Overseas Specialist Surgical Association of Australia (OSSAA)

Royal Australasian College of Surgeons (RACS)

Plastic Surgical team visit

HNGV, Dili, Timor Leste

21-27 April 2018

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Plastic and Craniofacial Surgeon

INTRODUCTION

The OSSAA plastic surgical team returned to the national hospital in Dili (HNGV) after last visiting in August 2017. In the interim we have had a team visit the Baucau Regional Hospital in November 2017. With the large number of visits undertaken since March 2000, it was hoped that on this visit the team would complete it's 1000th cleft surgical procedure.

In keeping with our hope to take cleft treatment beyond just cleft surgery we were once again accompanied by a speech pathologist from Darwin and an orthodontist from Adelaide. Both these cleft team colleagues have local counterparts who they are involved in teaching during the teams visit.

In country organisation was again orchestrated by Mr Sarmento Correia, the RACS coordinator based at HNGV, who on this occasion sought to use local television advertising as a means to encourage cleft lip and palate patients to attend for treatment.

TEAM PERSONEL

The OSSAA team for this visit was comprised as follows :

Mr Mark Moore	Plastic and Craniofacial Surgeon Women's and Children's Hospital and Royal Adelaide Hospital, Adelaide.
Mr Vani Prasad Atluri	Plastic and Reconstructive Surgeon Royal Adelaide Hospital and Queen Elizabeth Hospital, Adelaide.
Dr Ruth Barbour	Anaesthetist Royal Darwin Hospital, Darwin
Sr Joy Booth	Theatre Nurse / Educator Royal Adelaide Hospital, Adelaide
Sr Amy Elgar	Recovery / Anaesthetic Nurse Women's and Children's Hospital, Adelaide
Ms Celina Lai	Speech Pathologist Royal Darwin Hospital, Darwin

The team was also accompanied by Dr Zameer Gill, surgical resident from the Queen Elizabeth Hospital, Adelaide and Professor Craig Dreyer from the University of Adelaide Dental School. Professor Dreyer spent 3-4 days with the team in the assessment clinic and at surgery and was joined later in the week by three of his final year orthodontic students.

PARTICIPATING LOCAL STAFF AND COUNTERPARTS

The team was assisted by our long term counterparts Dr Joao Ximenes (Plastic surgical trainee/ surgeon), HNGV, Mr Sarmento Faus Correia (RACS in country coordinator) and a number of other local medical and nursing staff in the outpatient, operating theatre and surgical ward environment. Special note should be made of the contribution of Dr Cesaltina (Noki), surgical trainee, who most admirably filled in for Dr Joao after he was forced to depart overseas for personal reasons, and also Mr Cornelio M Mok Freitas (Mok) who provided the expert operating theatre nursing support for our team for the whole week.

OVERVIEW

Our team's visit to the Hospital National Guido Valadares, Dili on this occasion represents the 46th volunteer plastic and reconstructive surgical mission to Timor Leste by OSSAA/RACS since it's inception in March 2000.

The pre-visit organisation for our team was overseen by Mr Sarmento and Dr Joao X – on this occasion their decision was to consciously and formally advertise the team's arrival and scope of practice on local television. The success of this approach was manifest with more than 120 patients presenting for assessment on the Saturday morning of our arrival. Indeed patients came from as far as Suai in the west and south, and Viqueque and beyond in the east. After seeing 75 patients the surgical lists were already full, meaning that the remaining patients were addressed by Mr Sarmento and Dr Joao to explain that they could only be waitlisted for future team visits, or surgery by Dr Joao in the interim where he felt it was appropriate.

During that days clinic more than 70 cleft cases were examined and plans made for treatment. Among some of the older previously treated cleft cases were patients suitable for consideration of orthodontic / dental intervention. We had accompanying us in the clinic Professor Craig Dreyer, head of the Orthodontic postgraduate programme at the University of Adelaide, who with a group of fellow Australian orthodontists is developing a service which we hope will lead to the possibility of alveolar bone grafting for cleft patients. Patients as young as a few weeks old through to those well into adulthood were once again reviewed.

Dr Joao X was present through the whole of the screening clinic before departing for overseas on the Monday. He introduced his young surgical registrar / trainee, Dr Noki who then worked as our local counterpart all week. She was present throughout each day, working and learning from the team, as well as overseeing the pre-operative and post-operative ward management of the patients.

As this was the first visit to Dili for Dr Barbour, our team's anaesthetist, she took the opportunity to familiarise herself with the theatre and the anaesthetic equipment during the Saturday afternoon.

The team had the Sunday off, visiting various places of interest in and around Dili, before commencing surgery early on Monday morning. Mr Mok, one of the young local theatre nurses has over the last few years become our regular counterpart – taking every opportunity to learn from Joy Booth, was there to greet us. He had been in contact with the team in advance of our visit, so that he could ensure his shifts matched our timetable. Local nurse anaesthetists and GP anaesthetic trainees were also in attendance to work with Dr Barbour – the large number of cases operated on providing ample teaching opportunities.

By weeks end the team completed another 35 cleft operations, the majority of these being new cases. With this visit we have now performed over 1000 cleft operations in Timor Leste since we first started with more than 900 cases being primary surgical interventions. As there were many more cleft cases presenting than could be treated during the week, a number were referred to Dr Joao X for local treatment at his discretion after our departure. The more complex, wider and complete clefts that he does not feel confident in treating at this time were waitlisted for the team visit to Baucau later this year, or our next Dili visit in 2019.

There were a small number of burn contracture cases released – these were reconstructed with local flaps and limited amounts of skin grafting. Splinting post-operatively and skin graft care remains an issue, so we continue to be careful in the contracture cases we select for treatment.

There were no issues with post-operative ward management – separate rooms having been set aside so that our cleft patients were located together. Several cases were deferred because of fever and chest issues, whilst another case was noted to have finger clubbing and poor oxygen saturation. Referral to the visiting Australian paediatric cardiology team allowed for an echocardiographic assessment confirming a significant congenital heard anomaly – VSD with Eisenmenger's syndrome.

The team departed early on Saturday on the Air North flight to Darwin with onward connection for most of the team to Adelaide.

The logistic issues for the visit were all very well sorted in advance of the visit – excess baggage allowances had been arranged through the RACS office in Melbourne, and customs clearances for our consumables and equipment by Mr Sarmento in Dili. Accommodation was again comfortable at the Hotel California and airport transfers occurred courtesy of the hotel.

Teaching and training was once again a central focus for our team, with opportunities during the working week for nurses, anaesthetic staff as well as surgical trainees. The nursing report from Joy Booth will detail her observations about nursing issues.

Celina Lai our speech pathologist also spent considerable time with her local colleague Alotu continuing her education regarding cleft speech issues, as well as with paediatric nurses giving advice regarding infant feeding.

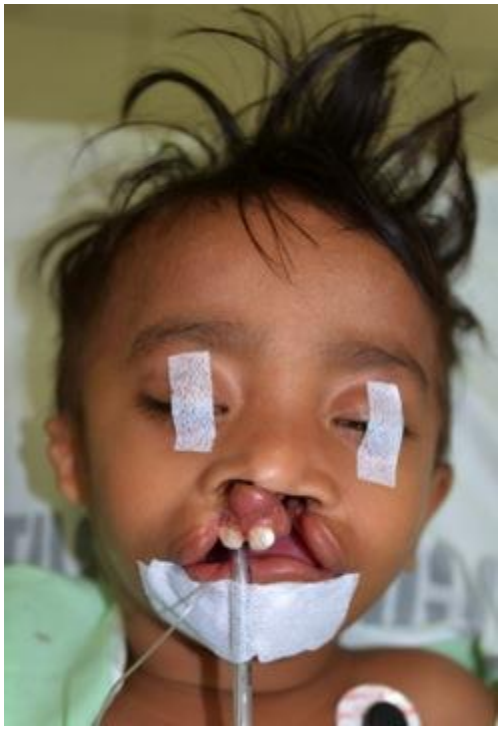
Finally, Professor Dreyer and his final year students from Adelaide spent some time with our team in theatre observing cleft surgery, before spending the remainder of the week at the PAS Clinic dental facility, where they saw among other cases some of our previously treated cleft cases who we are aiming at preparing for alveolar bone grafting in the near future.

SUMMARY OF CLINICAL ACTIVITIES – PLASTIC SURGERY

TOTAL PATIENT CONSULTATIONS		**135+**
	CLEFT LIP/PALATE	**75+**
	BURNS/ CONTRACTURES	**19+**
TOTAL SURGICAL PROCEDURES		**43**
	CLEFT LIP	**27**
	CLEFT PALATE	**8**
	BURNS/ CONTRACTURES	**4**
	OTHERS	**4**

Soft toy balls brought from Australia by Dr Barbour, which seems to symbolise the team's main activities – taking a "broken" mouth and making a smile !!

The OSSAA team with local theatre staff at the end of the working week in HNGV, Dili.



Wide bilateral cleft lip and palate – before and after primary lip repair.

17 year old girl with left unilateral complete cleft lip and palate and left hemifacial microsomia, who underwent cleft lip repair in 2017, and returns for review in 2018. She is orthodontic braces and will have palate surgery on a future visit.

4 year old boy with left incomplete cleft lip and palate, returning for palate repair.

Dr Ruth Barbour working with local anaesthetic trainees and nurse anaesthetists.

Nursing report

OSSAA team visit
Timor Leste
April 2018

Joy Booth & Amy Elgar

Introduction

Following a big day of consulting and screening patients for surgery, 43 surgical cases were undertaken by the OSSAA team during the week April 23-27 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 and Education

Similar to 2017 this trip had two local staff members allocated to the team for the duration of the week, Mr Cornelio M Freitas (Mok) and Miss Rossitta de Jesus. Mok had once again specifically asked to be allocated to the team. Mok has worked with the team since 2015, this was Rositta's first experience with a visiting surgical team. The consistent allocation of the same two staff each day supported the development of strong collegial working relationships and focused practice improvement.

Throughout the week opportunistic education was undertaken in response to direct requests for education from Mok and Rossitta. During the 2017 trip the major teaching focus was supporting Mok in developing leadership skills in surgical list management. Mok demonstrated that the skill development from the 2017 visit had been practiced and implemented throughout the year as he demonstrated good role modelling to Rossitta in leadership, situation monitoring and list management. This included organising the team, checking consumables, planning the workload and actively promoting and facilitating good teamwork behaviors. Throughout the week education for Mok was focused upon further developing leadership skills in list management.

Education for Rossitta focused on experiential learning and reinforcement on closed gloving technique, surgical scrubbing, aseptic techniques, draping, basic infection control practices, electrosurgical equipment, sharps management and correct transfer of instruments to the surgeon. Basic practice issues were reinforced with Rossitta, these included setting up in order of use, preparing instruments in a logical sequence and focusing on the surgical procedure rather than events occurring around the theatre.

Evidence of clinical improvement maintained from previous visits was observed in sharps management with contaminated sharps removed from instruments before leaving the theatre. Sharps were routinely discarded from their set ups into sharps

containers before being handed over to the cleaning/sterilising team. Surgical counts were embedded into practice with Rossitta routinely counting and documenting the count on the white board for all procedures.

Mok was encouraged as the nursing team leader to support Rossitta in all aspects of her skill development and to reinforce clinical skills. Because Mok demonstrated increasing leadership skills and felt empowered to support and educate Rossitta more time was available to support the learning needs of the staff working in the sterilising area on this trip.

It is acknowledged that the amount of cases undertaken challenged the usual workload of the sterilising team but practice improvements from previous visits have lost some momentum. The issue of eye protection when washing contaminated instruments was addressed on day one, however numerous occasions saw staff washing instruments with eye protection sitting on top of their head.

Even though sterilising timers were available they were only used when requested and as with previous visits when staff were questioned re sterilising times the answer varied considerably. Work processes varied between staff, this was most evident with the wrapping techniques used when preparing items for sterilising. Articles were not consistently wrapped in a manner (envelope/parcel wrap) to allow for opening in an aseptic manner and were not always sealed correctly.

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 of condensation results in contamination by capillary attraction. Daily 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.

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. Highlighted in previous visits the issue of overloading of trays continues .Overweight trays wrapped in one layer of paper wrap were unsterile on storeroom 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 and sterilising staff still place and remove sterile stock from the storeroom with little concept of stock rotation practices; the sterile storeroom was challenging to navigate due to stock being

placed haphazardly on shelves despite clear shelf labelling. Education was given to the sterilising team on basic stock rotation to prevent new stock being used first and out of date stock accumulating; this included the customary concept of taking from the right and replacing on the left. Shelf life of sterilised items was not addressed and would be useful to introduce in future visits as it was noted that some trays had been on the storeroom shelf for so long that the sterilising tape had lifted from the paper wrapper.

General housekeeping and consumable inventory management were noted to be poor with nursing staff unaware of what sterile stock was held and where to locate basic supplies.

It is apparent that the junior nursing staff group appear to support each other, mutual supportive behaviors and task assistance from senior staff was again noted to be poor. Staff rostered in adjoining theatres that had no cases did not offer assistance to Mok and Rossitta, apart from Mr Manuel Casanube who has joined the team over a number of years. Despite decreased activity in adjoining theatres no nursing staff were noted undertaking any housekeeping activities.

The issue of cleaning in the theatres remains problematic. The operating table and theatre equipment were not cleaned on a daily basis and no routine for in between cases and end of day cleaning was apparent. Education was primarily centered on Mok understanding and appreciating the importance of nursing staff supervising and planning cleaning as part of their nursing responsibility as patient advocate as well as issues of cross contamination between patients. Conversations with Mok included how to check a theatre for cleanliness prior to the start of the day. The cleaning staff appear to undertake 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 very obliging but appeared not to self-initiate cleaning above mopping floors and bin emptying. The floors within the suite were immaculate, however when removing the mattress from the operating table at the end of the day considerable force was needed to be used as it was glued down with dried blood, it was apparent that this had not been done for a considerable time. No horizontal surfaces appeared to be included in cleaning before or after surgery.

A highlight was the professionalism and commitment displayed to patients and the visiting team by Mok who volunteered to remain after his rostered finish time and have a shortened lunch break to help complete the days operating. As Mok continues to strive to improve nursing standards he is also undertaking English classes and it was a pleasure to assist him with his English homework and share his wife’s delicious coconut cakes!

Recovery Observations and Education

This year for the first time a second nurse was allocated to the team to specifically support education in Recovery. I (Amy Elgar) was fortunate to join the visiting surgical team in Dili for the first time in the role of recovery nurse and to support the anaesthetist and resident nurse anaesthetist. I used the first day to orientate myself to the recovery and anaesthetic nursing procedures and to observe the current practices and also the use of the equipment that the Dili theatre complex has.

The anaesthetic machine was much newer and more capable/complex than I thought we would have to work with. It had a reasonable working observations monitor with capabilities for blood pressure, oximetry, ECG and capnography. The consumables for each of these monitors was harder to address, as the reuse of these items is high or the no use of them higher. Our anaesthetist was also pleasantly surprised to see 2 choices of anaesthetic gases available giving her good options for her anaesthetics.

The nurse anaesthetist (Graciano) was extremely proficient and happy to answer queries on how things are done in the theatre complex whenever asked. I quickly took a back step to allow him to continue to assist the anaesthetist. If I did act in an assisting role, I found he would assume he was not needed and leave the room. There were many occasions that a gentle reminder to return to the room was required. And that patient needs are to take priority over phone calls in theatre.

The recovery unit in the hospital is relatively close to the theatre (OT 3) we were working in and is quite well laid out. There is space for 3 patients at any one time (3 wall units of oxygen). There are many monitors of varying age and capabilities, but it seems that some of them are not used due to not having the correct leads to allow for monitoring. Thus they are taking up a lot of space and could be stored out of the recovery unit.

I found that there were so many practices that could be improved on or changed, however, in 5 days there are only so many issues that were worth tackling, as some are just not sustainable after we leave. The two main things I focused on this visit, was to educate the recovery staff of the use of dirty suction equipment repeatedly and the role of IV fluids in babies and young children.

The current practice is to reuse a metal large yanked sucker on each patient. That

sucker is simply dipped in a kidney dish filled with tap water and placed behind the bed for the next patient. The suckers themselves did not seem to be in short supply, so in theory can be washed and taken around to the sterilising team for processing. The staff didn't seem to think there was any importance in this, even when explaining that the risk of cross infection was extremely high.

So, knowing that the recovery staff may not change the practice, my tact was to in fact educate on not using the suction at all on the cleft lip and cleft palate patients who have just had delicate surgery. Instead, I encourage the staff to access clean gauze swabs and gently mop any ooze from the patient's mouth. Each of the 43 patients we operated on were cared for like this with my supervision and guidance.

Along with the reused suckers, the reuse of Hudson masks and monitoring is the norm and even if soiled with blood, it is simply put back in place for the following patient. I role modelled the washing or wiping over of all of these items and asked the recovery staff to do so too and they were happy to adapt to this practice.

The second main issue I was witness to was that each patient, no matter their size or weight, received the same amount of IV fluids. For young babies (5-6kgs) this amount was too great and the anaesthetist was happy to put clear orders in the chart to ensure fluids were ceased in recovery. Initially I was met with confusion on this, but on explaining further the recovery staff were happy to adapt and change their practice. There was the issue however, that they were not able to provide the equipment to cap off the IV. I had supplied some and showed their use, however, I don't think it would be a consumable item that the hospital stocks. So I imagine the practice of running through any fluid will continue.

General cleaning in the recovery unit was not apparent, nor was restocking. The barouches had dried blood and other fluids and one had no mattress which was the one they opted to allow us for our cases. I found a part of an old theatre mattress to use as a makeshift mattress for the small children. There is no provision of cleaning wipes for disinfecting the beds, so I suggested a wipe over with a large gauze swap with an alcohol rub or simple soap and water. Following on from Joy's education on previous trips, I witnessed each patient having a new clean sheet on the barouche and another to cover them. These seemed to be an item that they could replenish well, even if not in wonderful condition.

I worked the majority of the week with four or five key recovery staff. The differences in their approach was clearly evident in their willingness to work. I witnessed a lot of phone usage in recovery at the end of patient beds and a lot of napping on a spare bed. With that said, I found the staff to engage with me and actively seek to learn new ways of doing certain things. For example, the staff in

recovery had not learnt to hold an airway or had not removed and laryngeal mask. I was able to demonstrate both and give them hands on learning.

The overall recovery experience for me was positive and each patient had good care and was safely recovered and returned to their families. The gratitude of the families was overwhelmingly rewarding and I imagine that this will always continue with the access to visiting surgical teams.

Recommendations

- Continue having two nurses travel in the OSSAA team as this allows extended opportunity for reinforcement of practice, and supports a wider range of role modelling and learning opportunities for local nurses.

- Continue to build on solid foundation of support and encourage supportive relationship with Mok and other key developing staff who will be leaders of the future.

- All nursing staff require ongoing 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.
- 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, stock rotation and shelf life.
- The novice 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.