse / Educator Royal Adelaide Hospital
Ms Celina Lai	Speech Pathologist Royal Darwin Hospital

PARTICIPATING LOCAL STAFF AND COUNTERPARTS:

Those local staff involved in the teams teaching and clinical activities included:

Dr Joao Ximenes	Surgical Registrar, Plastic Surgical trainee HNGV
Dr Rai) Dr Opel) Dr)	Surgical trainees – in the Diploma of Surgery Course HNGV
Dr Colom) Dr Mingota) Dr Jose)	Anaesthetic trainees HNGV

The nurse anaesthetists and operating theatre nursing staff, sterilising department staff, and outpatient and surgical ward staff all contributed in providing an appropriate level of pre- and postoperative care to the patients.

Mr Sarmento Correia, RACS resident coordinator and Ms Karen Myers, RACS administrator, contributed to the pre-visit planning, and day-to-day issues surrounding the team visit.

As with previous visits the resident RACS staff headed by Dr Eric Vreede supported the teams training and clinical activities during the weeklong mission.

OVERVIEW:

This visit to HNCV occurred just 3 months after the last mission to this same hospital. As such the focus was on the provision of clinical care to those previously waitlisted cases, and expansion of the teaching / training role from not only being clinically based, but also a role in a more formal teaching situation.

Among the specific issues attending this visit were the following:

- Improved documentation of patient details and increased access to mobile phone communication allowed retrieval of a significant number of patients waitlisted from the last visit.

- Appropriate pre-visit advertising ensured an adequate caseload for use in teaching of surgical, anaesthetic and nursing staff.

- Dr Joao Ximenes, our counterpart reconstructive surgical trainee has to date performed more than 60 unilateral cleft lip repairs. In the last 3 months in our absence he has not been able to progress this number further. A variety of factors have conspired to cause this – our team as well as the resident RACS team continue to seek mechanisms to overcome these obstacles.

  During the week we were able to progress Dr Joao Ximenes to perform his first cleft palate repair in its entirety. As with his cleft lip surgical technique, he is a skillful surgical technician well able to perform the specific aspects of the repairs – assertiveness and confidence remain his specific challenges.

- Formal surgical teaching of Dr Joao Ximenes and the 3 surgical diploma candidates was possible on Tuesday afternoon. A useful discussion about the following topics occurred
  - General principles of wound healing
  - Systemic and local factors associated with wound healing
  - Basics of surgical wound debridement and closure.

- The anaesthetic teaching opportunities with this visit proved equally fruitfull. The 3 local anaesthetic trainees were in regular attendance in the operating theatre and actively involved themselves in all aspects of the peri-, intra- and post-operative care of the surgical patients. Dr McLeod was able to meet with the trainees on two occasions in teaching tutorials, with a focus on regional nerve blocks, including the use of ultrasound assistance.

- Sr Joy Booth, the theatre sister with our team has visited HNGV previously, and has on two occasions hosted several of the Timorese theatre staff in Adelaide for two week intensive teaching and mentoring programmes. She was on this occasion to focus on 2-3 local junior theatre nurses, involving them in all aspects of operating room procedures and protocols. In particular she reinforced the concepts of :

  - Preparation and maintenance of a sterile operating field.
  - Surgical count of sharps and swabs.
  - Preliminary discussion of the surgical checklist
  - Turnover and cleaning of instruments between cases.

Whilst there remains a core group of older theatre staff whose work practices are unacceptable, the team on this occasion did receive appropriate support from Mr Abilio and Mr Jacinto the theatre nursing head and deputy.

- Expansion and education regarding the concept of a multidisciplinary cleft team was advanced on this trip with the inclusion of a cleft speech pathologist. Celina Lai, who is based at the Royal Darwin Hospital has family origins in Timor Leste and has coincidentally recently met and spent some time with the only trained speech therapist in Timor Leste. Alotu, a therapist from ASSERT had recently completed her speech therapy training in Jakarta. A more detailed report from Celina Lai is attached to this report.

- Few burn cases were presented to the team on this visit. RACS has provided Dr Joao Ximenes with a skin graft mesh machine – we were able to assist him and his young colleagues in skin grafting one of the significant burn cases already under local management.

  An abbreviated EMSB course overseen by Mr John Harvey and Mr Ian Leitch, burn surgeons, is planned for Dili in August 2013.

SUMMARY OF CLINICAL ACTIVITIES

1. SCREENING:

In light of there being a group of patient's waitlisted from our March 2013 visit, it was arranged that these cases be given first preference for surgery.

Screening was organised by Mr Sarmento to occur in outpatients – the usual local nursing staff were in attendance and Dr Joao Ximenes oversaw the running of the clinic with our team.

2. SURGERY:

Surgical lists were not overbooked on this visit, allowing adequate time for Dr Joao Ximenes to perform a further 5 unilateral cleft lip / nose repairs, as the lead surgeon. He now has done some 60-70 of these cases.

He was also able to progress to undertaking his first primary cleft palate repair in its entirety, as well as significant elements of the procedure in 3-4 other cases. This advance coincides nicely with the introduction of a speech pathologist in the management of cleft deformity and progressing the concept of cleft treatment being a long term multidisciplinary approach, not just an isolated operation. This is central to distinguishing the management of cleft lip and palate from other surgical complaints.

3. POST –OPERATIVE CARE:

Pre- and post-operatively all cases were again nursed in 4-6 bed bays in the male and female surgical wards, with specifically allocated nursing staff.

There were no clinical issues noted post-operatively, and no cases had their surgery deferred because of intercurrent illnesses – This visit occurring at the end of the wet season.

SUMMARY OF TRAINING ACTIVITIES

1. INFORMAL TRAINING

a) Outpatient clinic:

Once again Dr Joao was integral in the performance of the assessment clinic and the construction of the week's surgical list.

Unfortunately the more junior surgical trainees (the 3 surgical diploma candidates) were not present – as they were also largely absent from the operating theatre environment during the week.

b) Operating Theatre:

As discussed above Dr Joao expanded his cleft surgical expertise during the week when he commenced cleft palate repairs, whilst also undertaking unilateral cleft lip repairs on several younger infants.

The 3 anaesthetic trainees were present with Dr McLeod throughout much of the week allowing ample opportunity for teaching a range of anaesthetic approaches and techniques.

Sr. Joy Booth worked closely with her senior local counterparts to ensure an appropriate level of theatre nursing commitment. Throughout the week a small cohort of younger enthusiastic theatre nurses worked closely with our team, allowing teaching of a number of basic theatre principles:

- Sterile set-ups
- Surgical disposable counts
- Introducing the surgical checklist.

This was a significant step up in commitment to learning from the theatre staff – discussions are ongoing with Mr Abilio and Mr Jacinto to ensure this approach is ongoing.

Finally, groups of local nursing students were observers of the team's work in theatre during the week, providing further teaching opportunities.

2. FORMAL TRAINING

Pre-visit planning ensured that formal teaching tutorials were planned and incorporated during the week

The surgical and anaesthetic training session topics have been detailed above in overview.

3. TRAINING PRIORITIES / RECOMMENDATIONS

- The outpatient assessment clinic remains an under-utilised teaching forum for surgical trainees and medical students.

- Maintenance of a commitment to teaching, as achieved on this visit, is essential to improving the theatre activity.

- Continuing formal training / teaching tutorials with both anaesthetics and surgical trainees.

- Burns management training programme (EMSB – like) is planned and should act as basis for further improvement in the delivery of burn wound care.

EQUIPMENT AND SUPPLIES

There were no specific issues or concerns in these areas on this visit. The availability of a skin graft mesh machine in HNGV should assist with burn wound management.

As with previous visits, surgical consumables, sutures, dressings etc suitable for local use were left with Dr Joao and local nursing staff.

RECOMMENDATIONS

After the difficulties of the previous visit it was pleasing to see ongoing progress in both plastic surgical clinical service delivery and teaching on this mission. Expansion of the concept of multidisciplinary team based care of patients with cleft lip and palate has been introduced and should be expanded in the upcoming years. Alotu, the local speech pathologist should be supported in being appointed to the staff of HNGV. Letters of support will be provided for forwarding to the HNGV Medical Director and Health Minister.

In a similar vein, the team has previously introduced the role of an Orthodontist to cleft management. This group has recently re-visited Dili and is planning to commence a visiting orthodontic programme through the PAS dental clinic in Becora. We will supply names and details of cleft patients ready for treatment.

VISIT ORGANISATION

The pre-visit organisation by RACS staff in Melbourne and Dili ensured an uneventful visit for the team. There were no issues with visas, customs or excess baggage for travel to and from Timor Leste.

Likewise Mr Sarmento Correia and the RACS team in Dili had communicated appropriately within HNGU and in the wider community about the team visit, ensuring a productive week.

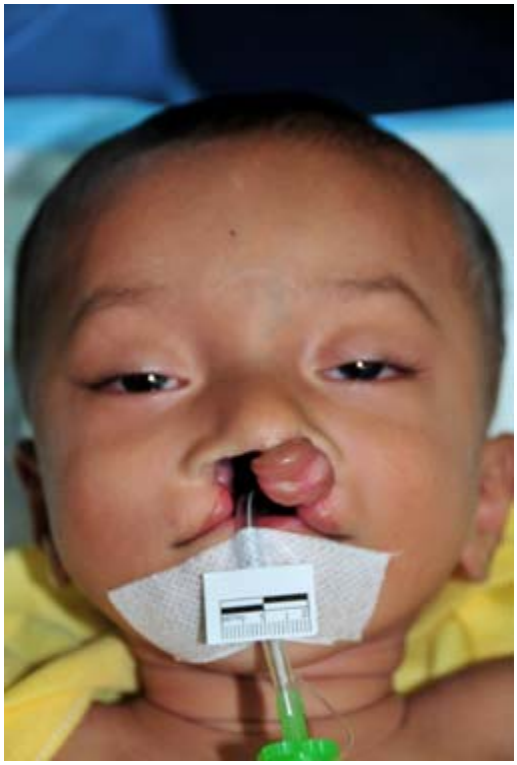
ACKNOWLEDGEMENTS

- The ATLASS Program and RACS International projects staff in Dili and Melbourne.
- The nursing and medical staff at HNGV Dili.
- The airlines that assist in our travel to and from Timor Leste, providing extra allowances for luggage.
- The assorted hospitals in Australia and surgical and anaesthetic supply companies who support our teams work and our families who tolerate our absences and commitment to this work in Timor Leste.

SUMMARY OF CLINICAL ACTIVITIES –PLASTIC SURGERY

JUNE 15 – 22, 2013

TOTAL PATENT CONSULTATIONS		**40**
INITIAL	**23**	
REVIEW	**17**	
TOTAL SURGICAL PROCEDURES		**27**
CLEFT LIP	**12**	
CLEFT PALATE	**8**	
BURNS / CONTRACTURES	**2**	
OTHERS (Excisions etc)	**5**	

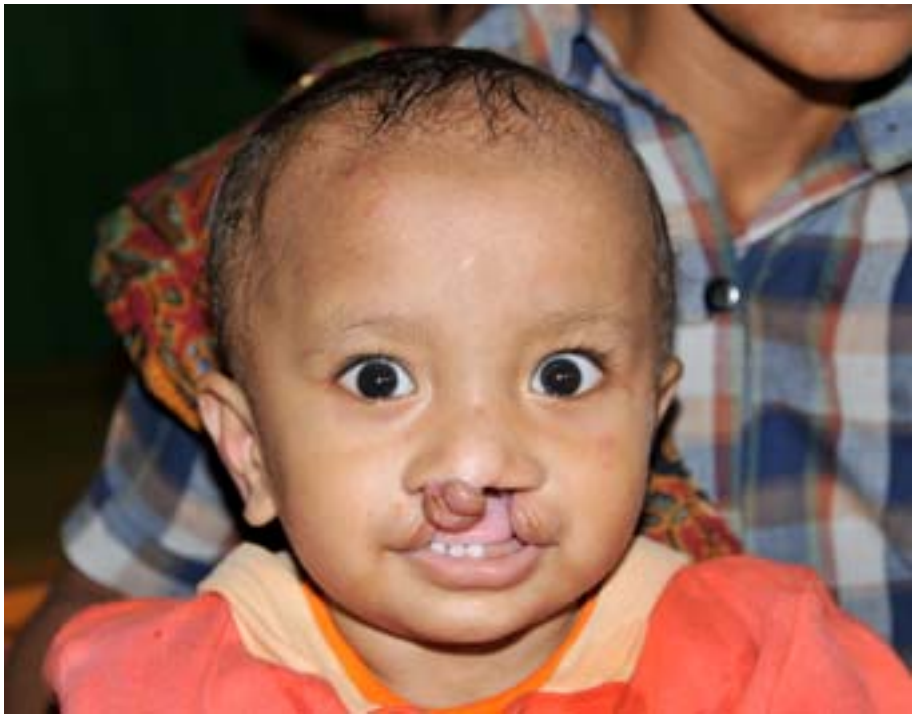


Follow-up 2013
With cleft palate repair

Bilateral cleft lip and palate

Before lip repair 2012

Follow-up 2013
Before palate repair



Bilateral cleft lip and palate

Before lip repair 2012

Follow-up 2013

Before palate repair

Right cleft lip and palate
Right frontal encephalocoele (Tessier cleft) – Needing repair in Australia

Dr Joao Ximenes

Nursing Report

Introduction
A total of 25 cases were undertaken over 5 consecutive days at the Hospital National Guido Valderes Dili. For the duration of the 5 days of planned operating, one theatre nurse was allocated to the team each morning to undertake the role of instrument nurse. Allocated staff varied in experience with the majority being junior staff with 18 months or less experience.

Observations
The allocation of different staff each day created challenges with developing and fostering strong collegial working relationships with the Timorese nursing staff. It is recognised that altering nursing rosters can create tension between the hospitals needs and the needs of visiting teams and will be an ongoing issue for future visiting teams that needs to be negotiated with caution.

Senior nurse in charge of the operating theatres, Mr Abilio de Oliveira, is to be congratulated for managing his nursing staff shift configurations by providing staff to the visiting team and still providing nursing staff to support ongoing local requirements. Local shift configurations of 0800-1300 are not intended to support consecutive cases for all day surgery. A highlight was the professionalism and commitment displayed to patients and the visiting team by junior nursing staff. Following negotiations with Mr Abilio de Olivira and Mr Jacinto Ornai, junior nursing staff volunteered to remain after their rostered finish time of 1300 to complete the days operating on four occasions.

Over the 5 days of operating, junior staff appeared keen to engage in learning opportunities to improve their practice. Opportunistic education was undertaken throughout the week in response to direct requests for education from the junior staff. As with the 2012 visit this included experiential learning and education on closed gloving technique, surgical scrubbing, aseptic techniques, basic infection control practices, diathermy use and correct transfer of instruments to the surgeon.

Evidence of clinical improvement being maintained from the 2012 visit was observed in sharps management with all scalpel blades and needles being removed before instruments left the theatre. All sharps were safely discarded by the instrument nurses from their set ups into sharps containers before being handed over to the cleaning/sterilising team. It was pleasing to note that junior staff all followed practice demonstrated in the 2012 visit with loading and removing scalpel blades with an instrument and correct scrubbing ,gowning and closed gloving technique.

Surgical counts were instigated by nursing staff for every procedure and documentation of the process was undertaken throughout the 5 days of operating. The introduction of vocalising “count correct” audibly to the surgeon was established and maintained.

The concept of setting up the instrument trolley and using a waterproof barrier between the trolley and drape was introduced. Nursing staff embraced the concept that when the single layer material trolley drape became wet with prep and soaked gauze without any water proof barrier there was a direct source of contamination from trolley to instruments. Junior staff showed insight that this contamination could have a significant impact on patient care especially when undertaking orthopaedic cases with open fractures.

The introduction of a local version of the WHO surgical checklist was unsuccessfully attempted. Mr Jacinto Ornai (second in charge) attempted to utilise the checklist but felt that he required further discussion with senior nursing staff .Although junior staff were allocated to the plastics team and were keen to implement the checklist, it seemed prudent not to pursue instigating a new practice with junior staff when senior staff were not comfortable with the process. It is anticipated that as the checklist has been recently developed and is part of the perioperative documentation accompanying patients to theatre its implementation should occur within the short term.

Another highlight of the 5 days was the work ethic displayed by the team reprocessing and sterilising instruments .At no time was the theatre list delayed due to reprocessing issues. Contaminated instruments were manually cleaned as soon as possible after use, rinsed and dried prior to sterilising. Discussion was attempted with sterilising staff concerning the overloading of sterilisers and the ability of steam under pressure to permeate all items in the chamber of an incorrectly loaded steriliser. The issue of overloading sterilisers appeared to be a well established behaviour that was culturally entrenched. The minimum time – temperature relationship in terms of sterilising efficiency was unable to be determined as it appeared to vary between staff loading the steriliser.

Concerns with the education of cleaning staff were addressed with Mr Abilio, it was noted that the theatre floors were immaculate and there was a strong emphasis by all nursing staff on monitoring the wearing of inside and outside shoes, however, the operating table, horizontal surfaces, theatre equipment and operating lights were not cleaned on a daily basis and no structured schedule for in between cases and end of day cleaning was established.

Novice staff undertook the role of the instrument nurse for the majority of cases and planning of individual cases was well managed. Even though the workload exceeded the usual expectations of nursing staff, junior staff quickly embraced planning for the requirements of a daily list with 5-6 cases and attempted to source consumables in a timely manner so the list could run without delays.

Recommendations

- Focus areas for future visits should include supporting sterilising staff with formal education on basic infection control practices, loading sterilisers and management of sterile stock and consumables.
- Support for cleaning staff needs to incorporate education on a logical and consistent process for theatre cleaning in between cases, terminal cleaning at end of day and a weekly schedule for vents and high surfaces.
- Further education for nursing staff needs to be targeted on infection control practice that is sustainable within the Timorese health system.

PLASTIC & RECONSTRUCTIVE SURGERY – TIMOR LESTE
SPEECH PATHOLOGY REPORT
15 – 22 June, 2013

Background

I was delighted to accept an invitation from Mr Mark Moore to accompany the RACS Plastic & Reconstructive Surgery team visit to Dili, in June.

I am a Senior Speech Pathologist with the Speech Pathology Department at Royal Darwin Hospital (RDH), with a particular interest in paediatric feeding, including children born with cleft lip and/or palate. Speech Pathologists assess and manage children and adults who present with feeding / swallowing and communication disorders, with a variety of aetiology. RDH has a Cleft Lip & Palate team which meets three times a year to case manage children and adults (0-25 years) in the Top End with a history of cleft lip and/or palate. The team is made up of plastics & craniofacial, orthodontic, paediatric and ENT specialists and speech, audiology and dental allied health professionals. I have had the privilege of working with the RDH cleft team since 2006.

In Australia, Speech Pathology services are required for feeding support pre-cleft repair and for speech and language monitoring, post repair. We have the ability to meet with expectant parents prior to the delivery of their baby and within the first 24 hours of the birth to assess the infant's cleft and subsequent feeding needs. Children with a cleft history are at increased risk of developing speech difficulties related to articulation and resonance post palate repair, which can severely impact upon their ability to be understood by others. This can, in turn, affect their educational progress and subsequent employment and life opportunities. Regular monitoring of speech and language development is required, particularly post cleft palate repair, during and after the child's dental and orthodontic intervention and potentially, after bone grafting surgery. The cleft team's relationship with a child and family affected by cleft is a long standing one.

My aims for this trip included:

- observing cleft lip and palate surgery and
- liaising with local speech pathology and medical services in relation to cleft management.

Feeding

I was very interested in observing how babies with cleft palates were being fed. In my experience, children with a cleft in the palate have difficulties creating suction to extract milk from the breast or bottle whilst sucking. Inefficient sucking at the breast often results in early fatigue and reduction of mother's milk supply. Sole breastfeeding is often not possible for babies with cleft palate, without extra work from the mother (eg. breast compression while the baby is sucking at the breast), and as a result many babies have bottle top ups or are fully bottle-fed. At RDH, we use specially designed teats made of very soft silicone with a large X-cut opening for easy fluid extraction. These are attached to squeeze bottles, to make feeding more efficient.

I observed a range of methods in Dili, including:

- Mother's expressing breastmilk into a spoon and the babe suckling from the spoon
- Spooning formula milk from a cup to give to the babe
- using rigid bottles with teats that had been cut to increase flow

Many parents reported that feeding methods were determined through “trial and error”.
A search through a number of large supermarkets in Dili revealed very few useful feeding bottles and teats for babies with cleft palate. We did find bottle spoon feeders at Dilimart Supermarket, which we trialled with an 8 month old boy with cleft lip & palate, post his lip repair. The child quickly adapted to feeding with the spoon feeder and the family reported that the feeds were easier to administer than spooning the milk into his mouth. The family were given two spoon feeders to take home.

It was difficult to ascertain from Dilimart if they are able to restock the bottle spoon feeders in their store. I have provided a small supply of these spoon feeders to Sarmento (RACS) who will distribute one to each baby born with a cleft palate, if possible. I plan to source more spoon feeders from Australia to send to RACS, for babies with cleft palate born at HNGV, who may benefit from use of this utensil.

Communication
Children with cleft palate may experience difficulties with speech sound production (articulation) and resonance (voice quality), post palate repair. Poor oral care and teeth positioning may also impact upon speech production. Some children with cleft palate history, who present with significant nasal emission during speech, may require further surgery when they are older to achieve more clear speech. Regular monitoring of speech development and progress by a speech pathologist is beneficial for children in the years post cleft palate repair.

We were able to identify a number of patients who would benefit from speech therapy during this week. The local speech therapist and I conducted a home visit to meet with a 9 year old girl (history of bilateral cleft lip and palate) who presented with nasal emission and imprecise articulation in connected speech. Her father was very keen to discuss speech therapy to improve his daughter’s speech ability. We were able to assess and provide therapy activities. As she also has dental issues, we suspect that her speech errors will persist until dental and orthodontic treatment are complete, however the selected activities should increase her awareness of oral and nasal speech production and strategies will improve her overall speech intelligibility. Some patients will receive a follow up call by the local speech therapist to check their speech progress post surgery.

Local Speech Pathology Services
Alotu da Costa Sarmento is a Timorese lady who has recently graduated (2012) from Akademi Terapi Wicara-YBW Jarkarta, Indonesia. Alotu is the first, and presently, the only practising speech clinician in Timor. Through a request from the then Acting Director at ASSERT and assistance from an Australian Rotary group, Alotu visited the RDH Speech Pathology department for two weeks in May 2013, to observe speech pathology practice for adult and paediatric patients within an acute and rehabilitation setting. Alotu also attended a week’s observation with the Children’s Development Team (a community based paediatric service), in Darwin.

My visit to Timor afforded me the opportunity to meet up with Alotu in Dili and explore ways that she could provide speech pathology support for children with cleft lip and/or palate. Alotu was able to volunteer her time to visit HNGV during the week and meet with Dr Joao Ximenes (Timorese surgical registrar) and Sarmento, and the other members of the visiting Australian team.

During the week, Alotu and I:

- observed cleft lip and palate surgery.
- visited with a number of patients and their families in the hospital wards pre and post surgery to discuss feeding and communication concerns.
- conducted a home visit and developed home activities for a child several years post lip and palate repair.
- visited ASSERT and discussed service delivery and professional development with local occupational therapists and prosthetic and orthotics technicians.
- attempted to source feeding equipment (eg. Bottles, teats, spoons) in Timorese supermarkets.
- met with the Rotary Liaison Officer in Dili to discuss how networks and contacts to assist Alotu in developing a local service.

Alotu will telephone some individuals and families of patients who underwent cleft surgery in the next month as a follow up to their cleft surgeries, to check communication progress.

Currently, Alotu is not employed by any Timorese government department to provide speech pathology services. She has a small list of clients whom she sees privately (fee for service). Alotu is open to meetings with relevant officials to discuss how to establish a public speech pathology service. It is an exciting prospect for Timorese citizens to be able to access local speech pathology services.

Future Considerations

With Alotu trained in speech and language assessment and management and currently working in Dili, there is opportunity for provision of holistic care to Timorese children and adults with a cleft lip and/or palate presentation.

These include:

- Meeting with babies born with cleft lip and/or palate and their families within a few days of birth to ensure adequate feeding ability is established and appropriate equipment is identified.
- Liaising with local surgeons to ensure speech therapy follow up is available to children and adults post cleft repair (for feeding and communication).
- Being present when plastic / surgical teams visit and working as part of the multidisciplinary team in cleft management.
- Establishing professional development links with speech pathology departments in Australia and Indonesia.

Acknowledgement

Thank you for the opportunity to travel with and to observe the amazing work conducted by the Australian and Timorese surgical teams. I hope that there is scope to include speech pathology input in future visits to provide speech assessment, management and education or as professional support to local speech pathology services.

Celina Lai
Speech Pathologist
25 June 2013

FEEDING OPTIONS FOR TIMORESE CHILDREN WITH CLEFT LIP +/- PALATE

CLEFT LIP ONLY

Babies with cleft lip only, should be able to breast feed. The intact palate will allow for appropriate suction at the breast. It may be useful to position the baby at the breast, so the cleft is on the top, as gravity will pull the cleft shut.

CLEFT PALATE

Children with cleft in palate will have trouble sucking the breast. The hole in the palate means they can't create good suction to get the milk out of the breast. The mother will need to squeeze the breast to help get milk into the baby's mouth, while the baby is sucking at the nipple.

If using a spoon, consider giving the family a bottle spoon feeder. I have seen these brands in Timor:

Hawaii	180 mls bottle	US90c ea
Pigeon	170 mls bottle	US$5.50 ea
Pigeon	240 mls bottle	US$7.00 ea

The Hawaii brand works well.

The other option of feeding method is a squeeze bottle with a large flow teat. I have been unable to find these at the couple of the supermarkets near the hospital. Teats are also not easy to find if they are not with a bottle package. The ones I did source, were large flow (but I suspect would need cutting to give a greater flow).

I have seen parents use a normal bottle with a teat that they have cut to give a larger flow, however some report that the milk comes out too fast.

CLEFT LIP & PALATE

These babies will need a bottle as per the descriptions above.

 Spoon feeder	 Feeding with Spoon Feeder post lip repair	 Home visit: Alotu demonstrating speech therapy exercise