Report for the APOA- Depuy Spine Clinical Fellowship 2014

Fellow: Dr Guoquan Zheng, MD

Associate professor,

Department of orthopedic

The General Hospital of Chinese PLA

28 Fuxing Road Beijing 100853, P. R. CHINA

Telephone: +86-10-66939439

FAX: +86-10-88219862

E-mail: zgq951@aliyun.com.

Guide: Ki-Tack KIM, M.D.

Chairman & Professor

Dept. of Orthopedics, Kyung Hee University

Hospital at Gangdong

E-Mail: ktkim@khnmc.or.kr

Centers visited:

- (1) Kyung Hee University Hospital at Gangdong
- (2) Shin Hospital
- (3) Hallym University Sacred Heart Hospital
- (4) Dongtan Sacred Heart Hospital

Please allow me to take this opportunity to extend my sincere gratitude and appreciation to APSS. Thanks for providing me with such a

precious chance to visit so many prestigious Spine Centers in this short time. I was so impressive with what I have learned and observed in Korea. My Asia Pacific Orthopaedic Association (APOA) - Depuy Spine Clinical Fellowship from 2nd Nov to 23rd Nov 2014, totally 3 weeks.

Dr Cho Seong Woo has picked me up in Jimpo international airport.



Kyung Hee University Hospital at Gangdong

1st week:

I have visited the spine center of Kyung Hee University Hospital at Gangdong accompanied by Dr Cho at 8:00 am, on Nov 3rd. Prof Kim KT introduced their procedure of clinical work every week in the past and the schedule of the following week.



Prof Kim and I have taken a picture together in spine center

Monday (Nov.3rd,2014). One level anterior cervical discectomy and fusion (ACDF) was the first case. This was followed by 2 cases of midline laminoplasty for cervical myelopathy and all these surgeries were done by Prof Lee. We discussed the planning of the pre-op cases and management of post-operative patients and how to prevent the complication of laminoplasty during the operation and in the coffee room.

Tuesday (Nov.4th, 2014). Beginning with a morning conference for spine surgeons in spine center on 7 am. Each of 3 resident doctors had a case report and literature review, Prof Kim had given excellent comments in this. The following case was a severe thoracolumbar kyphosis. Spinal

osteotomy was performed by Prof Kim KT.

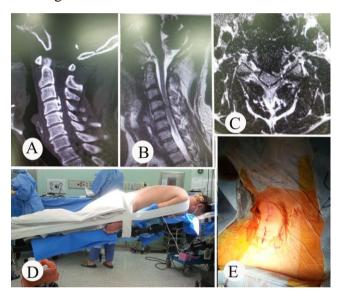
Wednesday (Nov.5th, 2014) At 7:00AM in the morning, research updates have been shared at the meeting room. Then we had 1 challenging case - thoracic spinal stenosis. In the duration of the discussion, we've referred to some operation principle for the decompression of thoracic spine during the operation.

Thursday (Nov 6th, 2014) After communicating and updating research in the meeting room since 7:00am, I was so lucky to go with Prof Kim for his clinical work of outpatients in spine center. Another big event for me was: I attended the annual meeting of APAS in Gangnan district in the afternoon.



Take a picture with Kim GI, the director of international education of Kyung Hee University

Friday, (07 Nov 2014), interrupted two levels foraminotomy was performed in patient with OPLL (C3/4 and C6/7) in morning, and attended the 10th Kyung Hee Spine Update 2014 in meeting room in afternoon.



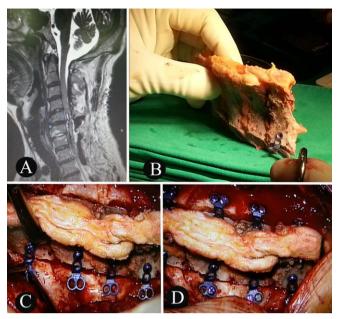
Interrupted two levels foraminotomy: A. CT scan show that the PLL was ossified. B,C: MRI show that the cervical spine disc herniation at C3/4 and C6/7. D. intraoperative position; E. postoperative picture.



The 10th Kyung Hee Spine Update in 2014.

2nd week:

Monday (Nov.10th, 2014). The first case was C1C2 fixation for patients with myelopathy after the resection of posterior arch of C1; The second case was one level foraminotomy performed by Prof Lee; The last case was very interesting case. Posterior cervical laminectomy was performed owing to intramedullary tumor resection 1 week ago, and this is the second stage operation for implanting the resected spinal lamina with laminal screws.



Two stages posterior cervical operation was performed by Prof Lee. A: MRI show that the intramedullary tumor was resected: B-D: The resected spinal laminas were implanted with the instrumentation of laminal screws.

Tuesday (Nov.11,2014) I was so honored to give a presentation in morning conference in spinal center. The topic is the management of ankylosing spondylitis kyphosis. We've talked about the surgical decision making and the special technique which is appropriate to this deformity. Then we went to operation room. The first case is two levels TLIF and it followed by thoracic fracture case. I attended these two operations as the assistant of Prof Kim.



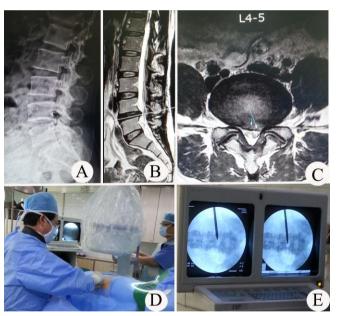
I had a presentation in morning conference in spinal center.



I attended operation as the assistant of Prof Kim.

Wednesday (Nov.12, 2014) Prof Kim performed a reoperation for patient owing to the adjacent segment disease (ASD) who underwent two levels PLIF 5 years ago.

Thursday (Nov.13rd, 2014). After the same routine which always began at 7:00am, I was going with Prof Kim for his clinical work of outpatients in spine center. Then Dr Cho drove me to Shi hospital to observe MIS surgery performed by Prof Shi, and we talk about the indication of MIS and some special technique to decrease the rate of revision and reoperation.



In the afternoon of November13rd, I observed the whole process of one level PELD performed by Prof Shi for a patient with lumbar disc herniation.

Friday, (Nov.14th, 2014), the cases seem more easier, the first case was a vertebroplasty, followed by one level microendoscopic discectomy. Prof Lee invited me to perform operation as his assistant.



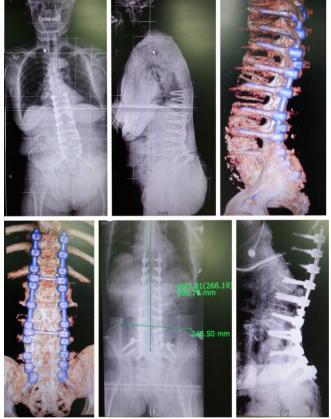
picture with Prof Lee during operation.

3rd week:

Monday (Nov.17th, 2014). One level ACDF was performed for a patient with severe myelopathy. The second case was revision of adjacent segment disease after PLIF. The last case was decompression of lumbar epidural hematoma.

Tuesday (Nov.18th, 2014). This was a pretty busy day. Prof Kim started with one level MED, and followed by on level PLIF for spondylolisthesis patient. Then he invited me to

perform a revision surgery together for a coronal imbalance patient after the correction of ADS. The fourth case was selective MED (L3/4) for a 71 years old patient with multilevel lumbar disc herniation and spondylolisthesis. Today, I observed an interesting case that performed by Prof LEE. He performed percutaneous pedicle screws instrumentation for thoracic spinal fracture.



Revision surgery was performed for a coronal imbalance patient after the correction of ADS

Wednesday (Nov.19th, 2014). This was the last day I stayed in the operation room. Prof Kim prepared an ankylosing spondylitis (AS) case for me because he knew that I have done some clinical research work about AS patients. After operation, Kim told me that we should take a picture together in the OR for memory, and he invited me to have a dinner together with Prof Lee SH, Prof Kim GI, and Dr Cho in traditional Korea fashion.



Prof Kim prepared an ankylosing spondylitis (AS) case for me before leaving



picture with Prof Kim in OR in the last day



Kim KT invited me to have a dinner together with Prof Lee SH, Prof Kim GI, and Dr Cho in traditional Korea style.

Thursday (Nov.20th, 2014). Today, I visited two

of five hospitals of Hallym University Medical Center. I made a presentation in Dongtan Sacred Heart Hospital in the evening and had a dinner together with the director of spine center and their colleagues.



A presentation at Dongtan Sacred Heart Hospital

Friday, Nov. 22^{nd} , 2014). Today is the last day for my fellowship I attended the annual meeting of the Korea Spine Association.



KSA Annual Meeting

All in all, a big thank you to APAS admin team who has helped with me paperwork and some other procedures. Hopefully, I will have chance to take part in APOA fellowship in the future!