

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

**Royal Australasian
College of Surgeons
(RACS)**



**PLASTIC AND RECONSTRUCTIVE SURGERY
TEAM VISIT**

**Rumah Sakit St Damian and St Rafael, Cancar,
Flores, NTT**

4 – 11 August 2018

TEAM LEADERS REPORT

Dr Mark Moore, AM, FRACS

Plastic and Craniofacial Surgeon

OSSAA team visit to RS St Damian & St Rafael, Cancar, NTT, Indonesia. 4 – 11 August 2018

INTRODUCTION

The last occasion on which OSSAA surgical teams had visited Cancar to provide clinical service and teaching at RS St Damian was in late 2013. Following the acceptance by the Indonesian Coordinating Ministry for Human Development and Cultural Affairs that Australian surgical teams affiliated to RACS were welcome in the Indonesian provinces of NTB, NTT, Papua and West Papua for the purpose of providing quality health service support and enhancing the expertise of local health care providers through the transfer of knowledge from experienced RACS doctor specialists, our OSSAA teams restarted our work in NTT in February 2018. This visit represented our first opportunity to return to our long standing colleagues in RS St Damian, Cancar. Our connection with the staff at this facility now goes back 25 years, with Dr John Hargrave / ASEA Rehab first working there in 1993, and this team being the 28th mission by OSSAA.

The invitation for our visit came from the Bupati of Ruteng, Dr Deno Kamelos, this having been arranged by our long term Cancar counterpart Sr Franseline, SSpS. Coordination of the visit, and in-country arrangements were overseen by Sr Franseline and our team coordinator Ms Anastasia Stain.

TEAM MEMBERS

OSSAA team

Dr Mark Moore – Plastic and Craniofacial Surgeon
Dr Vani Prasad Atluri – Plastic and Craniofacial Surgeon
Dr Andrew Wallace – Anaesthetist
Dr Todd Maddock - Anaesthetist
Sr Vanessa Dittmar – Theatre nurse
Sr Lisa Alvino – Recovery nurse
Ms Anastasia Stain – Coordinator / Interpreter
Dr Jake Nowicki – Surgical resident/ Observer

Counterparts – RS St Damian / St Rafael

Dr Agustina Lestari – Surgical trainee- Bandung
Dr Elizabeth – Doctor / medical administration – Jakarta
Dr Erwin – General practitioner – Cancar
Dr Oktavianus – General Surgeon – Ruteng
Dr Natalia , SSpS – General practitioner – RS St Rafael, Cancar

ITINERARY

- Friday 3 August Depart Adelaide for Denpasar
- Saturday 4 August Depart Denpasar for Labuanbajo. Met by staff of St Damian, and then onward travel by bus to Cancar. Patient consultations commence.
- Sunday 5 August Further patient consultations – 106 patients seen, and preliminary operating lists constructed. Brief visit with Sr Franseline to see the contemplative SSpS sisters in Ruteng at the end of the day.
- Monday 6 August Operating lists commenced.
- Tuesday 7 August Continue operating – 13 cases
- Wednesday 8 August Operating continues – 12 cases
- Thursday 9 August Further surgery
- Friday 10 August Surgical lists completed
Visit Ruteng for official meeting with the Bupati and Deputy Bupati of Ruteng.
On return to Cancar had opportunity to view 'spiderweb pattern' of rice paddies for which Cancar is renowned. Farewell dinner with the SSpS sisters followed by social event with the children and staff of St Damian.
- Saturday 11 August Depart Cancar by road to Labuanbajo, with onward flights to Denpasar, and then Adelaide.

OVERVIEW

The rehabilitation centre based at the Rumah Sakit St Damian, Cancar celebrated its 50th anniversary in July 2016, and for nearly half that time teams from OSSAA and its predecessor organisation ASEA Rehab have been providing clinical input and teaching there. The last 4 years has seen a hiatus in our activities in this region as a consequence of changes in the requirements for overseas visiting surgical teams across Indonesia. Following negotiations between our Australasian college of surgeons and high level Indonesian government authorities it was agreed that teams such as ours could resume their volunteer missions in the eastern Indonesian provinces commencing in late 2017. The first such visit was to RSKM in Halilulik in February 2018 and this our second.

The facility at RS St Damian is now directed by Sr Franseline SSpS, who was present when I first visited with Dr John Hargrave in 2000. She has thus had a long experience with planning our visits, and was able to procure the letter of invitation from the Bupati of Ruteng, and arrange for local counterpart Indonesian doctors to accompany the team.

Arrival in Labuanbajo was through the new airport terminal, completed since our last team visit. This, together with the increase in population, improved roads and infrastructure and expansion of tourism reflects the increasing interest in this region. We adjourned to Binongko, the sister's facility for the long term disabled patients on the beach where we were served a meal before heading off on the 3-4 hour bus trip to Cancar.

We were warmly welcomed in Cancar by staff and the assembled patients. After settling in to the usual on-site accommodation – all beautifully maintained since our last visit, the team commenced late afternoon on its initial consultation session. In the few hours on Saturday we saw 35 patients before adjourning for the evening.

Consultations continued on Sunday morning and into the early afternoon, by which time a total of 106 patients had been assessed. From this we were able to construct operating lists for the following week. Less cleft lip and palate cases were seen compared with previous visits, consistent with there having been a number of cleft team missions by Indonesian surgeons into the region, with Smile Train money assistance. A number of longstanding and on occasions unhealed burn wounds and contractures once again presented and were prepared for surgery during the week – these cases could then have their post-surgical wounds dressed and physiotherapy and splinting by the St Damian staff. The last category of cases seen in good numbers were a variety of head and neck masses and tumours. These ranged from all manner of congenital dermoid cysts, which had enlarged far beyond what we see here in Australia due to lack of access to care, through lipomas, jaw tumours and tuberculous neck lymph nodes.

In the clinic we were assisted by the local St Damian nursing and administrative staff who had registered many of the patients over the preceding weeks. Dr Agustina Lestari an Indonesian doctor who had just completed her year long term in Cancar, and who was looking to train in Plastic and Reconstructive surgery in the upcoming years was also present with the team during the pre-operative assessment clinic and then in theatre with us throughout the week following. Dr Erwin the resident Cancar GP also assisted in triaging cases – arranging to treat those which he felt were more appropriate for his skills. He has worked with our team on a number of occasions in the past.

All cases assigned to have surgery were assessed by our teams anaesthetists – only two cases listed for surgery were subsequently deferred due to intercurrent respiratory illness.

Following the clinic on Sunday the anaesthetist and nurses visited the operating theatres to ready them for the lists starting on Monday morning. The theatres remained as clean, tidy and well organised as they were when we were last here.

Surgery commenced early on Monday morning, with both theatres working each day – there were late finishes on the first two days, but as the week went by our days were shorter allowing for a lunchtime finish on Friday. 58 surgical cases were completed, including 24 cleft lip and palate cases. Many of these were having surgery at an age appropriate time, including one baby only two months old. Dr Agustina and Dr Elizabeth whilst she was there were able to assist and participate in the surgery, There were several challenging anaesthetic issues which arose during the week – including a Suxamethonium apnea on the first day of operating – fortunately it reversed after one hour! This and the other adverse events were well dealt with by the anaesthetist and nursing staff without any permanent consequences.

The patients were managed postoperatively in the St Damian wards with supervision by the nurses and volunteer staff as on previous visits. Twice daily ward rounds allowed for early discharge of patients with arrangements for follow up in the hospital clinic after our departure. Those burn cases requiring skin grafting and/or local flaps for closure were kept as inpatients with dressings to be overseen by Ferdi, the resident physiotherapist and long term counterpart of our OSSAA teams. With the advent of improved communications using phone apps such as Whatsapp it is possible to communicate with our local counterparts after our departure to assist in advising about postoperative dressing and care.

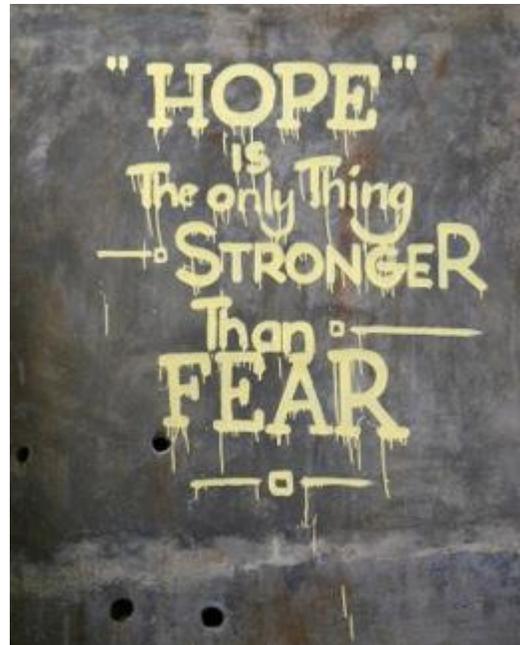
A number of long term follow up cleft cases were reviewed – it was pleasing to see these cases with aesthetically pleasing outcomes. There is however the remaining frustration of poor dental hygiene in many of these cases, which limits what is possible in terms of further cleft rehabilitation. In discussion with local staff it seems there are improving dental services, and even an orthodontist in Ruteng so

that for selected cases it may be possible to expand cleft treatment beyond just lip and palate repair.

There were several cases of clinical interest which require treatment more complex than is possible at St Damian. Among these was a jaw tumour (likely ameloblastoma) and a man with a large longstanding soft tissue tumour in the neck abutting the brachial plexus which were to be referred to Bali or Surabaya by the sisters. A young 3 year old girl presented with a large congenital omphalocele – she had been previously seen elsewhere in Indonesia and assessed as too challenging a case – we will have her case reviewed by paediatric surgeons here in Australia and if suitable consider her for treatment sponsored by charities such as Children's First or ROMAC.

At weeks end the team was invited to meet with the Bupati (mayor/regent) of Ruteng, Dr Deno Kamelos and his deputy. They welcomed our team together with Sr Franseline and reaffirmed their firm desire to continue and expand the role of OSSAA teams at RS St Damian. The bupati expressed his wish to be personally involved in facilitating our future visits. Returning to Cancar the team had a farewell dinner with the sisters and then were entertained in a short concert of singing and dancing by the residents and children of St Damian.

The following morning the team departed Cancar for Labuanbajo, again with a short stop at Binongko, before boarding the Garuda Indonesia flight bound for Bali, with onward transfer to Adelaide later that evening.



Inspirational quotes on walls around St Damian



The spider web pattern of rice paddies for which Cancar is renowned.



Pre- and post-operative left complete cleft lip repair.



Bilateral cleft lip repair



Infant with left cleft lip treated in Cancar in 2008 and follow-up in 2018



Female with extensive neck and facial burns, causing deformity of the lower lip and upper eyelid, reporting for surgery



The theatre team at end of surgery week.



The OSSAA team with staff and patients of St Damian.



The OSSAA team meeting with the Bupati of Ruteng – Dr Deno Kamelas and his deputy Dr Victor Madur.



Early morning views over Cancar.

OSSAA trip to Cancar 2018

Anaesthetic report : Andrew Wallace and Todd Maddock

Cancar 12 August 2018



Introduction

The OSSAA trip to Cancar in August included 2 anaesthetists to operate 2 separate theatres during the visit. Todd Maddock was visiting Cancar again, after his last trip in 2012, while Andrew Wallace was on his first trip to Cancar. We both thoroughly enjoyed the opportunity to meet and work alongside the staff and patients of St. Damians and St. Raphaels.

In total 58 patients underwent procedures, the majority being under general anaesthetics. The age of the patients ranged from 2 months to 60+ years old. They underwent a wide range of procedures from cleft lip or palate surgery, burn contracture releases with skin grafting, syndactyly repairs and excisions of a variety of different lesions.

The theatre and anaesthetic facilities in St Raphael's hospital were excellent. The hospital theatre complex has 2 theatres - the very large theatre 1 and the smaller theatre 2. Theatre 1 is equipped with a Heinen and Lowenstein sinus anaesthetic machine and Edan IM8 monitor while the 2nd theatre has a soft lander anaesthetic machine and a mindray MEC 1000 monitor. Both are equipped with isoflurane vaporisers and are supplied with piped oxygen and nitrous oxide from gas cylinder banks. The larger theatre 1 also has an air compressor, providing air to the machine. There were ample suction machines throughout the theatres to provide both theatres and recovery with medical suction facilities. The monitors are both able to measure multiple vital signs including NIBP, SpO₂, ECG and temperature however we had a shortage of different sized and compatible BP cuffs and improvised. We brought portable end tidal CO₂ monitors along to complement our monitoring.

The electricity and gas supply was very reliable and we had no interruptions or delays as a result. Theatre 1 is equipped with a Ritchie whistle which alerted to the need to switch over oxygen banks while theatre 2 has no oxygen failure alarm mechanism.



In addition, the Soft lander machine in theatre 2 had a few potential issues to be aware of. These included no anti-hypoxic mechanism and a reversed flowmeter arrangement, with the oxygen flowmeter positioned on the right hand side. Extra vigilance is required to ensure oxygen flow and supply.

The Heinen and Lowenstein sinus anaesthetic machine had a bellows ventilator which we found unreliable and discontinued using it, particularly for paediatric patients.

The anaesthetic incidents involved laryngospasms in younger children which were appropriately managed. The incidence of laryngospasm is much higher in the paediatric population, especially if associated with recent respiratory tract infections.. We did experience one unexpected reaction after treating laryngospasm in a child. The child was breathing spontaneously and on emergence, experienced a laryngospasm. It was appropriately managed using scoline. Following the treatment, the child had no respiratory effort or movements and with no other identifiable correctable causes. Approximately 30 minutes later, the child started showing signs of muscular movements and was extubated 15 - 20 minutes later with good recovery. The case was a presumed case of heterozygous scoline apnoea. On managing and reflecting on the case , we would consider including a nerve stimulator and glucometer for future trips to aid diagnosis and management in these rare but concerning cases of delayed recovery.



The other issue we encountered was a lack of surgical tourniquets which we overcame by improvising using additional manual BP cuffs. We later discovered a range of surgical tourniquets and a mini air compressor stored in a cupboard at the end of the week. A note for future trips.

There was a huge quantity of stored equipment from previous OSSAA trips, to the extent that we would have managed without bringing any new equipment. The long interval between this trip and the last trip in 2012, meant all the drugs had expired and some equipment had perished and was unusable. Lisa spent considerable time and effort during the week sorting through the crates, discarding all the perished items and consolidating all OSSAA's stock. We have created an inventory of what is stored in Cancar for future trips, which is available through Mark Moore.

We spent time involving all the staff in assisting with the anaesthetics and taught them techniques and safety principles. We also tried our very best to entice Dr Agustine to switch her future career choice from plastic surgery to anaesthesia by involving her in intubations and airway management. However, against the surgical teaching of Mark and Vani, I think we failed in that respect.

We also wish to extend our sincerest appreciation and gratitude to the hospitality and hard work shown by all the staff and sisters at St. Damiens and St. Raphaels, which made our week incredibly successful and enjoyable. We look forward to returning in the future.

