



**Overseas Specialist Surgical Association of Australia
(OSSAA)**

Royal Australasian College of Surgeons (RACS)

Plastic Surgical team visit

Dili, Timor Leste

5 – 12 August 2017

Mark Moore, AM., FRACS

Plastic and Craniofacial Surgeon

INTRODUCTION

The OSSAA plastic and reconstructive surgical teams have been the only continuous volunteer surgical team providing both clinical and teaching services in the management of cleft lip and palate, and burn management in Timor Leste since 2000. This uninterrupted contribution especially to teaching and mentoring is now bearing fruit as our local counterparts increase their involvement in the day to day treatment of these conditions. This is despite the isolated, episodic visits of other teams from assorted nations in the region who perform surgery in country without reference to the local surgical community / colleagues.

This long term involvement has also allowed our organisation to assist and facilitate the introduction and development of firstly dental services and more latterly orthodontic expertise. The advent of these services introduces the possibility of expanding the range of surgical options for cleft patients – alveolar bone grafts and even orthognathic surgery in time.

Our team once again relied on the resident RACS team and our long term counterpart Dr Joao Ximenes to assist in advertising the team's visit, undertake the necessary administrative processes with local health authorities and recruit patients for assessment and treatment – this ongoing partnership remains crucial to the efficient running of our missions.

TEAM PERSONEL

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 Andrew Wallace Anaesthetist
Women's and Children's Hospital and Royal Adelaide 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

A number of local nurse anaesthetists and GP anaesthetic trainees.

Mr Cornelio M Mok Freitas Theatre nurse, HNGV

Mr Manuel Casenube Theatre nurse

Mr Francisco N da Costa Theatre nurse

Mr Silvino da Silva Theatre nurse

Mrs Lolita C Amaral Recovery nurse

Mrs Maximiana L S Ferrao Recovery nurse

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 – RACS in country team leader

Mr Sarmiento Correia Faus – RACS coordinator

OVERVIEW

This visit to the Hospital National Guido Valadares in Dili is the 44th such volunteer plastic and reconstructive surgical mission to Timor Leste since our team initiated its programme there in March 2000.

A pre- screening visit had been carried out by Dr Joao Ximenes and Mr Sarmiento Correia to the inland districts of the Manatuto region in the month leading up to the teams arrival- this followed on from a very successful similar

plan on recent previous visits. Communication of the teams planned assessment clinic on the Saturday morning of arrival was focussed in this region, as well as more widely throughout the country. As a consequence more than 40 patients were initially registered to attend, but by days end some 56 patients had presented. This allowed the production of a full weeks operating schedule – with some allowance for late presenting cases.

Following the clinic there was an opportunity to visit Maria Dias at the PAS Clinic in Becora, the suburb near the hospital. This clinic which was the site of the original assessment clinics for our teams in the earliest years, is now where Dr Terry Yuen and his dental colleagues, and more recently D Mark Leedham and his orthodontic colleagues perform dental and preliminary orthodontic interventions. Discussions with Maria reaffirmed our commitment to the healthcare services she continues to provide to her people – and from the perspective of the cleft lip and palate population, the opportunity for us to now refer cleft patients for consideration of orthodontic treatment in advance of alveolar bone grafting at age 9-12 years of age, and at completion of facial growth for aesthetics and occlusion. She arranged for a group of older cleft patients to present to the hospital on Monday afternoon for review. A number of these were waitlisted for revisionary surgery in 2018, and others assessed as being candidates for orthodontics, with further soft tissue surgery contemplated after this.

The team had the day free on Sunday, and opted to travel to the Ermera region, an area we had not previously visited. Famous as a coffee growing region Ermera lies in the mountains west of Dili. The road as far as Gleno has been well constructed with uninterrupted new tarmac, but from there on all the way to Ermera travel becomes increasingly difficult because of the poorly maintained roads. The mountain slopes in this area are covered with coffee bushes organically grown beneath the tall overarching canopy trees. Returning to Dili late afternoon the team took the opportunity to enjoy the local coffee in a new coffee shop on the waterfront.

The team arrived at HNGV early on Monday morning, and after quickly setting up the operating theatre was able to start the week's surgery. We were greeted by Mr Mok, the young theatre nurse who first worked with our team 2 years ago, on what was at that time his first week in the operating theatre. He once again worked enthusiastically with the team throughout the week, and continued to absorb as much knowledge as possible from Sr Joy Booth. He once again made a significant contribution to the delivery of our surgical services. His input from local colleagues was only matched, as always by Dr Joao. From early morning ward rounds assessing preoperative cases and discharging postoperative patients, through the full days surgery and then end of day ward review Joao was an outstanding example of a clinician dedicated to assisting his people. By weeks end he had performed another 12 cleft lip repairs, this adding to the 5 cleft cases he has performed throughout the year since our last visit.

In summary, the team had seen 56 cleft lip and palate patients, with 37 of these being new to our team- a small number of these have had surgery in

the past by visiting Indonesian or other surgeons. There remain a steady stream of newborn clefts, with a number having a family history – older siblings with clefts also. Among the review cases were a number who had cleft lip repairs in 2016, who were returning for palate repair on this visit. With this visit completed the team has now performed 947 cleft procedures in Timor Leste, with some 843 of these being primary operations. Dr Joao can now easily perform high quality unilateral cleft lip repairs where these are incomplete, and on this occasion progressed to several complete cleft lip repairs with comparable outcomes.

There were only a small number of burn contracture cases presented for surgery. One of these had undergone release of an axillary contracture by Dr Joao in the month or so prior to our team's arrival, with an acceptable result. The contralateral side was released with skin graft repair – redressing of this case later in the week showed good graft take. The other burn contracture was in a young 11 year old girl with a long standing contracture across the groin and upper thighs. Despite achieving an acceptable release and resurfacing with skin graft, she will in all likelihood need further surgery. As with all burn surgery performed in Timor Leste at present, one of the limiting factors remains access to good quality splinting and physiotherapy post-operatively.

One patient presented with a recurrent tumour in the mandible. There was no record of the details of the nature of the lesion from the previous surgery, and the only imaging available was a poor quality plain xray. Surgical excision was possible of what turned out to be an encapsulated soft tissue tumour in the left body of the mandible. Histological assessment of the tissue back in Australia confirmed it to be a plexiform type ameloblastoma. Follow up will be necessary for this lady.

There were no early issues with management of the patients intra-operatively or during their in-hospital course after surgery. We were well supported by a small cohort of theatre nurses dedicated to working with our team – further comments about nursing issues is in the attached report from Joy Booth. This visit also saw for the first time a reliable if small team of recovery staff who monitored the patients appropriately prior to their return to the ward. In hospital care was provided in the male and female surgical wards, with Dr Joao overseeing the discharge planning for our cases.

The full spectrum of nations providing surgical and anaesthetic services remains in place at HNGV – the large contingent of Cuban doctors remain, side by side with a smaller number of Chinese specialists as well as the full resident RACS team. Unfortunately for Dr Joao the Cuban team continues to send a Dentist / Oral and Maxillofacial surgeon who attempts some cleft lip / palate repairs without involving Dr Joao at all – thus losing a further educational opportunity for him.

From this visit there remains a waitlist of cleft cases to do on the upcoming OSSAA visit to Baucau in November – both cleft lip cases returning for palate

repairs as well as others which were just too young to have their surgery on this visit.

The team departed on the Saturday, somewhat saddened by the news of Ms Kate Moss impending departure from Dili, after her 3 years there – we thank her greatly for all her support and wish her well in her future endeavours. Similarly earlier in the week we had to farewell Dr Eric Vreede, long term RACS anaesthetist and Team leader in Timor Leste, whose guidance and friendship to our teams was much valued over many years.

SUMMARY OF CLINICAL ACTIVITIES

1. Screening

Patient pre-screening was again planned by Mr Sarmento and Dr Joao – on this occasion they had in the month leading up to our mission visited the inland , remote mountainous areas of the Manatuto region. As has become the norm with this triaging process most cases were very relevant to our teams area of expertise. A number of the cleft cases were very young , only 2-3 months of age, and thus too young for surgery on this visit – they were waitlisted.

With the improving cleft referral process, some consideration needs to be given to establishing a national cleft database, perhaps run out of the RACS office, but being overseen by DR Joao.

2. Surgery

Comments above in the overview detail the improvements in the theatre environment. Other areas of work practice in the operating theatre remain much unchanged.

Dr Joao again supported the team throughout the week – he performed a large number of the incomplete unilateral cleft lip cases, as well as several of the more complete cases. On occasions the sheer number of cases and length of the operating list unfortunately meant some compromise in teaching for him. Dr Andrew Wallace as the anaesthetist had a number of the local GP anaesthetist trainees with him as well as episodically some of the long term nurse anaesthetists.

3. Post-operative care

The post-operative care of all case was overseen by Dr Joao. As has become our protocol in Dili, all cases were discharged on day one or two depending on the location of their home town or village, and whether there was a lip or palate repair. There were no specific issues of concern during our time in country.

SUMMARY OF TRAINING ACTIVITIES

1. Informal training

a. Outpatient

The initial clinic for assessment is the focus for the clinical evaluation of the cleft and burn cases- both surgical and anaesthetic assessment for fitness for surgery. Dr Joao is now well versed in the protocols for the surgical management of cleft lip and palate. With the advent of a volunteer orthodontic service from Australia, the opportunity now arises for referral for further management of the abnormal occlusion, and preparation for alveolar bone grafting in those cleft children in mixed dentition where their overall dental hygiene is adequate – this concept was introduced with this visit.

b. Operating theatre

This remains the principle location for teaching the technical aspects of cleft and burn surgery – Dr Joao continues to progress- his cleft repairs with the

incomplete cleft lips are the equal of many surgeons working in the developed world. With the opportunity to perform such surgery on a more regular basis , other than just with visiting teams he will continue to expand his cleft surgical repertoire.

Anaesthetic training was ongoing with a number of the local medical trainees and nurse anaesthetists.

The theatre nurse training is detailed in much greater depth with Sr Joy Booth's attached report.

2. Formal training

The heavier than expected clinical workload on this visit once again mitigated against the team being involved in any other formal teaching or lectures. We, as always remain open to providing such teaching opportunities.

EQUIPMENT AND SUPPLIES

The team was once again very largely self sufficient with regard to supplies and consumables. In advance of this visit there had been no specific requests for any surgical or anaesthetic equipment or supplies.

The provision of the appropriate documentation for importing of these surgical and anaesthetic materials was organised by Mr Sarmento from the Timorese customs and health authorities, ensuring a straight forward passage through the airport on arrival.

VISIT ORGANISATION

The pre-visit organisation of accommodation, travel, clinic logistics and planning of the team's timetable was overseen by Ms Kate Moss and Mr Sarmento Correia , respectively the RACS team leader and local coordinator in Dili. Their expertise ensured an uneventful and productive week both administratively and clinically.

RECOMMENDATIONS

These remain largely unchanged from the last report – that Dr Joao continue to perform as many cleft repairs as he can possibly do during the rest of the year. The infrastructure in theatre as well as the peri-operative environment is now conducive to this occurring, and he needs to be proactive in making it happen.

Similarly from our end we are at the time when we can consider assisting in developing a national cleft database for Timor Leste – the administrative structures exist in Dili to begin this process, and we will look to provide the database expertise from our end to make this happen.

SUMMARY OF CLINICAL ACTIVITIES – PLASTIC SURGERY

TOTAL PATIENT CONSULTATIONS **74**

CLEFT LIP/PALATE **56**

New **37**
Review **19**

BURN **5**

TOTAL SURGICAL PROCEDURES **43**

CLEFT LIP **28**

CLEFT PALATE **7**

BURNS / CONTRACTURES **2**

OTHERS **6**



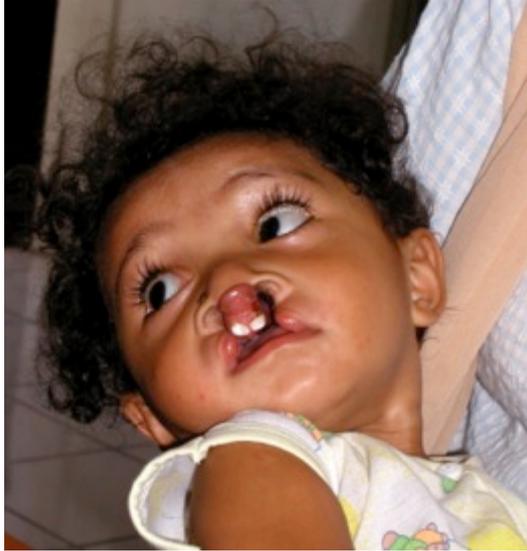
Saturnina, aged 12 years in 2016 , presented for repair of her bilateral cleft lip. Returns in August 2017 for repair of her cleft palate



Marfin, age With bilateral cleft lip repaired in September 2016,
returning for cleft palate repair in August 2017.



Gonzalo, aged 1 year in September 2016 prior to right unilateral cleft lip repair, returning almost one year later for palate repair.



Hendri Lopes, first seen in 2001 with bilateral cleft lip and palate. Surgical repairs in 2001 and 2002. Returned in 2017 for assessment of speech and dentition.

Nursing report

Introduction

A total of 41 surgical cases were undertaken by the OSSAA team during the week August 5-11th 2017 at the Hospital National Guido Valderes Dili East Timor. Local nursing staff were allocated to the team for the duration of the 5 days of planned operating. For the first time since 2012 no nurse anaesthetist was allocated to the team.

Observations

This author first visited East Timor in 2012 and has been privileged to make consecutive annual visits; whilst there are improvements noted each year it seems timely to make a comparison of improvements and observations from the first visit undertaken in 2012 and progress to date in 2017.

2012	2017
2 Operating theatres 14 Instrument / circulating staff 7 Sterilising staff	3 Operating theatres 16 Instrument / circulating staff 7 Sterilising staff
2012 Organisational processes 2017	
Rotational staff roster with different team members allocated to visiting team each day, no individual responsibility or accountability for surgical list management.	Consistent instrument /circulating allocations with nursing leadership demonstrated by Mr Cornelio M Freitas (Mok)
No role modelling or team leadership for surgical lists.	Role modelling in leadership, and list management displayed (organising the team, checking consumables, planning the workload and actively promoting and facilitating good teamwork behaviours)
Lack of patient focus with staff starting late, leaving for extended breaks or not returning from breaks.	Commitment displayed to patients & visiting team by junior staff who volunteer to remain after their rostered finish time and have a shortened lunch break to help complete the days scheduled operating.(Manual Casanube, Lucio Loe Mali, Cornelio M Freitas)
Poor mutual supportive behaviours across staff; staff rostered in adjoining theatres that	Junior staff group support each other with mutual supportive behaviours, however,

have no cases do not offer assistance.	task assistance from senior staff remains poor. Junior workforce noted to be collegial and collaborative.
No housekeeping activities such as stock rotation, equipment checking, equipment maintenance and consumable inventory management.	Minimal housekeeping activities, continued problems with stock and location of instruments and consumables. Stock rotation still remains unresolved: nursing staff place and remove sterile stock from the storeroom with no concept of stock rotation practices.
Poor situation awareness during procedures.	Cross monitoring and situation awareness remain poor with circulating nurses spending intraoperative time on their phones. Use of mobile phones excessive.
Clinical practice	
Sharps management poor with scalpel blades and needles left on instruments, minimal use of sharps containers with sharps discarded into plastic rubbish bins.	All sharps routinely discarded by instrument nurses from set up into designated sharps containers before being handed over to the cleaning/sterilising team. Significant OHS and Infection control improvement and compliance.
Surgical count process not routinely undertaken.	Area of significant improvement. Surgical counts embedded into practice, routine counting and documenting the count on white board for procedures. Vocalising " <i>count correct</i> " audibly to the surgeon. Good understanding of process to follow for incorrect count.
Scalpel blades loaded and removed with fingers.	Scalpel blades loaded and removed with an instrument reducing risk to staff and complying with good OHS behaviour.
Haphazard scrubbing, gowning and open gloving.	Correct scrubbing, gowning and closed gloving technique, compliance with recognised standards of practice.
Intraoperative aseptic technique practices	Aseptic techniques improving towards recognised standards of practice.

poor	<p>Waterproof base routine under instruments Gloved hands kept on top of the trolley Fluids on field contained. Fluids poured without contaminating sterile field No leaning over field to dispense items by circulating nurse Absence of flicking onto sterile field Consumables correctly opened avoiding contamination</p>
Surgical consent not checked pre-operatively	Surgical consent and fasting status routinely checked in holding bay, compliance with recognised standards of practice.
No Surgical safety checklist	Local version of the WHO surgical checklist implemented, significant improvement with recognised practice standards, currently only initiated by nurse anaesthetist.
Cleaning and sterilising	
Variable and inconsistent sterilising times with staff incorrectly removing damp loads and placing on top of the steriliser (unsterile surface) to dry, potentially contaminating the tray as the moisture from condensation results in contamination by capillary attraction.	Trays correctly left in the steriliser untouched to allow the moisture on the trays to evaporate as the retained heat is dissipated.
Not using steriliser timers or fast forwarding timers to hurry sterilising process resulting in contaminated trays	Manual timers correctly used on the bench top sterilisers and sterilising staff responding " <i>not ready</i> " when asked if the instruments were available if timing not complete.
No wearing of PPE by staff washing contaminated instruments	Gloves routinely worn, eye protection selectively used.
Instruments sterilised in closed position	All instruments sterilised in the open position allowing steam to come in contact with all surfaces on instrument. Significant practice improvement.

Overloading of sterilisers ,only 1 steriliser working	2 new Sakura Japanese steam sterilisers commissioned 2017, overloading still noted to be problematic.
Unlabelled and haphazard sterile store room	Revamped and clearly labelled sterile stock room with new shelving, significant improvement.
Poor cleaning processes	Unchanged .The operating table, horizontal surfaces, theatre equipment and operating lights still appear not to be cleaned on a daily basis and no structured schedule for in between cases and end of day cleaning appears to be in place.`
Overloading of trays, overweight trays wrapped in one layer of paper wrap lay un sterile on shelves due to the paper wrap being torn from the weight of the tray contents when placed on shelves.	Practice unchanged

As can be seen from the table significant improvements have been observed in clinical practice since 2012 and it can be anticipated that as the junior workforce move into more senior roles there will be vigour and energy further directed towards improving standards and patient care activities within the operating theatres of HNGV.

Joy Booth

August 2017