Overseas Specialist Surgical Association of Australia (OSSAA)

Plastic Surgical team visit

Dili, Timor Leste

1 – 7 August , 2015

Mark Moore, AM., FRACS

Plastic and Craniofacial Surgeon

INTRODUCTION

This first OSSAA Plastic and Reconstructive surgical team visit to Timor Leste for 2015, continued on seamlessly from the previous volunteer missions badged under RACS, and funded from AusAID / DFAT. Our focus remains on both the provision of clinical service and teaching and capacity building, as it relates to the delivery of surgical care, with a special focus on cleft lip and palate , burns and other reconstructive surgical issues. Coordination of the visit was again done with the assistance of the resident RACS staff, who ensured the appropriate pre-visit preparations were in place, and the facilities and staff of the Hospital National Guido Valadares, Dili available in readiness for our teams visit.

The structure of the visit and the timetable of our activities was essentially unchanged from our previous missions. A strong focus was maintained on teaching in the arenas of surgery, anaesthesia and nursing especially in the operating theatre environment. The commencement of further local programmes of specialist training in surgery and anaesthesia ensured that a small group of new trainees were present to interact with various members of our team in a practical hands-on fashion.

As with our visit a year ago Ms Celina Lai accompanied our team to continue her assistance in the teaching and up-skilling of Alotu, her counterpart Timorese speech pathologist.

TEAM PERSONNEL

The OSSAA team was comprised as follows:

Dr Mark Moore — Plastic and Craniofacial Surgeon
Women's and Children's Hospital and Royal Adelaide Hospital.

Dr Vani Prasad Atluri — Plastic and Reconstructive Surgeon
Women's and Children's Hospital.

Dr Andrew Wallace — Anaesthetist
Women's and Children's Hospital and Royal Adelaide Hospital .

Sr Joy Booth — Theatre Nurse / Educator
Royal Adelaide Hospital.

Sr Margaret Maloney — Theatre Nurse
Royal Adelaide Hospital.

Ms Celina Lai — Speech Pathologist
Royal Darwin 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

Ms Alotu da Costa Sarmento — Speech Pathologist , HNGV

A number of new anaesthetic and surgical trainees participated clinically and were provided with teaching opportunities during the week.
The operating room scrub / circulating nurses and sterilising staff actively assisted the team and were engaged in learning activities with our nursing team members.
The outpatient and ward staff who facilitated the assessment clinic on the Saturday, and managed the pre- and post-operative care of the operated patients, under the supervision of Dr Joao Ximenes.

Mr Sarmento Correia , RACS coordinator, Ms Kate Moss, Monitoring and Evaluation Officer, RACS and Ms Karen Myers, RACS administrative officer arranged and organised the logistic issues both before and during the visit.

OVERVIEW

This return visit treads a well worn path for our team in its delivery of plastic and reconstructive surgical services to Timor Leste. Our 41st surgical mission since March 2000 represents a substantial ongoing commitment to the region, and provides an ongoing opportunity to support and assist the Timorese medical community in its development of a comprehensive healthcare service. The last few years have seen a consistent attempt by our team members to focus increasingly on teaching and skill transfer to local counterpart doctors, nurses and healthcare workers. On this occasion our visit coincided with the start of new specialist anaesthetic and surgical training programmes for a small group of local doctors selected out of the RACS – run family medicine programme. These trainees had the benefit of working with our team, alongside our long – term local counterpart Dr Joao Ximenes.

Pre-planning for our visit was overseen by Mr Sarmento and Dr Joao , and included outreach visits to identify suitable cases for treatment. A waitlist of untreated patients from previous visits also was available. Dr Ingrid Bucens an Australian paediatrician working at HNGV had also identified a group of patients in need of assessment and / or treatment.

Most patients presented to outpatients on Saturday, with others seen in the wards and a small number who arrived later in the week. By the end of the visit some 54 patients were assessed, the majority being new referrals.

Surgical lists were formulated for the week, avoiding overfilling of these to ensure adequate time for teaching. 28 operations were possible, with as is usual for our visits the most common procedures being for cleft lip and palate. After this visit , our teams have performed some 851 cleft surgical procedures, of which 750 are primary cleft lip or cleft palate repairs. Dr Joao X has continued to perform a small number of incomplete cleft lip repairs on his own between visits, and again on this trip demonstrated his surgical expertise with these cases. There were few palate repair cases this visit on which he could continue to expand his cleft surgical repertoire.

The weeks operating list provided ample opportunity for teaching of anaesthetic principles and techniques to the 4 new local anaesthetic trainees. Dr Andrew Wallace used all the surgical cases as a means to involve these young trainees in the delivery of various anaesthetic procedures.

Sr Joy Booth , assisted by Sr Marg Maloney continued with the upskilling of the local theatre nursing staff. Several of the young nurse who worked with Joy and our team one year ago were ready and willing to continue their education and understanding of operating theatre principles and practices. As such routine application of the surgical checklist approach, and counting of instruments and consumables by these staff has been actively adopted. A more detailed

description of the nursing staff teaching will be provided by Joy Booth in a separate report.

The ongoing work of Celina Lai, speech pathologist with her local counterpart continues to provide an ever expanding link with our ongoing focus on cleft lip and palate multidisciplinary management. On this occasion Celina was able to link with Dr Ingrid Bucens, paediatrician and assist in infant feeding issues in a number of malnourished neonates in the paediatric wards. Her inputs are detailed more fully in her attached report.

SUMMARY OF CLINICAL ACTIVITIES

1. Screening

Outpatient screening was again very efficiently planned and presented by Dr Joao X and Mr Sarmento. A combination of previously waitlisted and new patients attended, including a small group from the Bairo Pite clinic, who received the message to come on time.

A sizeable waitlist of patients too young for this visit, as well as others needing follow-up interventions has been generated for the next visit.

2. Surgery

The surgical facility remains largely unchanged – a number of the young enthusiastic new nursing staff who had exposure to Joy's teaching programme a year ago were waiting expectantly to continue with her mentoring. From this group it is hoped we can offer 2 week scholarships to visit hospitals in Adelaide as we have done previously.

Dr Joao, as always was actively involved in the surgical procedures performed during the week. There seeming on this visit to be more a sense of a local team taking ownership of the surgical suite- perhaps this being a reflection of the change in the leadership of the theatre complex.

Our team was able to continue it's ongoing interaction with local nursing and medical staff – providing advice and assistance in several other cases being managed in the surgical suite.

3. Post-operative care

All cases were as per protocol nursed in 4-6 bed bays in both the male and female surgical wards – admission occurred the evening before surgery , allowing pre-operative review. All cleft patients remained in hospital for 1-2 days post-operatively, whilst the burns contracture cases were hospitalised until first wound dressing changes.

Two cases early in the week were deferred for surgery because of upper respiratory tract infections, and will be waitlisted for a subsequent visit.

SUMMARY OF TRAINING ACTIVITIES

1. Informal training

a. Outpatient clinic

The assessment clinic at the weeks beginning is a forum to discus clinical cases with Dr Joao X, both in terms of their surgical features and the anaesthetic issues associated with treating them.

We were also able to involve Alotu, the local speech pathologist in identifying cases which would be amenable for her further management.

Finally, a young visiting medical student on an elective at the Bairo Pite clinic was present with some of their patients, and able to observe and interact with our clinicians.

b. Operating theatre

Cleft surgical training of Dr Joao continued as previously. He has performed a small number of cases since our last visit, and clearly remains comfortable and adept at unilateral cleft lip repairs. On this visit the spectrum of cleft cases provided only a small number which were suitable for him to expand his cleft skills.

Anaesthetic teaching was more widely achievable due to there being 3-4 new trainees commencing their training programme. Dr Wallace actively encouraged the involvement of these young doctors in the delivery of anaesthesia for almost all our cases.

Nursing education was managed expertly be Sr Joy Booth, and will be detailed in her attached report. The progress in nursing skills in the scrub and circulating staff has been maintained since the last visit.

Post-operative recovery remains an area of concern – our team brought our own nurse this visit to emphasize the importance of this aspect of the delivery of anesthesia and surgery in a safe manner

2. Formal training.

A formal teaching session with a small group of new basic surgical trainees was requested after the teams arrival by the resident RACs general surgeon – Dr Vani Prasad was able to facilitate this in parallel with our ongoing surgical clinical activities.

As detailed in previous reports our team is happy to contribute further to the teaching of local junior medical staff either in a formal lecture setting , or by having such local trainees accompany our team in outpatients, ward rounds and in theatre. This offer will be re-directed to local RACS staff managing the family medicine teaching programme.

EQUIPMENT AND SUPPLIES

Our team was very largely self – sufficient in terms of our equipment and consumables. The transport of these was facilitated by appropriate documentation provided by RACS , which allowed easy passage through the customs area at Dili airport.

At weeks end surgical and anaesthetic consumables unused were left with our counterparts at the hospital.

VISIT ORGANISATION

As with our previous trips the pre-visit preparation , organisation and planning for our visit was performed by the RACS staff in Dili . There were no issues with travel, visas, excess baggage or Timorese customs, all of which were covered with appropriate documentation. The only change for this visit was that there is no longer visa-free entry for the visiting teams.

RECOMMENDATIONS

There remains an ongoing need for cleft lip and palate and burn / burn contracture surgery in this small developing world nation. Dr Joao X requires continuing support in expanding his surgical skills, and because of his particular circumstance this can only be maintained by direct mentoring within his country. As other young surgeons commence their local programmes of training he may soon be joined by a colleague prepared to support him in providing reconstructive surgery.

It is planned that we maintain our twice yearly visits focussed at this stage in Dili and Baucau, so that the service and experience of all staff, medical, nursing, dental and speech in this specialized field be consolidated into a team.

ACKNOWLEDGEMENTS

The excellent organisation and support of the RACS staff in Dili, in making our visit a success.

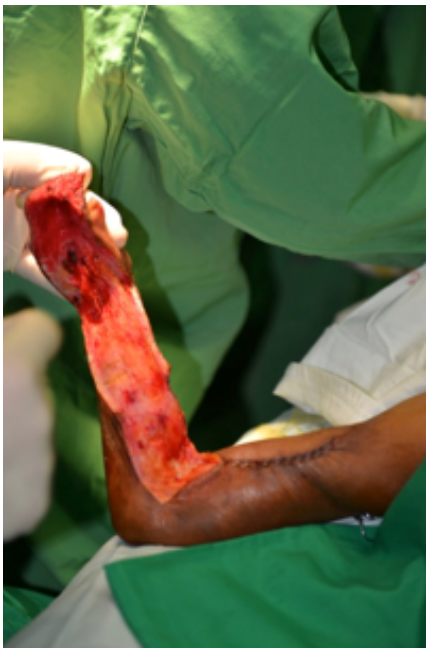
The surgical , theatre and ward staff of HNGV who once again worked closely with our team in both the delivery of care and also participated in the teaching situations provided.

Qantas and Air North airlines who again provide excess baggage allowances for the teams flights to and from Timor Leste.

The respective members of the team who as always willingly gave of their time, and the various surgical and anaesthetic supply companies and hospital who continue to support our work.

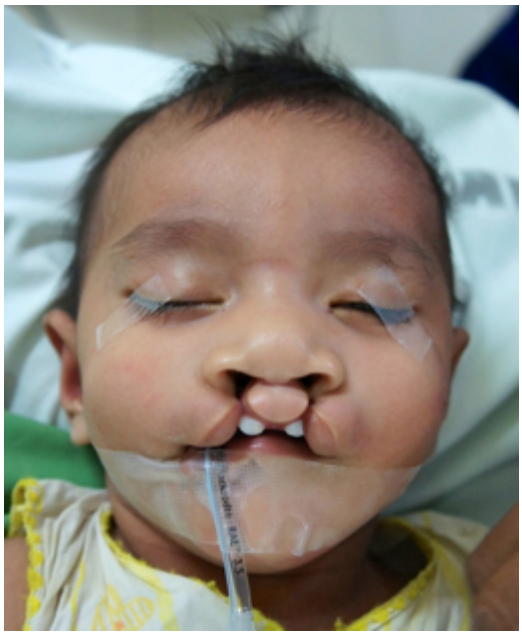
SUMMARY OF CLINICAL ACTIVITIES – PLASTIC SURGERY

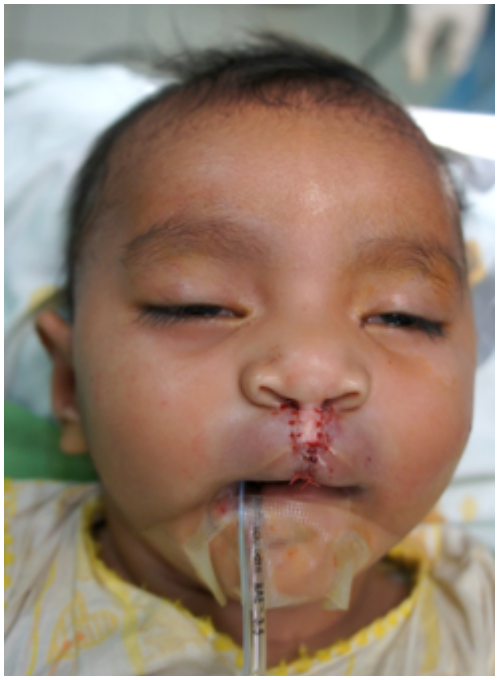
TOTAL PATIENT CONSULTATIONS		**54**
	INITIAL	**46**
	REVIEW	**8**
TOTAL SURGICAL PROCEDURES		**28**
	CLEFT LIP	**11**
	CLEFT PALATE	**5**
	BURNS / CONTRACTURES	**3**
	HANDS / LESIONS	**9**



2014 – at first presentation, with burn contracture

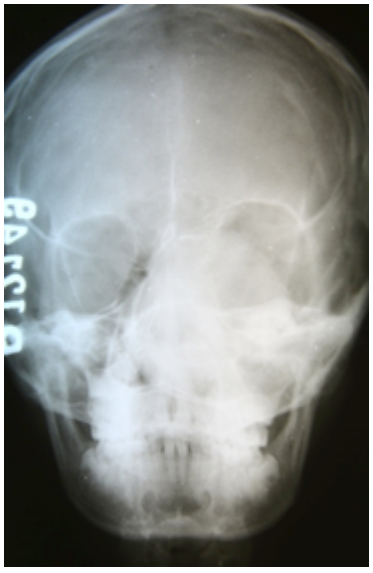
2015 – healed skin graft and maintenance of contracture release





Bilateral cleft lip and palate – before and after primary lip repair

Unilateral cleft lip repair in 2013 , followed- up in 2015



14 year old girl with fibro-osseous tumour arising in midface causing left eye to be displaced laterally and forward. For treatment in Australia.

Dr Wallace teaching new anaesthetic trainees techniques of intubation.

Dr Joao and local staff with Sr Margaret and Dr Andrew Wallace

NURSING REPORT

Introduction

A total of 27 surgical cases were undertaken by the OSSAA team over 5 consecutive days at the Hospital National Guido Valderes Dili East Timor. Local nursing staff were allocated to the team to undertake the role of scrub/circulating and recovery for the duration of the 5 days of planned operating.

Observations

As with previous visits the allocation of consistent staff each day supported the development of strong collegial working relationships with the Timorese nursing staff. Mr Jacinto Ximenes acting Theatre manager (Chefe Unidade) is to be applauded for managing nursing staff shift configurations in providing staff consistency to the visiting team and still allocating nursing staff to support ongoing local requirements. Local surgical workload appeared to have significantly increased compared to previous visits with multiple procedures being undertaken in adjoining theatres on a number of days.

Local shift configurations are not intended to support consecutive cases for all day surgery. Once again a highlight was the professionalism and commitment displayed to patients and the visiting team by junior nursing staff who volunteered to remain after their rostered finish time and to work through the usual lunch break to help complete the days operating (Mr Manual Casanube & Mr Cornelio M Freitas).

Over the 5 days of operating opportunistic education was undertaken in response to direct requests for education. As with previous visits this included experiential learning and reinforcement on closed gloving technique, surgical scrubbing, aseptic techniques, draping, basic infection control practices, diathermy, sharps management and correct transfer of instruments to the surgeon. A practice issue reinforced on this visit was having a waterproof base under the instruments; current practice had one layer of linen between the instrument trolley base, causing the instruments to become unsterile as soon as the drape became wet.

Evidence of clinical improvement maintained from the 2013 & 2014 visit was observed in sharps management with all scalpel blades and needles being removed before instruments left the theatre. All sharps were routinely discarded by instrument nurses from their set ups into sharps containers before being handed over to the cleaning/sterilising team.

Surgical counts were instigated by nursing staff for every procedure and

documentation of the process was undertaken throughout the 5 days of operating on the white board. The vocalisation of "*count correct*" audibly to the surgeon was established and maintained.

The implementation of a local version of the WHO surgical checklist was established in 2014 and it was pleasing to note that this was now embedded into local practice. Nursing staff requested and reminded the anaesthetist to undertake the process prior to surgery commencing.

Similar to previous visits was the work ethic displayed by the team reprocessing and sterilising instruments .At no time was the theatre list delayed due to reprocessing issues. It was pleasing to note that staff washing contaminated instruments wore gloves and following a gentle reminder and provision of eye shields all wore eye protection for the remainder of the week. Instruments were manually cleaned immediately after use, rinsed and dried prior to sterilising. It was noted that two manual timers were used on the bench top sterilisers and the sterilising staff all would respond "*not ready"* when asked if the instruments where available. This is a significant improvement on previous visits when timers weren't used or were fast forwarded to hurry the sterilising process. Another significant improvement discussed with staff in 2014 was the correct drying of trays in the bench top sterilisers. Staff correctly allowed the moisture on the tray to evaporate untouched in the steriliser (the moisture on the trays then evaporates as the retained heat is dissipated). Prior practice was to remove damp loads and place on unsterile surfaces to dry potentially contaminating the tray as the moisture of condensation may result in contamination by capillary attraction.

As in previous visits 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. The issue of overloading sterilisers remains a well-established culturally entrenched behaviour and will be challenging to change without intensive education.

Some issues highlighted in 2014 still remain 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 multiple stock items (gowns and drapes).

Another issue highlighted in 2014 was the weight overloading of trays. 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.

Concerns with the education of cleaning staff were again addressed with nursing staff. There appears to be no improvement from 2014, the operating table, 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 has been implemented. Curtains remain in the theatre and no-one was sure when or if they had been washed or replaced. Rubbish was removed between cases and the floor swept and spot cleaned. The floors within the suite were noted to be immaculate; however dust was obvious on vents and ledges in the theatre. Discussion centred on encouraging nursing staff to oversee and plan the cleaning as part of their responsibility to the patient. There appeared to be a wide variation in what cleaning was undertaken depending on who was allocated to the role. No-one appeared to be responsible for cleaning positioning equipment.

The wearing of inside shoes or shoe covers appeared to be vigorously enforced, however it was noted that many staff wore the same surgical scrubs unwashed on consecutive days.

Conversations with junior staff **(**Mr Manual Casanube, Mr Cornelio M Freitas, & Mr Frederico B.G Leite) highlighted that the junior staff are keen to be patient advocates and improve their practice, "*I want to be a good nurse and make things better for my people",* however, all acknowledged that it was challenging to do the right thing and articulated insight that role modelling by some senior staff conflicted with correct practice. It appeared that the junior staff group collectively supported each other and shared knowledge and skills.

Even though the workload exceeded the usual expectations of nursing staff, junior staff quickly embraced planning for the requirements of a daily list with 6-7 cases and proactively attempted to source consumables in a timely manner so the list could run without delays. Interestingly staff allocated to other theatres consistently used the teams theatre as a stock collection point, when asked about this practice junior staff commented that "*they know it will be here as you have taught us to have everything ready for the day".*

Cross monitoring and situation awareness in the theatre was poor with circulating nurses spending intraoperative time on their phones.

Recovery is an area that until this visit had not been examined or reported on in any detail. A member of the visiting team (Marg Maloney) worked alongside the Recovery nursing staff for the duration of the visit .There was noted to be a range of knowledge and skills varying from very limited to satisfactory amongst staff.

Due to the fact that a large percentage of patients in Dili hospital have surgery

under spinals the Recovery nursing staff have limited exposure to recovering patients following a general anaesthetic. Nursing staff appeared keen to apply their generic shortened recovery observation time used for spinal anaesthesia to patients having a general anaesthetic. The concept of allowing children to wake up slowly following cleft lip and palate surgery to avoid them becoming distressed and exacerbate potential for post-operative bleeding was not a practice the staff were familiar with.

Although Recovery staff appeared keen to return patients back to the ward as quickly as possible, following prompting, routine and regular observations were undertaken on all Recovery patients and they remained in Recovery until they were sufficiently awake to be transferred safely to the ward.

Oxygen and Pulse oximetry were always available unless more than 2 patients, then an OSSAA pulse oximeter was utilised. There appeared to be no emergency resuscitation equipment or system in place for gaining support in a Recovery emergency.

Basic infection control practices in Recovery were noted to be poor. No regular cleaning of trolleys was observed, no hand hygiene between patients, no paper available to dry hands after role modelling hand hygiene. The concept of each patient having a clean Hudson mask for Oxygen delivery was instigated, local practice was to keep one mask attached for all patients to use.

Recovery is an area that could be significantly improved with education on the different types of anaesthetics, recovery observations and what is critical to observe and document. Due to language challenges it was difficult to ascertain and evaluate the knowledge of the Recovery staff.

Recommendations

- Future visits should include a focus on Recovery skills including; monitoring patients in recovery, recognising potential complications and planning appropriate management. This could be facilitated by role modelling and education on principles of airway management, post-operative observations, documentation and emergency protocols. This should also include education on setting up for the day and checking equipment.
- All nursing staff require further education on basic infection control practices; this includes hand hygiene, the wearing of fresh scrubs each day and cross contamination. Further follow up is required so that nurses

can support and instruct cleaning staff with implementing 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.

- Having two nurses travel in the OSSAA team allows extended opportunity for reinforcement of practice, and supports a wider range of learning opportunities for local nurses.
- Continue to build on solid foundation of support
- As with previous recommendations focus areas for future visits need to include consolidating knowledge and skills for sterilising staff; this should include role modelling and education on basic infection control practices, loading sterilisers, tray weight limits and stock rotation.
- The junior workforce are the group that have demonstrated a willingness to learn, question and improve local practice. This is 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.

Marg Maloney as a patient for draping practice with junior nurses.

PLASTIC & RECONSTRUCTIVE SURGERY – TIMOR LESTE
SPEECH PATHOLOGY REPORT
1st – 7th August 2015

Background
I was very happy to join the Plastic and Reconstructive Surgery team visit to Dili's national hospital (HGNV) in early August, alongside Dr Mark Moore (team leader & surgeon), Dr Vani Prasad (surgeon), Srs Joy Booth & Marg Maloney (theatre nurses) and Dr Andrew Wallace (anaesthetist).

My focus for this trip was to continue supporting the local speech pathologist, Ms Alotu da Costa Sarmento, particularly in relation to cleft support for children and adults pre and post surgery. Alotu's other significant caseload is patients impacted by stroke.

Alotu was able to attend the plastics team's assessment clinic on Saturday 1st August. Here, she was able to meet the team, further develop networks and educate the community on her role in communication post surgery. At least two children who attended the clinic were offered appointments the following week to visit the speech pathologist (one for feeding and one for speech input post lip & palate repairs).

Alotu and I were also able to visit the Bairo Pite Clinic, to discuss the role of speech pathologist and how the clinic can refer patients to speech pathology. It was opportune that our visit co-incided with a recent birth of a baby boy born with an incomplete cleft lip and complete cleft palate. Alotu collected the details of the newborn and was able to pass these onto Sarmento Correira (RACS) for future review with the plastics team.

Feeding / Equipment
There were three infants who were admitted to the hospital for feeding issues with cleft lip +/- palate and were referred to the visiting team by Dr Ingrid Bucens (Paediatirician). Two of the infants had been admitted with weight loss of greater than 10% since birth. Dr Ingrid had requested Special Needs Feeder (Haberman) bottles to be brought from Australia for the babies.

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. Meeting these families highlighted to me the importance in ensuring parents understand the difference in feeding mechanics of babies with a cleft condition. Again, Alotu was able to take details to follow up the families in the interim months prior to corrective surgery.

On previous trips, the spoon feeder was provided, as it was felt spoon feeding cleft babies was the most common alternative to breastfeeding. However, I saw more bottles utilised this time, so I will explore the possibility of squeeze bottles and cleft teats (similar to those we recommend in at Royal Darwin Hospital). The Special Needs

Feeder is expensive (over $50 retail in Australia), and can be complicated to put together and not necessarily more effective than a simpler system.

Cleft Speech Therapy

We saw one 2-year-old girl who had her lip and palate repaired last year, who was reviewed by the team on the Saturday clinic. She was reported to not be talking well. She was seen by Alotu and myself the following Monday for a play session and a review of her speech sound repertoire. She presented with nasal sounds (ie. m, n), vowel sounds and minimal pressure consonants (eg. p, b, t, d). Advice was given to parents on which sounds to elicit and a core vocabulary was suggested to practice the target sounds. Alotu has offered weekly therapy to the family.

Unfortunately, there were not many children identified for speech follow up this trip. Alotu was able to obtain a list of the children having surgery and will contact the local families to offer speech therapy follow up in the coming months.

Future Considerations

- Ongoing promotion of the speech pathologist role in cleft care and to ensure staff at HGNV and other health clinics (eg. Bairo Pite Clinic) are aware of how to refer patients for follow up.
- Alotu to be present for other plastic team visits – to liaise with RACS or OSSAA to be notified of when trips to Timor are planned.
- To liaise with the Plastics Co-ordinator to locate children post repair with speech and communication concerns for therapy input.
- Develop resources to educate parents on feeding infants with a cleft condition.
- Explore feeding equipment options.
- Establishing professional development links with speech pathology departments in Australia and Indonesia.
- Developing a mentor / supervision relationship to support Alotu in her speech pathology role.

Acknowledgement

Thank you to Dr Mark for extending the invitation for me to join the RACS Plastics team and the welcome given so generously to me by the Timorese medical officers, allied health professionals and the local RACS team.

I continue to 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

August 2015