APSS MEDTRONIC FELLOWSHIP 2018

Duration:

February 01, 2019 - April 30, 2019

Fellow:

Dr Md Abdul Awal, MBBS, MS- Orthopaedic Surgery, APSS Spine Fellow- Korea, APSS operative course- Dhaka, AO Spine Principal Couse- Kolkata, Advanced level operative course- Ganga Hospital, Coimbatore, India.

Registrar- Spine Surgery, Dept. of Orthopaedic Surgery, Rajshahi medical college hospital, Rajshahi, Bangladesh.





Host spine center:

The Catholic University of Korea Seoul St. Mary's Hospital



Host spine surgeons:

Dr. Young Hoon Kim, M.D., Ph.D, Professor, Dept. of Orthopaedic Surgery (Deformity correction & degenerative spine)





Introduction

The APSS Medtronic Spine Fellowship Program is well-known to develop enthusiastic spine fellows by providing surgical exposure and training in excellent spine centers of Asia Pacific region. I was so much excited when I got the information of the acceptance for this fellowship at Seoul St. Mary's Hospital, The Catholic University of Korea.

The Asia Pacific Spine Society (APSS) Medtronic Spine Fellowship 2018 for me was scheduled from 1st February to 30th June 2019 at The Catholic university of Korea Seoul St. Mary's Hospital under the mentorship of Prof Dr Young Hoon Kim. I was sublime to get the invitation and grabbed the opportunity with both hands. Getting an opportunity to work and learn different ideas and techniques at one of the most reputed institution in Asia Pacific Region was a great opportunity for me. I was very much excited as I had heard a lot of amazing things about the centre and the city from online & some of my senior who had learnt been there previously.

My fellowship schedule and all the previous formalities were very nicely arranged by APSS. It will be very much less if I only give thanks to APSS. So, I would like to express my heartiest gratitude to the APSS for arranging such a hassle free fellowship for me and giving the opportunity to acquire some knowledge and exposed myself in the field of spine surgery. Though

my fellowship schedule was from February 1, 2019 but February 2-6, was Korean national holydays. So, I arrived at Incheon Int. airport, Seoul, Korea on 7th February from where I came to my accommodation place at Navi Hotel Residence by taxi which was pre booked for me by APSS. It was a 45 minutes drive where I saw a glimpse of the city.

The accommodation was very nice and was close to my workplace. Korea has an amazing public transport that makes travelling very easy. St. Mary's Hospital was 10-15 minutes by bus. Next day I was asked to report to my mentor Dr Young Hoon Kim, Prof. Spine section, department of orthopaedic surgery. The day of my reporting was the schedule operative day. After reporting to Prof. Dr Young Hoon kim, He advised me to enter in operation theater. He nicely introduced me to all staff and about the surgical schedule. I was greatly impressed by my mentor when he advised me to scrub in and observe the operation.

I was impressed by the great numbers and varieties of spinal operations. I spent 4 days in a week to observe and assist spine surgeries in the operating theatre. Every Monday & Tuesday, I joined the morning conference. I also attended out-patient spine clinic and morning round with Prof. Dr. Young Hoon Kim.

Actually, I acquired a lot of knowledge from this fellowship program. Some areas of learning are as follows- a. Pre operative decision making from conference (whether patient needs operative or conservative treatment), b. Pre operative planning (which procedure/options should be the best), c. Various surgical techniques- minimal invasive surgery, open & endoscopic procedure, different types of osteotomy and deformity correction, decompression and various fusion techniques, d. Post operative management protocol and technique to manage post operative complications.

To add to the excitement I also had a chance to attend the national conference on spinal deformities in elderly patients at Soon Chun Hyang University hospital, The 8th Spring congress of the Korean society of spine tumour at Samsung Seoul Hospital, Cancer Hospital, the 12th combined meeting of APSS-APPOS at Songdo, Convensia, Incheon, Korea from April 4-6, 2019

and 2019 Catholic Orthopaedic symposium I- Shoulder, Paediatric, Spine at The Catholic university of Korea Seoul St. Mary's Hospital.

I also got opportunity to observe surgery with my mentor in another two hospital of Seoul other than Seoul St. Mary's hospital. On the last month of my fellowship my mentor also gives a great opportunity to observe operations of Prof. Dr Jin-Sung Luke Kim, Prof. of neurospine surgery of Seoul St. mary's Hospital on every Tuesday.

I was given the schedule for my fellowship which was nicely planned so I got a chance to learn from all the faculty of spine and orthopaedic surgery at The Catholic university of Korea Seoul St. Mary's Hospital.

During my fellowship period, I was invited in Korean traditional dinner party by my mentor for many times and I always enjoyed that a lot. On the last day of my fellowship my mentor arranged a farewell dinner party for me that was very much entertained and honored for me.

1st May: My Departure Flight date was 1st May, 2019 at 11.20 pm. From my hotel I reached to Incheon Int. Airport by taxi. My flight was Singapore Airlines. I safely reached at Bangladesh at 11.45am on 2nd May, 2019 via Singapore where my transit time were 4.30 hours.

Weekly training contents								
Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday			
Conference	Spine	Orthopaedic	Musculoskeletal	Orthopaedic				
(7.00-8.00)	Conference	Conference	Tumour	Conference				
			Interepartmental					
			Conference					
AM	Outpatient	Outpatient	Operation	Outpatient	Operation			
(8.00-12.00)	Clinic	Clinic/		Clinic				
		Occasional						
		operation						
PM	Outpatient	Occasional	Operation		Operation			
(13.00-17.00)	Clinic and	operation						
	operation							

Logbook of spine surgeries observed & assisted in Seoul St. Mary's Hospital, The Catholic University of Korea (01 February 2019 – 30 April 2019)

No.	Date	Sex/ Age	Diagnosis	Procedure	Surgeo n	Role	Remarks
1	08- February	F/75	Degenerative Lumbar Scoliosis (L2-L5)	DLIF L2-3, L3-4 & TLIF L4-5, L5-S1 and fixation by Pedicle screws and rods L2-S1 & ACBG	Prof Kim	Observer Cum assistant	Previous unilateral laminectomy L4. 1st DLIF in L2-3, L3-4, then one sided TLIF in L4-5, L5-S1
2	08- February	M/55	Cervical Myelopathy C4-C7 with amyloidosis	Corpectomy C5-C6 with fusion by ACBG and fixation by Pate screws	Prof Kim	Observer Cum assistant	1st Stage- laminectomy and lateral mass with pedicle screw fixation 2nd stage corpectomy
3	12- February	M/41	CSM	ACDF at C5/6, C6/7 level	Prof Kim	Observer Cum assistant	
4	13- February	F/71	Lumbar Spinal canal stenosis L4/5, L5/S1	PLIF	Prof Kim	Observer Cum assistant	Previous laminectomy
5	13- February	M/56	Lumbar Spinal canal stenosis L5/S1	PLIF	Prof Kim	Observer Cum assistant	Previous laminectomy
6	13- February	F/66	Lumbar Spinal canal stenosis L4/L5	MIS(TLIF with cage & DBM)	Prof Kim	Observer Cum assistant	Previous F/D
7	15- February	F/73	Degenerative Dorso- Lumbar scoliosis with L4/5 fixation state	Decompression, PLIF insertion and Deformity correction by long segment pedicle screws, rods and pelvic screws	Prof Kim	assistant	Previous fixation state
8	15- February	F/64	Degenerative Lumbar kyphosis with L3/4, L4/5 fixation state	Decompression, PLIF insertion and Deformity correction by PSO at L4 and fixation by long segment pedicle screws, rods and pelvic screws	Prof Kim	assistant	Previous fixation state
9	18- February	M/62	Burst #D2	Decompression, transpediculaar screw fixation, Cementation and posterolateral fusion by DBM	Sang Il Kim	assistant	Trauma case
10	19- February	M/44	PLID L4/5 rt	Microscopic Discectomy through rt side at L4/5	Prof Kim	Observer	
11	19- February	F/45	PLID L5/S1 rt	Microscopic Discectomy through rt side	Prof Kim	Observer	Impending CES
12	19- February	F/80	Lumabar Spinal stenosis	Decompression PLIF L5/S1, L4/5 &	Prof Kim	Assistant	Comp; Dural tear

				Fixation L3-S1			
13	20- February	M/59	Lumabar Spinal stenosis	Decompression, PLIF L5/S1, TLIF L4/5 Fixation L3-S1	Prof Kim	Assistant	Previous Laminectomy
14	20- February	M/61	Spondylolisthesis L4/5 GII	Decompression & PLIF, Fixation L4/5	Prof Kim	Assistant	
15	22- February	F/76	Lumbar spinal canal stenosis L5/S1,L2/3 with fixation state L3-L5	Decompression at L2/3,L3/4, L5/S1, PLIF at L5/S1 and Deformity correction by PSO at L3 and fixation by long segment pedicle screws, rods and pelvic screws	Prof Kim	Assistant	Previous Laminectomy with fixation L2-L5
16	22- February	F/69	Lumbar spinal canal stenosis L5/S1 with lumbosacral scoliosis	Minimal invasive PLIF L5/S1	Prof Kim	Assistant	Patient refuse to correct deformity
17	27- February	M/18	PLID L5/S1 rt	Microscopic Discectomy through rt side at L4/5	Prof Kim	Observer	
18	27- February	F/51	Metastatic leiomyosarcoma D8, 9 th rib	Spondylectomy D8, Cage with BG insertion, Long segment fixation	Prof Kim	Observer	Uterus primary site
19	4-March	M/66	Compression #D12	Vertebroplasty	Sang il Kim	Observer	
20	5-March	F/65	Flat back Syndrome & DLS e ALIF L2-S1 state	Deformity correction by PSO, PLIF L5/S1, long Segment fixation L2-S1, pelvic Screw insertion	Prof Hwa	Assistant	Previous DLS e ALIF L2-S1 state
21	5-March	F/76	Spinal canal stenosis L3-S1, Listhesis L4/5	Decompression, PLIF L4/5, Fixation L3-S1	Prof Kim	Assistant	
22	6-March	F/73	Cervical Myelopathy C3/4	Laminectomy C3-4, lateral mass fixation C3-4	Prof Kim	Assistant	Congenital block vertebra C4/5
23	6-March	F/74	Degenerative lumbar kyphosis	PLIF L1/2, Deformity correction by smith Petersen osteotomy, Fixation D10-L1	Prof Kim	Assistant	Previous PLIF L2-L5
24	6-March	F/69	foraminal stenosis L4-S1	Minimal invasive PLIF at L5/S1 level	Prof Kim	Assistant	
25	6-March	M/60	Implant broken (rod)	Revision Surgery	Sang il Kim	Observer	L2-S1 Fixation state, PLIF L3- L5
26	8-March	F/72	PLID L4/5, Foraminal stenosis L5-S1	PLIF L4/5, L5/S1, fixation L4-S1	Prof Kim	Assistant	Previous Microscopic discectomy L5/S1
27	8-March	M/69	Listhesis L4/5, Foraminal stenosis L5- S1	Minimal invasive PLIF L4/5	Prof Kim	Assistant	
28	8-March	F/65	Multilevel Spinal Stenosis with lumbar degenerative kyphosis	MIS D/C, OLIF L5/S1, L2- L4 with L- screw at S1, and DLIF at L1/2	Sang il Kim	Observer	
29	11-March	F/82	Lumbar spinal stenosis	Neuroplasty	Sang il Kim	Observer	
30	11-March	M/63	Lumbar spinal stenosis	Neuroplasty	Sang il Kim	Observer	

31	11-March	M/66	Pathological # D10, L2	Vertobroplasty	Sang il Kim	Observer	MM
32	13-March	F/69	Spinal Stenosis with foraminal stenosis L4-S1	PLIF L4/5, L5/S1, fixation L4-S1	Prof Kim	Assistant	Previous Laminectomy
33	13-March	F/58	Foraminal stenosis L5-S1	PLIF L5/S1, fixation L4-S1	Prof Kim	Assistant	Previous Laminectomy
34	13-March	F/36	PID C6/7	ACDF C6/7	Prof Kim	Assistant	
35	13-March	M/82	Osteoporotic Comp# D11 with Liver cirrhosis	Long segment fixation from D7 To L3	Sang il Kim	Assistant	Liver cirrhosis, Resistant to meropenem
36	15-March	M/72	Spinal Stenosis with foraminal stenosis L2-S1	PLIF L4/5, L5/S1, fixation L2-S1	Prof Kim	Assistant	
37	18-March	M/62	Spinal metastasis involving mulple vertebrae with incomplete neurology	Laminectomy D4-5, D11-L2 & Fixation D11-L4	Sang il Kim	Assistant	On chemotherapy
38	20-March	M/77	Spinal Stenosis L3-S1, Spondylo listhesis L4/5, L5/S1	PLIF L4/5, L5/S1, fixation L3-S1	Prof Kim	Assistant	Previous Laminectomy with unilateral fixation L4/5
39	20-March	F/60	Spondylolisthesis L5/S	PLIF L5/S1, fixation L5-S1	Prof Kim	Assistant	
40	20-March	F/72	Foraminal stenosis L5-S1	PLIF L5/S1, fixation L5-S1	Prof Kim	Assistant	Previous Laminectomy L4/5
41	22-March	M/62	Foraminal stenosis L2/3	Microscopic assisted TLIF L2/3, Fixation L2/3	Prof Kim	Assistant	Previous Laminectomy L4/5
42	22-March	M/59	Foraminal stenosis L4/5	Microscopic assisted TLIF L4/5, Fixation L4/5	Prof Kim	Assistant	Previous Laminectomy L4/5, L5/S1
43	22-March	F/74	Lumbar Spinal stenosis Multilevel	PLIF L2/3, L4/5, L5/S1, fixation L2-S1	Prof Kim	Assistant	
44	25-March	F/62	Spinal stenosis L4/5	Neuroplasty with NAVI catheter	Sang il Kim	Observer	
45	25-March	F/83	Comp # D11	Vertebroplasty	Sang il Kim	Observer	
46	27-March	M/76	Spinal stenosis L2-S1	PLIF L4/5, L5/S1, Fixation L3-S1	Prof Kim	Assistant	Traditional Rx
47	27-March	F/66	Spondylolisthesis L5/S1	Minimal invasive TLIF L5/S1, fixation L5-S1	Prof Kim	Assistant	Previous Vertebroplasty L3
48	27-March	M/32	Foraminal stenosis L5/S1 rt	Microscopic assisted unilateral laminectomy	Prof Kim	Observer	Lumbaarizatio n
49	28-March	F/23	PLID L4/5, L3/4, L5/S1	Minimal invasive laminectomy & discectomy at L4/5 lt	Prof Kim	Observer	
50	29-March	F/65	Dorsal Myelopathy with comp # D12	Microscopic assisted laminectomy with fixation D11/12	Prof Kim	Assistant	Previous fixation L2-5
51	29-March	M/74	CSM with OPLL	Laminoplasty C4-5	Prof Kim	Assistant	

52	29-March	F/78	Spinal stenosis L4-S1 with Spondylolisthesis L4/5	PLIFL5-S1, Fixation L4-S1	Prof Kim	Observer
53	30-March	F/72	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
54	30-March	F/58	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
55	30-March	F/62	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
56	30-March	M/74	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
57	30-March	F/79	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
58	30-March	M/72	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
59	30-March	F/63	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
60	30-March	F/71	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
61	30-March	F/58	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
62	30-March	M/66	Spondylolisthesis	TFESI	Sang il Kim	Observer
63	30-March	F/67	Lumbosacral Radiculopathy	TFESI	Sang il Kim	Observer
64	30-March	F/59	Lumbosacral Radiculopathy	TFESI	Sang il Kim	Observer
65	30-March	F/77	Foraminal stenosis	TFESI	Sang il Kim	Observer
66	30-March	M/65	Spondylolysis L5/S1	TFESI	Sang il Kim	Observer
67	30-March	F/65	Spinal Stenosis	TFESI	Sang il Kim	Observer
68	30-March	M/62	PLID	TFESI	Sang il Kim	Observer
69	30-March	M/65	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
70	30-March	F/78	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
71	30-March	F/87	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
72	30-March	M/85	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
73	30-March	F/75	Lumbosacral Radiculopathy	TFESI	Sang il Kim	Observer
74	30-March	F/73	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
75	30-March	M/71	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
76	30-March	M/66	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
77	30-March	F/71	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
78	31-March	M/59	Spondylitis L2/3	Lateral interbody fusion	Sang il	Observer

				with strut graft, Biopsy, Percutaneous fixation L1- L4	Kim		
79	02-April	F/78	TB Spondylitis D7	Corpectomy D7, interbody fusion with strut graft, Biopsy, fixation D5-D10	Prof. Kim	Asistant	Previous Vertebroplasty
80	03-April	F/76	Spondylolisthesis L4/5, Foraminal sstenosis L5/S1	PLIF L4/5, L5/S1, Fixation L3-S1	Prof. Kim	Asistant	
81	03-April	F/56	Spondylolisthesis L4/5	TLIF L4/5, Percutaneous fixation L4/5	Prof. Kim	Asistant	
82	03-April	F/61	Lumbar Spinal stenosis L4/5	Microscopic assisted TLIF L4/5, Percutaneous fixation L4/5	Prof. Kim	Observer	
83	08-April	F/61	Spondylitis D7/8	Ant. Interbody fusion with strut graft	Sang il Kim	Asistant	Previous fixation state
84	08-April	M/61	Lumbar Spinal stenosis L4/5, L5/S1	Neuroplasty with NAVI catheter	Sang il Kim	Observer	
85	09-April	F/71	Lumbar Spinal stenosis L4/5 lt with Spondylolis thesis L4/5 GI	Endoscopic laminectomy L5 lt	Prof. Luke Kim	Observer	
86	09-April	F/63	Lumbar Spinal stenosis L4-S1 with Spondylolis thesis L4/5 GI	PLIFL4/5, L5/S1, Fixation L3-S1	Prof. L. Kim	Observer	
87	09-April	F/48	PLID L4/5 Rt	Endoscopic discectomy L4/5 rt	Prof. Luke Kim	Observer	
88	10-April	F/64	Lumbar Spinal stenosis (multilevel) with degenerative scoliosis	DLIF L2/3, L3/4	Sang il Kim	Observer	Previous fixation state
89	10-April	M/29	Foraminal stenosis C5/6	ACDF C5/6	Prof. Kim	Observer	
90	10-April	M/46	Spondylolisthesis L5/S1	Microscopic assisted TLIF, percutaneous fixation L5/s1	Prof. Kim	Observer	
91	12-April	F/78	Lumbar spinal stenosis L2-S1, Dorsal Myelopathy D9-11	PLIF L3//4, 4/5, L5/S1, Fixation L2-S1, Laminectomy D9-11	Prof. Kim	Asistant	
92	12-April	F/63	Lumbar spinal stenosis Multilevel	OLIF L2-S1	Sang il Kim	Observer	
93	12-April	M/57	Spondylolisthesis L4/5, foraminal stenosis L5/S1	PLIF 4/5, L5/S1, Fixation L4-S1,	Prof. Kim	Asistant	
94	12-April	F/64	Lipoma On back	Excision biopsy	Prof. Kim	Observer	
95	15-April	F/63	Lumbar spinal stenosis L4/5, L5/S1	Neuroplasty with NAVI catheter	Sang il Kim	Observer	
96	15-April	F/66	Lumbar spinal stenosis Multilevel	Neuroplasty with NAVI catheter	Sang il Kim	Observer	
97	15-April	F/64	Lumbar spinal stenosis L3/4, L4/5	Neuroplasty with NAVI catheter	S. Kim	Observer	
98	15-April	M/41	Pathological #L1 due to MM	Percutaneous fixation D11- L3 with transpedicular biopsy	Sang il Kim	Observer	

99	16-April	F/63	Lumbar spinal stenosis L3/4, L4/5	OLIF L3/4, L4/5, PLIF L5/S1	Prof. Luke Kim	Observer	
100	16-April	M/73	Oseoporotic # L4	Percutaneous pedicle screw fixation L4/5	Prof. Luke Kim	Observer	Previous vertebroplasty L4
101	16-April	F/77	Foraminal stenosis L3/4	Microscopic assisted foraminotomy L3/4	Prof. Luke Kim	Observer	
102	17-April	F/64	Degenerative lumbar kyphoscoliosis	PSO L4, PLIF L5/S1, Long segment fixation from D10-S1 with iliac screw	Prof. Kim	Assistant	Previous Laminectomy L4/5, DLIF L2/3, L3/4
103	17-April	M/50	CSM,OPLL C3-T1	Laminoplasty C6, C7, lateral mass fixation C3/4, laminectomy C3,C4,T1	Prof. Kim	Observer	
104	18-April	M/63	Cervical Myelopathy C3/4	lateral mass fixation C3/4, laminectomy C3	Prof. Kim	Observer	
105	19-April	F/66	Lumbar spinal stenosis with degenerative lumbar scoliosis	PSO L4, PLIF L5/S1, Fixation L2-S1 & iliac screw insertion	Prof. Kim	Assistant	Previous Laminectomy L5
106	19-April	F/61	Spinal stenosis L4/5	Minimal invasive Laminectomy L5	Prof. Kim	Observer	
107	19-April	F/82	Dorsal myelopathy with osteoporotic compression #L1 with vertebro plasty L1 in situ	Laminectomy L1, Fusion with bone BG, fixation D11-L3	Prof. Kim	Observer	Previous vertebroplasty L1
108	22-April	M/56	Foraminal steonosis C6/7, C7/T1	Microscopic assisted foraminotomy C6/7, C7/T1	Sang il Kim	Observer	
109	23-April	F/42	Dorsal Myelopathy D10/11 with OYL	Laminectomy D11, Posterior fusion & fixation D10-11	Prof. Kim	Assistant	
110	23-April	F/58	Spinal stenosis L4/5, Listhesis L4/5 G-I	Anterior endoscopic discectomy and DLIF L4/5, percutaneous fixation L4/5	Prof. Luke Kim	Observer	Previous laminectomy state L5, PKD
111	23-April	F/81	Foraminal stenosis L4/5, L5/S1 rt	Microscopic assisted foraminal decompression L4/5, L5/S1	Prof. Luke Kim	Observer	
112	24-April	M/72	Foraminal stenosis L3/4	TLIF L3/4, Percutaneous fixation L3/4	Prof. Kim	Assistant	
113	24-April	F/67	Spinal stenosis L4/5, L3/4	PLIF L4/5, Laminectomy L3-5, fixation L2-5	Prof. Kim	Observer	
114	24-April	M/78	Osteoporotic compression #L1 with CES	Laminectomy L1, Fixation D11-L3	Sang il Kim	Observer	
115	26-April	F/82	Dorsal myelopathy with osteoporotic compression #L1 with fixation D11-L3	AIF with allofibular BG through thoracolumbar approach	Prof. Kim	Assistant	Previous fixatin state
116	26-April	F/75	Foraminal stenosis L4/5	TLIF L4/5	Prof. Kim	Observer	
117	26-April	F/64	Spinal stenosis L4/5, L5/S1 due to listhesis	PLIF L4/5, L5/S1 with fixation L4-S1	Prof. Kim	Observer	

			L4/5, L5/S1 G-2			
118	26-April	F/49	Compression # D2	Pedicle screw fixation C7- D4, posterior fusion with ABG	Sang il Kim	Observer
119	27-April	F/74	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
120	27-April	F/82	Lumbar neuritis	TFESI	Sang il Kim	Observer
121	27-April	M/75	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
122	27-April	F/66	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
123	27-April	M/67	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
124	27-April	F/67	HNP, Lumbar	TFESI	Sang il Kim	Observer
125	27-April	F/44	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
126	27-April	F/82	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
127	27-April	M/72	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
128	27-April	F/81	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
129	27-April	M/45	Lumbosacral Radiculopathy	TFESI	Sang il Kim	Observer
131	27-April	F/79	Lumbosacral Radiculopathy	TFESI	Sang il Kim	Observer
132	27-April	F/33	HNP, lumbar	TFESI	Sang il Kim	Observer
133	27-April	F/44	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
134	27-April	F/67	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
135	24-April	M/49	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
136	27-April	F/85	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
137	27-April	M/66	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
138	26-April	M/72	Lumbar Spinal stenosis	TFESI	Sang il Kim	Observer
139	27-April	M/54	HNP, Lumbar	TFESI	Sang il Kim	Observer
140	27-April	F/52	Lumbar spondylolisthesis	TFESI	Sang il Kim	Observer
141	27-April	F/72	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
142	27-April	F/85	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
143	24-April	F/83	Lumbosacral radiculopathy	TFESI	Sang il Kim	Observer
144	27-April	M/41	HNP, Lumbar	TFESI	Sang il Kim	Observer
145	27-April	M/49	Lumbosacral	TFESI	Sang il	Observer

			radiculopathy		Kim	
146	26-April	M/72	Lumbosacral	TFESI	Sang il	Observer
			radiculopathy		Kim	
147	27-April	M/54	HNP, Lumbar	TFESI	Sang il	Observer
					Kim	
148	27-April	F/52	Lumbar	TFESI	Sang il	Observer
			spondylolisthesis		Kim	
149	29-April	M/78	Copm# L1 with post.	AIF with expandable cage	Sang il	Assistant
			Fixation state	& BG	Kim	
150	29-April	M/56	Cervical radiculopathy	ACDF C6/7, C7/T1	Sang il	Observer
			C6/7, C7/T1		Kim	
151	29-April	M/53	Cervical myelopathy	ACDF with divergent	Prof	Observer
			C7/T1 with previous	Medtronic system	Luke	
			Corpectomy C5 &		Kim	
			Laminoplasty C3-6			
152	29-April	F/60	Spinal stenosis L4/5,	PLIF L4/5, L5/S1	Prof	Observer
			L5/S1		Luke	
					Kim	
153	29-April	M/75	Cervical myelopathy	Implant removal	Prof	Observer
			with laminoplasty state		Kim	

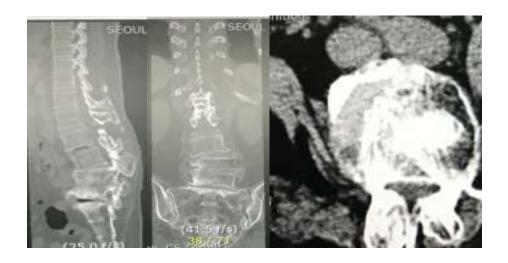
Conclusion:

The Aim of the APSS to develop the Spine Surgeons from the Asia pacific Region. I am so lucky that APSS has been selected me for this Fellowship. I would like to express my heartiest gratitude to the APSS for arranging such a hassle-free fellowship for me and giving the opportunity to acquire some knowledge and exposed myself in the field of spine surgery. My Mentor was one of the Famous Spine Surgeon in Korea. He is very Enthusiastic to teach us. Though a period of 3 months was too short to learn but I learnt not only the techniques but also the up-to-date principles in treating conservative & operative treatment of adult spine deformity and other various spinal disease condition.

Some case examples:

Some operative procedures that I assisted and observed;

- a. Deformity correction-example
- 1. A 64 years female presented with degenerative Lumbar kyphoscoliosis. He was treated pedicle substraction osteotomy (PSO) of L4, PLIF L5/S1, Long segment fixation from D10-S1 with iliac screw insertion. She had a history of previous Laminectomy L4/5, DLIF L2/3, L3/4.





- b. Spinal stenosis and degenerative diseases-
- 1. A 50 years old male presented with cervical spondylotic myelopathy with OPLL from C3-T1. He was treated with laminectomy of C3-4, T1, lateral mass fixation of C3-4 and open door laminoplasty C6-7.

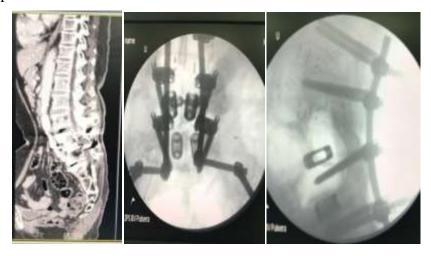




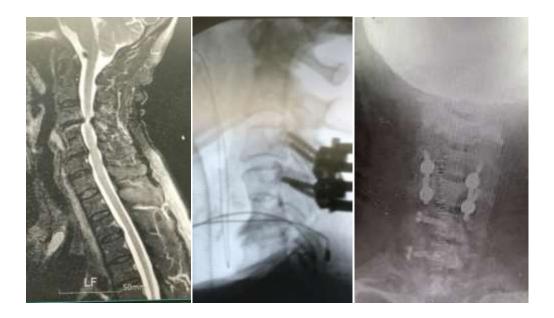
2. A 76 years female presented with Spondylolisthesis L4/5, Foraminal sstenosis L5/S1. She was treated with PLIF L4/5, L5/S1 and Fixation from L3-S1.



3. A 64 years female presented with multilevel lumbar spinal stenosis with degenerative Lumbar scoliosis. He was treated in tow stage; direct lateral inter body fusion of L2/3 and L3/4in first stage and in second stage; posterior decompression, PLIF at L5/S1, L4/ level 5and Deformity correction by PSO of L4 and fixation by long segment pedicle screws, rods and pelvic screws.



4. A 63 years male patient suffered from cervical myelopathy C3/4, he was treated with laminectomy of C3 and lateral mass fixation C3/4.



c. Spinal Tumour-

1. A 51 female patient suffered from Metastatic leiomyosarcoma D8, 9th rib. She was treated in the form of Spondylectomy D8 through posterior approach, interbody fusion with mesh cage and bone graft, Long segment fixation from D6- D10.



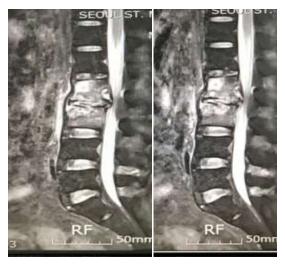
d. Spinal Injury-

1. A 78 years male presented with compression # L1 . He was treated in two stage; first stageposterior decompression and percutaneous pedicle screw fixation from D11-L3 and in second stage anterior inter body fusion with expandable cage & bone graft.

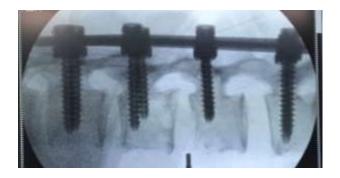


e. Spinal Infections-

1. A 59 years male presented with Spondylitis L2/3. He was treated in two stage; first stage posterior decompression and percutaneous pedicle screw fixation from L1-L4 and in second stage; Biopsy and Lateral interbody fusion with strut graft.







2. A 78 years male presented with Tubercular Spondylitis D7. He was treated in two stage; first stage posterior decompression and percutaneous pedicle screw fixation from D5-D10 and in second stage Biopsy and Lateral interbody fusion with strut graft.



- f. Prolapsed Intervertebral Disc-
- 1. A case of 36 female patient suffered from neck pain with radiculopathy due to prolapsed inter vertebral disc at C6/7 level. She was treated in the form of ACDF.



2. A case of 48 female patient suffered from low back pain with radiculopathy due to prolapsed lumbar inter vertebral disc at L4/5 level. She was treated in the form of endoscopic di



- g. Others procedure
- 1. A 66 years male presented with osteoporotic compression # D12. He was treated in the form of Vertebroplastyunder C-Arm guide.



The highlight of my Fellowship and the moment with place that I will never forget:

Selection procedure of fellows, flight schedule with transportation, arrangement of accommodations, entertainment with cooperativeness of Korean people, training facilities, learning method, interdepartmental cooperation and discipline of the hospital all were highlights for me. The moment that I will never forget is my fare well dinner party and the place that I will never forget is the Seoul St. Mary's Hospital campus.

Some others photograph

The national conference on spinal deformities in elderly patients at Soon Chun Hyang University hospital;



The 8th Spring congress of the Korean society of spine tumour at Samsung Seoul Hospital, Cancer Hospital;



The 12^{th} combined meeting of APSS -APPOS at Songdo, Convensia, Incheon, Korea from April 4-6, 2019;







2019 Catholic orthopaedic symposium I- Shoulder, Paediatric, Spine at The Catholic university of Korea Seoul St. Mary's Hospital;





Livings in korea;















Acknowledgement

I thank once again the organization: APSS, The Catholic university of Korea Seoul St. Mary's Hospital Department of Orthopaedics and Traumatology for excellent training opportunity. I thank my mentor Dr. Young Hoon Kim, Professor, Dept. of Orthopaedic Surgery (Deformity correction & degenerative spine) for his guidance, support & academic inspiration. I also thank Dr Sang Il Kim, Asst prof Spine Surgery, Prof Dr Luke Kim, Dept. of Neurospine surgery & each and every member of The Catholic university of Korea Seoul St. Mary's Hospital for making my stay wonderful. I would like to thanks to all my teachers of Bangladesh, Prof Dr Shamsuzzaman, Asst. Prof Dr Md Shahidul Islam Akon, Prof Dr Md Kamrul Ahsan, Prof Dr Shah Alam, Asso. Prof Dr MAK Shamsuddin and all other teachers of RMCH & DMCH who always help me & support me a lot. Finally I would like to thanks my beloved wife Dr Sabera Sultana, My two sons and my parents for their great sacrifices for me.