

Report for the APSS Depuy Synthes Spine Travelling Fellowship 2013

Fellow : Dr. Yang Hyun Kee, MD

Visited centers

- (1) National University Hospital of Singapore ; Prof. Wong Hee-Kit
Duration : 10th ~ 17th
- (2) Ganga Hospital, Coimbatore, India ; Prof. S Rajasekaran
Duration : 18th ~ 24th
- (3) Dr. Hasan Sadikin Hospital, Bandung, Indonesia ; Dr. Bambang Tiksnadi
Duration : 25th ~ 27th
- (4) Clipto Mangunkusumo Hospital, Jakarta, Indonesia ; Dr. Dohar Tobirg
Duration : 28th ~ 30th

Travelling programs

- (1) Singapore

11th Nov. (Monday) : We presented our presentations respectively in morning conference at 7 am. Posterior instrumentation for AIS was the first case on Monday, 11th Nov. Next surgery was microdiscectomy for lumbar-HNP by Prof. Gabriel.



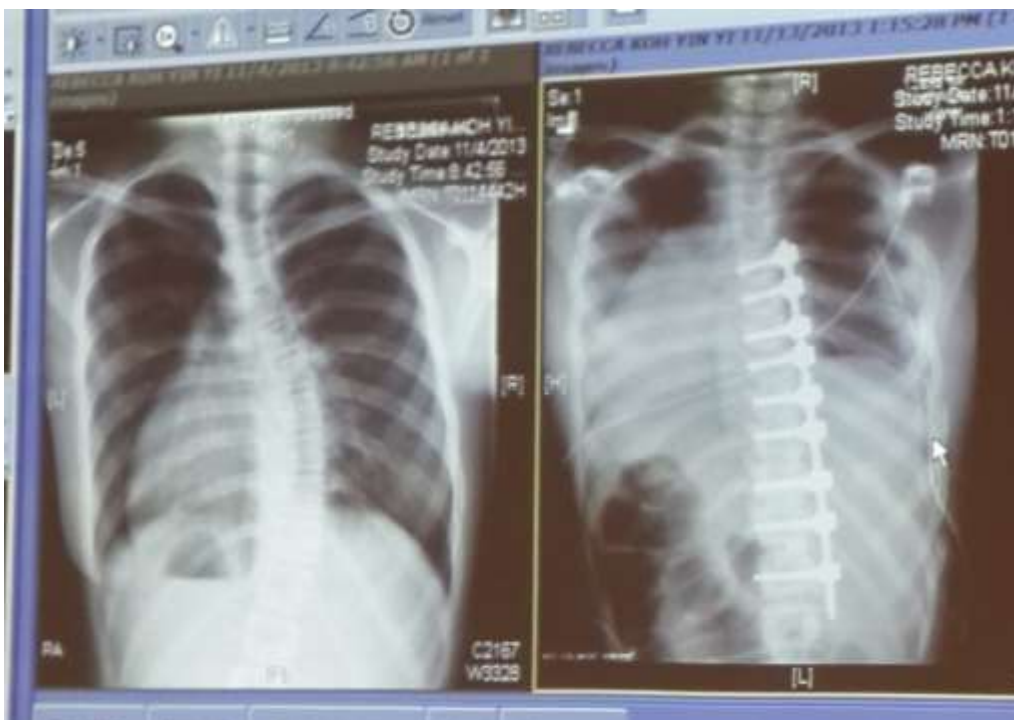
[NUH spine team]

12th Nov. (Tuesday) : Thoracoscopic scoliosis surgery for AIS was performed by Prof. Wong Hee-Kit. Prof. Wong gave me the opportunity to scrub up with hip. That was the first time for

me to see thoracoscopic scoliosis surgery. We experienced this technique with excellent correction of deformity as evidenced by postoperative x-rays. 2nd operation was revision surgery.



[Thoracoscopic scoliosis surgery for AIS]



[Preoperative and postoperative plain radiographs]

13th Nov. (Wednesday) : We visited to Singapore General Hospital. Dr. Eds presented his

presentation; Intradura extramedullary Schwannoma. We had wards rounds. We backed to NUH and participated operation which was percutaneous MIS for L1 compression fracture done by prof. Gabriel.



[Every night, we travelled Marina bay sands.]

14th Nov. (Thursday) : We had discussions about preoperative cases and clinical cases; multiple vertebral fractures, C1 burst fracture, AIS, degenerative lumbar kyphosis, and etc. I was impressed they are doing many basic researches; supraphysiological BMP-2 induced inflammation in a Rat model (Dr. Glen Liao), Protamine based polyelectrolyte microbeads - a potent carrier of rhBMP-2 in posterolateral spinal fusion application (Mr. Hu Tao) and Cell penetrating MMP 12 MRI probe prototype development for pain visualization (Mr. Raymond Lam). In the afternoon, we had NUH tour and research facilities tour. Prof. Wong Hee-Kit and NUH invited us for a fare-well dinner. We ate chilly crab at the Jumbo restaurant. It was very delicious.



[Dinner with prof. Gabriel (left), Chilly crab at Jumbo restaurant (right)]

15th Nov. (Friday) : We visited to Singapore Tan Tock Seng Hospital. Extreme lateral interbody fusions was performed for multiple lumbar degenerative spinal stenosis by Dr. Leslie Ng. He introduced cortical screw technique for posterior instrumentation and wanted show to us. But, we have no time, we can't see it.

16th Nov. (Saturday) : We participated Singapore Orthopedic Association meeting at NUH. We discussed about the management of degenerative kyphoscoliosis. After that we travelled to Singapore. We moved to Ganga hospital, Coimbatore, India on 17th Nov. night.

(2) Coimbatore, India

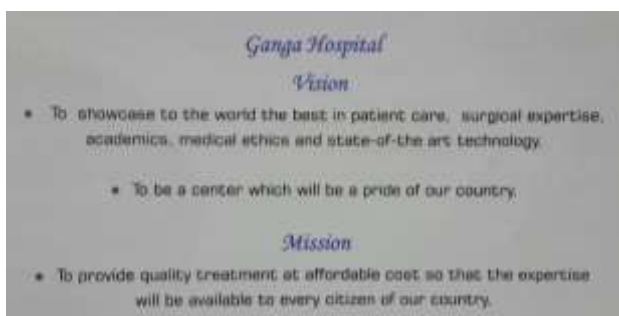
18th Nov. (Monday) : We visited Ganga Hospital. Ten cases were line up for the day. We saw posterior instrumentation for AIS, microdiscectomy for lumbar HNP, Cervical discectomy and interbody fusion, and etc.



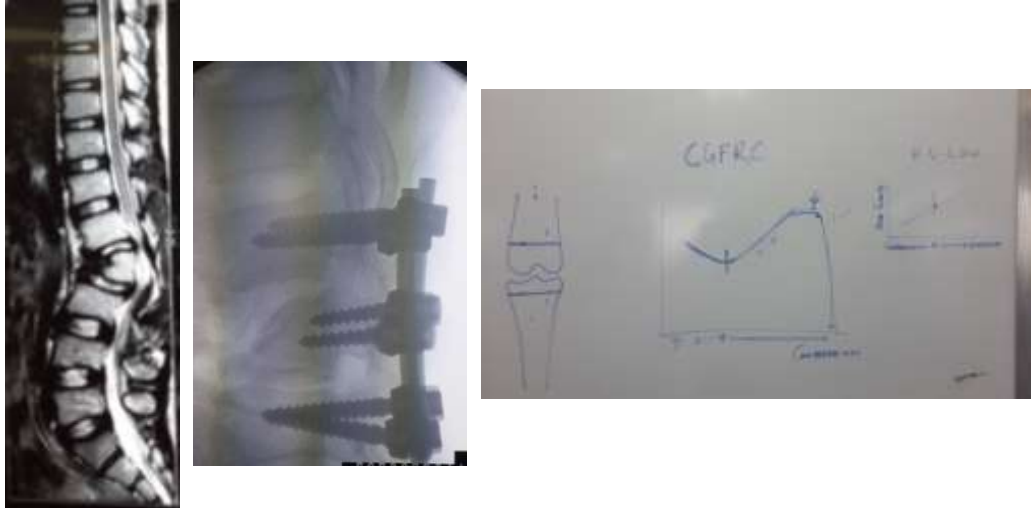


[Prof. Rajasekaran (above) and his office (below) : there are many certifications and awards]

19th Nov. (Tuesday) : We presented our presentations respectively in morning conference at 8 am. After that we went to OPD. We saw many severe cases such as spine tumor, AIS, congenital kyphosis, neurogenic scoliosis, and etc. Every patients and their parents respected prof. Rajasekaran. I surprised and respected prof. Rajasekaran for his passion and efforts to patients.



20th Nov. (Wednesday) :We saw posterior instrumentation for congenital kyphosis. Prof. Rajasekaran explained us chondral growth force response curve, which was very interesting. After operation, we went to movie theater and watched "Gravity".



[Congenital kyphosis; MRI (left), postoperative C-arm image (middle), and Chondral growth force response curve (right)]

22th Nov. (Friday) : We saw screw fixation for dens fracture of C2. They used 2 C-arms. So they didn't rotate the C-arm see AP or Lateral view. After operation, we travelled to Coimbatore.

23th ~ 24th Nov. (Saturday ~ Sunday) : We travelled to Ooty called Switzerland of India which located in mountain is 2500 meters above the sea level. The scenery was very nice and temperature was very good for us. We moved to Bandung, Indonesia on 25th Nov. night.



[Ooty]

(3) Bandung, Indonesia

25th Nov. (Monday) : We arrived to Bandung about 1 pm. So, we couldn't participate the 1st day program of Dr. Hasan Sadikin Hospital.



[Dr. Hasan Sadikin Hospital Spine Team]

26th Nov. (Tuesday) : In morning conference, we presented our presentations respectively. We had discussions about preoperative cases and clinical cases; Tuberculosis spondylitis, Mini-TLIF and etc.

27th Nov. (Wednesday) : Actually, 3 cases were lined up for the day. However, due to strike for arrested resident to medical accident, all cases were cancelled. We had hospital tour. After that we travelled to Bandung and moved to Jakarta.



[Dr. Bambang gave me the certification]

(4) Jakarta, Indonesia

28th Nov. (Thursday) : We visited to Clipto Mangunkusumo Hospital. In morning conference, we presented our presentations respectively. Posterior instrumentation and biopsy was performed for metastatic cancer. After operation, we went to shopping and had Coffee Luwak. At dinner meeting, prof. Dohar gave us a Coffee Luwak as present.



[Clipto Mangunkusumo Hospital Spine Team (above) and I am presenting (below)]

29th Nov. (Friday) : Dr. Luthfi accompanied us to private hospital. We participated surgery.

30th Nov. (Saturday) : There was no official program at last day of travelling fellowship. But, my aircraft to Korea was 10 pm, we asked to Dr. Luthfi for golf. He arranged our schedule and played with us, kindly.



[Last program with Dr. Luthfi]

My impressions

My three week of travelling fellowship was extremely satisfying. I saw many cases and different approaches and techniques that was not seen in my institute. After 3 weeks, I realized something and I gave me my word. First, more kind to foreign fellows who visit our institute. Second, more work hard and kind for patients.

Finally I would thank the APOA Spine section especially the President; Prof Arvind Jayaswal, Vice Chairman; Prof Kuniyoshi Abumi, Secretary; Prof Mun Keong Kwan, for selecting me for this fellowship and providing with the golden opportunity. A final word of appreciation for Helen Chong and Ms YM Kong for co-ordinating the fellowship program.

Date	Day	Diagnosis	Procedure	Surgeon	My role	Hospital
11	Mon	AIS	Post. instrumented fusion	Prof. Wong	Observation	NUH
		L4-5 HNP	Microdiscectomy	Prof. Gabriel	Observation	NUH
12	Tue	AIS	Thoracoscopic scoliosis surgery	Prof. Wong	Assistant	NUH
13	Wed	L1 compression Fx.	Percutaneous MIS	Prof. Gabriel	Observation	NUH
15	Fri	Multiple deg. lumbar stenosis	XLIF	Dr. Leslie Ng.	Observation	Tan Tock Seng H.
18	Mon	L4-5 HNP	Microdiscectomy	Prof. Rajasekaran	Observation	Ganga H.
		AIS	Post. instrumented fusion	Prof. Rajasekaran	Observation	Ganga H.
		C5-6 HNP	ACDF	Prof. Rajasekaran	Observation	Ganga H.
		C4-5 HNP	ACDF	Prof. Rajasekaran	Observation	Ganga H.
20	Wed	Congenital kyphosis	Post. corrective instrumented fusion	Prof. Rajasekaran	Observation	Ganga H.
		AIS	Post. instrumented fusion	Prof. Rajasekaran	Observation	Ganga H.
		L4-5 HNP	Microdiscectomy	Prof. Rajasekaran	Observation	Ganga H.
		L5-S1 spondylolisthesis	L5-S1 fusion	Prof. Rajasekaran	Observation	Ganga H.
		L4-5 stenosis	Decompression	Prof. Rajasekaran	Observation	Ganga H.
22	Fri	Odontoid fx.	Screw fixation	Prof. Rajasekaran	Observation	Ganga H.
28	Thu	T10 metastatic cancer	Post. instrumentation & biopsy			Clipto Mangunkusumo H.
29	Fri	L4-5 stenosis	Decompression	Dr. Luthfi	Observation	