

AHSS Report from the Upper Limb Team service program, Phnom Penh, Cambodia, November 2018

In November 2018 a team of Australian Upper Limb surgeons, accompanied by Prof. Neil Jones, the former President of the American Society for Surgery of the Hand (ASSH), Dr. Roongsak Limthongthang, plus hand therapists Kathy Merry and Marin Suzuki, completed a successful 10 day outreach program to Cambodia.

In addition to patient assessment and assisting national colleagues with more than 50 complex surgical cases undertaken at three hospitals (National Paediatric Hospital, Children's Surgical Centre, Kossamak Hospital) the team facilitated both a successful Hand Therapy Workshop and a Surgical Skills Workshop in association with the National Surgery Conference featuring modules in:

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- Microsurgery, [L] [SEP]
 - Nerve repair [L] [SEP]
 - Flexor Tendon repair, [L] [SEP]
 - Extensor Tendon repair, [L] [SEP]
 - Splint making and [L] [SEP]
 - Hand Therapy for tendon injuries. [L] [SEP]
 - Physical Examination
 - Xray interpretation

Team members have contributed to the detailed report noted below.

Continued thanks go to our Cambodian counterparts who continue to strive for improved patient outcomes and advancing skills.

A/Prof. Graham Gumley, [L] [SEP] team facilitator, unfortunately had to cut his trip short after only two days to return home for the death of his mother.

Graham Hextell, Program Manager for Orthopaedic Outreach, ably took over the coordination of the large project and ensured continuity of programs and optimization of effort.

Activity logs:

Monday 12th November 2018

Neil Jones (USA), Des Bokor (Aus) and Alex Nicholls (Aus/UK) attended the morning meeting at CSC, hosted by Jim Gollogly. We heard about an interesting trip recently undertaken by two of the local surgeons, Sokleng and Ratha, to North Korea to perform Cleft surgery and then were presented with several cases for surgery.

Neil Jones performed an index finger pollicisation with local surgeon Dr Yong on a 29 year old male who had lost his thumb due to severe electrical burns. Toe- to-Thumb transfer would have been preferred but he had sustained significant burns to his feet as well, ruling out this option.



Des Bokor and Alex Nicholls performed an open fixation of a chronic missed Monteggia fracture (plate fixation and bone graft to ulna and reconstruction annular ligament). DB also performed an open elbow arthrolysis and bone spur excision in a chronic distal humeral malunion.



Several cases were seen in clinic in the afternoon and scheduled for surgery on subsequent days.

Tuesday 13th November

Neil Jones led a team of local surgeons (Dr Yong & Dr Vanna) performing a complex syndactyly separation on both hands and feet of a young child. This was the first stage of a planned two stage procedure for the hands that will need to be completed on a subsequent visit.



Des Bokor and Alex Nicholls performed a Latissimus Dorsi transfer in an 18 year old male with a chronic brachial plexus injury to improve his shoulder external rotation and function, teaching one of the local surgical trainees the deltopectoral approach to the shoulder.



Wednesday 14th November

David Graham (Aus), Damian Ryan (Aus), Tee Roongsak (Thailand) and Phu Ho (Vietnam) joined the others at CSC today for the morning meeting.

Damian Ryan and Phu Ho performed a burn contracture release to a thumb, index finger and 1st webspace on a 50 year old man with severe burns to both hands (he had recently undergone a successful pedicled groin flap to the dorsum of the other hand).



David Graham and Tee Roongsak performed accessory digit removal on a 7 year old girl with bilateral polydactyly.



Neil Jones then performed bilateral Krukenberg procedures with Dr Yong on a 31 year old male who had lost both hands in a severe electrocution injury. The patient had been carefully examined and counselled preoperatively, due to the lack of upper limb prosthetics in Cambodia this operation should maximise his function.





Alex Nicholls and Des Bokor performed an open reduction of a chronic elbow dislocation in a 37 year old male with local trainee surgeon Dr Rith using the 2 incision triceps sparing approach that has become the standard procedure for these cases at CSC.



Alex Nicholls and Neil Jones reviewed several more patients in clinic, fortunately none requiring surgery as CSC was closing down for the forthcoming Water Festival.

The rest of the week was spent lecturing and teaching practical workshops at the National Surgical Conference.

National Paediatric Hospital

- Compiled by Dr. David Graham

Thursday 8th November

National Paediatric Hospital morning clinic with Dr Vuthy Chhoeurn reviewing cases and preparing some for surgery during the week.

Notable cases included:

- severe post burn contractures in a 2 year 4 month old,
- obstetric brachial plexus palsy,
- parsonage turner,
- post burn contracture in a 14 year old boy needing a wrist fusion and elbow release,
- 9 year old with achondroplasia and elbow contractures,
- severe wrist/forearm crush injury from a sugar cane crushing machine 6 years previously in a 13 year old girl with very limited hand function
- Volkmann's ischaemic contracture of the forearm following a supracondylar fracture 5 years previously in a 10 year old boy,

- infant with arthrogyrosis,
- 19 year old with a stiff elbow following elbow fracture 6 years previously,
- 10 year old girl with spastic hemiplegic cerebral palsy needing wrist tendon transfers,
- 14 month old with pre-axial polydactyly,
- 9 month old with brachial plexus palsy for exploration
- a case of obstetric plexus palsy.

The sheer volume of patients and the level of pathology was impressive. It was great to see Dr Vuthy again and catch up with him about some patients that we had operated on in the previous years.



Monday 12th November 2018
David Graham and Ho Man Phu

Surgery with the local surgeons (including Dr Vuthy)

- 14-month-old female with bilateral duplicate thumbs
- 2 year 4-month-old male post burn contracture release



Damien Ryan and David Graham gave talks at the University in the afternoon on hand examination, elbow/forearm/wrist arthritis and hand arthritis.

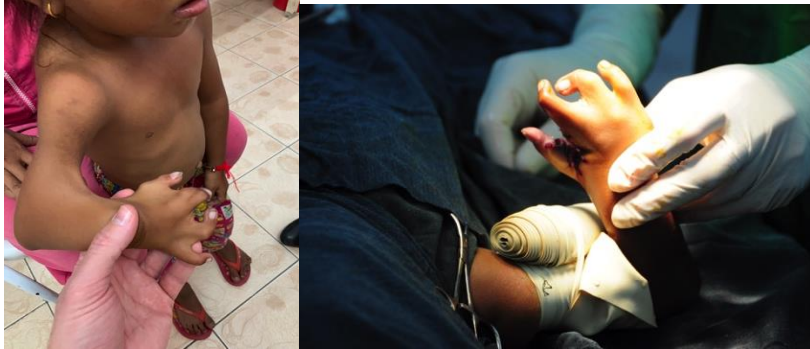


Tuesday 13th November 2018

David Graham and Roongsak Limthongthang

Surgery with the local surgeons

- 10 month old male with obstetric plexus palsy (upper trunk) for exploration and neurolysis (+/- spinal accessory to suprascapular nerve transfer)
- 6 year old female with webbed elbow and symbrachydactyly for elbow release and 4 flap z plasty and syndactyly release

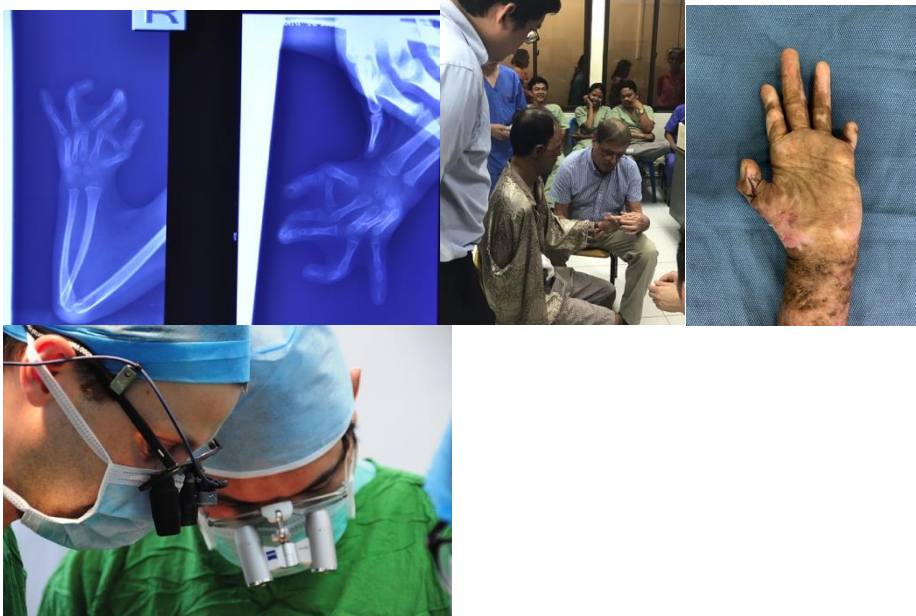


Wednesday 14th November 2018

CSC; Neil Jones, David Graham, Roongsak Limthongthang, Alex Nicholls, Des Bokor, Damien Ryan

Surgery and consulting with the local surgeons

- 7 year old female, complex syndactyly release of all 4 extremities
- Post burn contracture release, IPJ fusion, and skin graft to thumb/hand
- Bilateral Krukenberg procedures



Thursday 15th November 2018

Surgical Congress; X-ray interpretation station (Des Bokor/Dave Graham), flexor tendon repair (Alex Nicholls), extensor tendon repair (Damien Ryan), nerve repair (Neil Jones/Roongsak Limthongthang), hand therapy station (Cathy Merry/Marin Suzuki)



Friday 16th November 2018

National Paediatric Hospital; David Graham, Roongsak Limthongthang, Alex Nicholls

- 10 year old male post burn contracture forearm, FPL opposition transfer, thumb IPJ arthrodesis, ECRB tenodesis, FCR to EDC tendon transfer
- 15 year old male post burn contracture wrist and forearm, wrist PRC and arthrodesis, and contracture release elbow



Dr. Graham comment:

This trip was a great success, and I feel privileged to be involved with such a fantastic group of people. I would like to sincerely thank Professor Graham Gumley and Graham Hextell for organising another amazing trip, Orthopaedic Outreach and Touching Hands / ASSH for their support, Medartis/Synthes/Acumed for their donation of equipment that was of tremendous help in Cambodia.

HAND THERAPY REPORT

- Compiled by Marin Suzuki, Hand Therapist

Day 1 - Monday 12/11/18

- Hand Therapy Workshop "Hand Therapy Management following Nerve Injury and Compression" – Kean Khlang National Physical Rehabilitation Centre

- 15 participants from provinces around Phnom Penh
- Lectures translated in advance by Seiha Suth
- Present Sarun Chap (treasurer physiotherapy association)
- Participants included three participants who travelled from 7, 6 and 5 hours away
- The workshop was advertised through the Cambodian Physiotherapy Association via their facebook group
- Most participants were paid by their hospitals, to attend the workshop

No.	LISTED NAME	DATE					POSITION	INSTITUTION (Distribution/Committee/CEO)	PHONE NO. (Tel / Mob)	E-MAIL	SIGNATURE (SIGNATURE)		
		11/24	11/25	11/26	11/27	11/28					11/24 Morning	11/24 Afternoon	
1	CHAP Sarun	✓					Director of PCC	KKPC	No	012 836537	chapsarun@gmail.com	[Signature]	[Signature]
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4	MAP SETHA	✓					PT	Sinh Rong				[Signature]	[Signature]
5	RY L HOUR	✓					PT	FFC	No	06 5521566		[Signature]	[Signature]
6	Seay Sipheak	✓					PT	Kychnm	No	05 8 321670		[Signature]	[Signature]
7	Sreangbinna	✓					PT	Fact ball	No	012 9103144	binna.sreang@gmail.com	[Signature]	[Signature]
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12	Seang told	✓					PT	SRM		012 514630	sv. Lola@gmail.com	[Signature]	[Signature]
13	Phlaus tetra	✓					PT	KZK		012 727985		[Signature]	[Signature]
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Day 2- Tuesday 13/11/18

- CSC
- Morning meeting with the team
- Ward rounds with the physiotherapists

The local physios had fabricated a beautiful functional splint to allow a bilateral below elbow amputee (from an electric burn) to eat unassisted. They used material that was given to them by Anne and Cathy last year.

Patients seen:

- Sokkhoem Touch 25F - Day 1 post Elbow release (to try to regain flexion)
- Soy Sokha 61F - Day 1 post ORIF for Monteggia fracture (backslab not taken down)



Keo Mony (Head of Physiotherapy at Kien Khleang Leprosy Rehabilitation Center) attended the workshop on the previous day.

Cathy and Marin visited Mony at the Leprosy Unit, and met Carol the co-ordinator of the Center. Mony has previously been trained by Australian Surgeon, Dr Grace Warren during Dr Warren's visits to Cambodia.



Dinner at Dr. Jim Gollogly's house with Prof Gumley's team

Day 3 – Wednesday 14/11/18

- CSC morning meeting
- Following up of the patients seen on the previous day.



- Mini workshop with CSC physios on nerve anatomy and manual muscle testing
- Practical component of testing muscles specific to radial nerve, medial nerve and ulnar nerve as well as serial casting for fixed flexion deformities also added.



Day 4 – Thursday 15/11/18

- Full day workshop at the Surgical Conference.
- The hand Therapy station was conducted by Cathy Merry, Marin Suzuki and local physiotherapist Many San. Topic: Hand Therapy Following Hand Surgery.
- The talk consisted of promoting physiotherapy and the role of physiotherapy in post surgical hands patients. Rehabilitation was discussed specifically for following flexor tendon repair, extensor tendon repair and following nerve repair. Considerations and protocols were discussed and the presentation was made available to the participants.
- The participants seemed eager to learn, and asked some thoughtful questions. We were also asked to have pictures taken with many of the participants!



Day 5 – Friday 16/11/18

Walked to orphanage Friends International with Dr. Damien Ryan to drop off donations, and heard about the incredible work they do there.

To CSC in the morning to find all inpatients discharged in preparation for the Water Festival next week.

We found two patients waiting for transport, outside the hospital and we asked them to come inside for us to treat them.



Patients seen:

- Thorn Sokhim

29M day 2 post pollicisation following thumb amputation in March 2016 following burn injury (following moto with gasoline, it caught fire and exploded)

- Chhoen Sotharoth

49M maintenance worker with bilateral burns injury since July 2017

Day 2 post division groin flap R hand, and L hand release scar contractures with multiples z plasties through thumb and IF. Fusion of L thumb IPJ, and DIPJ or IF, with FTSG to defect.



Chooen's reaction after writing for the first time since July 2017.

Thanks for the donations.

