## Travelling Fellow: Dr Lau Sun Wing, Cary (Hong Kong) Group 2

- 1. Sarawak General Hospital, Kuching, Malaysia.
- 2. Chang Gung Memorial Hospital, Chang Gung University, Taipei, Taiwan.
- 3. Gifu Memorial Hospital, Gifu, Japan.

## 26th October 2014 (Malaysia)

I arrived Kuching at 7:40pm and I received the warm welcome from the driver who was already waiting for me at the airport. I stayed at the Merdeka Palace Hotel which is a beautiful hotel in Kuching.



27th October 2014 (Malaysia)

I was very excited to meet the other three travelling fellows today at the lobby after breakfast. They are Dr Dipak Shrestha from Nepal, Dr Manish Chadda from India and Dr Ryoji Yamazaki from Japan. We arrived the Sarawak General Hospital at about 8am. We met Dr Wong Chunk Chek and his colleagues in the operating theatre. I assisted in the first case, which was a patient undergoing L4-S1 posterior lumbar interbody fusion(PLIF). They showed me their techique in putting in the pedicle screws and how to achieve a good lordosis after instrumentation. We went to lunch at a Chinese restaurant at Sarawak Club with Dr Wong and his colleagues at 1pm. After lunch, the second patient was a case of grade 2 L5/S1 spondylolisthesis undergoing transforaminal lumbar interbody fusion(TLIF). They demonstrated the use of reduction screws at L5. There were two cases of vertebroplasty and one more case of right L4/5 foraminal injection. Dr Wong taught us his tricks in putting in the needles. We went back to hotel for a short break at about 6:45pm and we had dinner in the Rock Road Seafood Restaurant with them.



28th October 2014 (Malaysia)

We checked out at the Merdeka Palace Hotel in the morning and went to the airport. We joined Dr Wong at the airport and went to Sibu together. Sibu is another city in Sarawak, with a population more than 200000 and 80% are Chinese. We checked in at the RH Hotel after arrival. Dr Wong showed us the river in Sibu and told us about the history. We had some traditional Chinese noodle in a restaurant. We went to the government hospital after lunch and attached to Dr Wong's clinic. We discussed on a number of cases, including scoliosis, prolapse disc, spondylolisthesis, etc. In the evening, we followed Dr Wong to a private hospital in Sibu, since he was going to perform a corrective osteotomy in a patient with ankylosing spondylitis, who suffered from spinal stenosis and kyphosis after a neglected fracture at T12. Dr Wong showed us the techniques in doing the osteotomy and it was impressive. The operation was finished after 12 in the midnight and it was a memorable experience to all of us.



29th October 2014 (Malaysia)

We arrived the government hospital in the morning and observed two cases. The first case was a patient with bilateral L5 pars defect undergoing PLIF. The second case was a patient with neglected fracture at T12 with retropulsion resulting in kyphosis and stenosis. He performed a corrective osteotomy for posterior shortening with anterior spinal fusion using a mesh cage filled with bone graft. Dr Wong gave us two lectures which were very educational. The first lecture was on the differences between polyaxial and monoaxial pedicle screws in deformity correction. The second lecture was on the funnel technique, which he found it very useful in putting in the pedicle screws in thoracic vertebra. We went to a massage shop with Dr Wong after the operation and enjoyed the foot massage for about 1 hour. We went back to Kuching by plane in the evening and checked in again at the Merdeka Palace Hotel.



## 30th October 2014

We arrived the Sarawak General Hospital in the morning and there were two cases of adolescent idiopathic scoliosis for posterior spinal fusion. The first case was a T4 to L3 posterior spinal fusion, which Dr Ryoji and Dr Dipak scrubbed in. Dr Wong demonstrated the funnel technique in putting in the pedicle screws. We had some delicious food at a beautifully decorated Malay restaurant at lunch time and we learned about the history of Kuching from Dr Wong. We took a look at the ward and visited the postoperative cases after lunch. Dr Manish and I scrubbed and assisted in the second case, which was a T2 to L1 posterior spinal fusion for another case of adolescent idiopathic scoliosis. I had the opportunity to put in a thoracic pedicle screw successfully using funnel technique. They also demonstrated the technique on segmental rotational correction in scoliosis using the bar to rod system. We finished the operation at about 6pm. We went to the waterfront and took some good pictures at the riverside and had dinner. At 9:30pm, Dr Wong invited us to a bar for wine and sake. We enjoyed some wonderful drinks and chats in a very relaxing environment.



## 31th October 2014

We went to the Sarawak General Hospital in the morning and each of us had made a presentation. I have presented on the use of miniplate and local bone graft in preventing spring back in cervical laminoplasty. We learned from each other and Dr Wong also shared with us his opinions on each of the topics. We then started our one-day-tour in Kuching with a tour guide and we went to the Sarawak Culture Village which is closed to the sea. We learned that Sarawak is the land of hornbills. There are people from different ethnic groups living together in Sarawak in harmony for more than a century. The culture village is actually a living museum showing the houses and living lifestyles of different racial groups in Sarawak. I was extremely impressed by the cultural performance which was about 45 minutes long and included dances and songs of different racial group. We then went for a mangrove cruise in a boat and saw some animals in mangrove like crocodiles, monkey and mud skippers. We had a exciting day trip and went back to hotel in the evening.



I travelled to Taipei with a transit at Kuala Lumpur and checked in at Fullon Hotel nearby the Chang Gung Memorial Hospital.

2nd November 2014

I visited the Taipei Main Station and the Taipei City in the afternoon.



3nd November 2014

We arrived the Chang Gung Memorial Hospital in the morning and joined the morning round with Professor Chen Wen Jer. He showed us the patients in the ward and their postoperative Xrays. Chang Gung Memorial Hospital is a the largest medical center in Taipei and provides more than 4000 beds. They showed us the operating theatres after ward round and we were surprised that there are more than 100 theatres in this hospital. Every day there are about 2 to 6 theatres for spine operations. We visited two spine theatres today and there were 3 cases in each of the theatre. The first case was an infected TLIF at L2/3 with the posterior instrumentation already removed in the previous operation. There was also pathological fracture of L2. They did the anterior approach this time for removal of the cage, L1/2 disc and the L2 fracture vertebra. They put in a humeral shaft allograft and anterior instrumentation. There were another two TLIF, one ASF and one posterior decompression. In one of the TLIF, they demonstrated the principle and use of Isobar Dynamic Stabilization System on the junctional level in TLIF. There are two unique dampener elements in each of the specially designed rods, which can control motion at the level but reduce the stress concentration at the junctional level.



We went to the hospital at 7am and joined their journal club. There were two presentations and the topics were achilles tendon repair and psychological impact on low back pain. We went to the theatres after journal club and there were 5 theatres for spine operation today. We saw a case of cervical laminoplasty and the demonstation on the use of ultrasonic dissector from Misonix. They did open door laminoplasty similar to Hirabayashi laminoplasty but they used the Twinfix 2.8mm suture anchor in holding the laminar opening. I also saw another case of TLIF with dynamic stabilization system employed at the junctional level. There was also a case of adolescent idiopathic scoliosis for posterior spinal fusion from T3 to T12. They also shared with us their special technique in putting in the thoracic pedicle screws with a guide pin and bone curette. We visited the Shilin night market in the evening, which is the largest and most famous night market in the city. We enjoyed a dinner at a local teppanyaki restaurant in the night market.



There were two theatres for spine operation today. There were two TLIF today. All spine surgeon in this centre use the same technique for pedicle screw insertion, which was quite impressive. For posterior decompression, they mainly did it with osteotome and kerrison rongeur. There was also one case of anterior cervical diskectomy and fusion with Cervios cage from Synthes. They did the anterior approach from patient's right side. After visiting the operating theatres, we went to visit the Taipei 101 in the evening, which is the landmark supertall skyscraper in the city. It was the world's tallest building from 2004 to 2010 and we took some beautiful picture of the building with all lights on at night.



We arrived the meeting room at 7am and joined their weekly spine meeting. They had done 50 spine cases over the past 1 week. There were 6 theatres for spine operation today. There was another case of infected TLIF and the screws were removed during the last operation. This time was anterior approach for removal of the cage and anterior spinal fusion with a tibial allograft. We saw three cases of vertebroplasty today and observed their technique in preparing and injecting cement. There was another case of ossification of ligamentum flavum and they demonstrated the use of ultrasonic dissector in removal of the ossified mass from dura. There was also a case of advanced breast cancer with cord compression undergoing posterior decompression and instrumentation.



We arrived the meeting room at 8am today. There was a one-day seminar including live surgery demonstration on the dynamic stabilization system and trabecular metal cervical cage. There was over 100 participants from different parts of Taiwan. Each of the spine surgeons from Chang Gung Memorial Hospital presented their techniques and experiences on the above topics. We learned a lot from their presentations. In the evening, we enjoyed a banquet at Fullon Hotel with the surgeons from the hospital and we said goodbye to the Professor Chen.



I travelled to Nagoya today and arrived the hotel at 10pm. I had ramen noodles nearby the hotel for dinner.

9th November 2014

I visited the department store near the Nagoya Station and enjoyed a japanese lunch set. I travelled to Gifu and checked in at the Comfort Hotel and joined another three travelling fellows after they arrived and checked in. With the introduction by Dr Ryoji, we went to a famous local japanese restaurant in Nagoya and tasted the delicious roasted chicken wings, which is the signature dish of the city.



We met the Secretary at the hotel entrance and we went to Gifu Municipal Hospital together. We met Professor Katsuji Shimizu in the operative theatre. There were two cases today and the first case was a case of cervical spine spondylosis with multiple level stenosis from C3 to C7. Professor Shimizu demonstrated his famous hybrid technique in treating this kind of multiple level cervical stenosis. He did one level of anterior cervical diskectomy and fusion with a cage for C6/7. For the upper levels, he did corpectomies for C4 and C5 and did an anterior spinal fusion with a fibular autograft from C3 to C6. He also demonstrated the use of intraoperative ultrasound machine to ensure the adequacy of decompression. The second case was cervical foraminotomy for cervical radiculopathy.



We attached to professor's clinic today and discussed with him about the management of different spine problems. Professor Shimizu had arranged a presentation time for all of us at 6pm to talk about our medical system in different countries to the medical staff in Gifu Municipal Hospital. Dr Ryoji also shared about his experience on how he became a travelling fellow with APSS and our experience in Kuching and Taipei.



Professor Shimizu had arranged a special tour for all of us today. We went to the Gifu Park in the morning after breakfast. From the park, we then went hiking with professor and reached the Gifu Castle at the top of the mountain. Gifu Castle is located at the top of Mt Kinka and it has a history of over 800 years. It was occupied by the famous general Oda Nobunaga, and now it became the museum of Oda Nobunaga. We could have a 360-degrees panoramic view of the Gifu city and we took a lot of beautiful pictures over there. We then travelled back to the Gifu park by cable car and took pictures on the famous autumn red leaves in Japan. We visited the Gifu City Museum of History and the Gifu Great Buddha in Shoho-ji Temple with professor afterwards. We went back to the hospital and Professor Shimizu gave us a lecture on hybrid cervical anterior spinal fusion which was very educational and inspiring. We enjoyed the hot spring around the Nagara River and it cured our fatigue and arthalgia after hiking. We had dinner in a ramen shop nearby our hotel in the evening and that completed our wonderful one-day trip in Gifu.



There was one operation today. The case was a neglected adolescent idiopathic scoliosis in childhood. Professor performed an anterior spinal fusion with instrumentation from L1 to L3 10 years ago. She was diagnosed to have rheumatoid arthritis later and there was progressive loss of sagittal balance and coronal balance. She also presented with progressive increase in back pain and walking difficulty. Professor did a posterior instrumentation and fusion from T9 to L4. For L1 to L3, he demonstrated the technique of using sublaminar merilene tape instead of metal wires. He also demonstrated the technique in inserting the pedicle screw with the asisstance of PediGuard. After operation, we had lunch with the professor and had some discussion on the use of PediGuard. In the evening, we went to local restaurant and enjoyed a traditional japanese dinner set with sake. We had an enjoyable evening and chat among the fellows.



We attached to professor's clinic again today and saw the cases with him. The nurses in the clinic had prepared some tasty cakes for us for our farewell gifts from Gifu. Professor Shimizu had arranged a special event today for all of us. We met the Mayor of Gifu City - Mayor Shigemitsu Hosoe. We had a discussion on the APSS travelling fellowship program and we shared our enjoyable experience with him. Our meeting and picture were reported in Gifu News few days later. In the evening, Professor Shimizu invited us to his house for a farewell dinner and we enjoyed the wine and delicious food prepared by professor and his wife. We talked about his career development, children, Gifu city, our different training systems for orthopaedic surgeons, travelling experience, etc... We had a wonderful and memorable evening at professor's house.



The four fellows had made a promise for breakfast farewell at the lounge at 8:30am and no one was late. We said goodbye to each other and guaranteed to meet each other again later in the spine meetings. We became good friends during the fellowship and I believe the friendship will definitely last for the rest of our lives. I travelled back to Hong Kong and arrived in the evening and it was the end of my 3-week fellowship attachment. I must thank APSS for the arrangement of the fellowship program and all the three spine centres for their hospitality and teaching. I enjoyed a lot and learned a lot from the three centres of excellence.



