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Shoulder and Elbow Fellowship Report at Kyungpook National University Hospital 2007

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I got the opportunity to pursue a fellowship in South Korea by my guide and teacher Dr Ashok Rajgopal, a leading Joint replacement and arthroscopic surgeon working with Fortis group of hospitals, New Delhi, India. When I received my invitation letter from Prof. In-Ho Jeon, a prominent upper extremity surgeon working at Kyungpook national university, Daegu Korea, I started a voyage towards some thing new and exiting.

My fellowship started on 15th of February 2007 and was stationed at Kyungpook national university, Daegu, South Korea under supervision and guidance of Prof. In Ho Jeon. My arrival at Daegu concided with the start of Chinese New Year's Day. Daegu is the third largest metropolitan city of South Korea geographically located in the southeastern part of Korea. Daegu is also known as the city of hope and colors. It is an educational and cultural city with historical links to the glorious Shilla culture and spirit of Chosun Confucianism. Kyungpook National university hospital is situated at the heart of the city and caters to a population of 2.5 million. The motto of the hospital is very inspiring that is of Truth, Pride and Service (진리, 긍지, 봉사).

During the tenure of three months, I actively participated in academic and clinical work. On a usual day my daily schedule started at 7 am with morning conference, which included case presentations by the residents. After few days of acclimatization of the surroundings I was given opportunity to join the surgeries.

First Month

My first surgery with Prof Jeon was Mumford procedure (arthroscopic distal clavicular resection) along with rotator cuff repair on 23 rd Feb. He during the surgery explained me the basics shoulder arthroscopy. Portal placements, diagnostic work up (10 glenohumeral and five subacromial points), distal clavicular resection with rotator cuff repair was duely explained to me. The same very day I joined him for arthroscopic removal of loose body from elbow joint and a radial shortening operation for Kienbock's disease after assessing cartilage status with wrist arthroscopy.

Next day on 24 th of Feb., we went to shoulder camp at Biseul mountains at a

resort surrounded by mountains all around. It was a very impressive meeting of local shoulder surgeons and few radiologists. The camp covered all topics relating to rotator cuff tears stating from the anatomy and then covering biomechanics, diagnosis, and treatment of rotator cuff tears. Traumatic versus degenerative tears was topic of big fight. Prof. Jeon presented a talk on this burning issue. The traumatic etiology of rotator cuff tears is a matter of controversy especially relating to medicolegal claims. Age <40 yrs, No prior history of shoulder pain, definitive history of trauma, acute presentation, local signs of trauma, no secondary changes on radiographs and presence of marrow edema on MRI were points presented in favor of traumatic tears. In a study published regarding rotator cuff contusions of the shoulder in professional football players concluded that fifty percent of the players had contusions as diagnosed on MRI. This may be indirect evidence in support of traumatic tears[1]. Shoulder camp ended with a magnificent barbeque dinner along with cocktails.

On 6th March in local meeting of hand surgeons at Keimyung university hospital, Daegu. I was given opportunity to speak about Keinböck's disease regarding its etio pathogenesis, diagnosis, staging and treatment. I found this very interesting as all the surgeons present there cases and there is free discussion about the issues.

In the weekend I visited the historical city of Gyung-ju to attend a CME on Pain management. Prof Kyung in his talk emphasized that Pain should be considered a vital sign and should be dealt aggressively. After completion of CME I visited Buddhist temples of Bulguksa and Suk-Gul Am. The temples are wooden masterpieces and are a part of ancient heritage.

Second Month

Apart from the routine work we operated a few interesting cases.

On 30th and 31st, I attended the 15th meeting of Korean shoulder and elbow society clubed with 3rd Mayo Asia elbow club at Konkuk university hospital located at Seoul. This meeting was attended by Dr Louis U Bigliani, from Columbia University, United states (US) (Fig. 1) and Dr. Bernard Morrey, Mayo clinic, US. Other international faculties who attended the meeting were Dr. Jeff Hughes from Australia, Dr. Brain Lee from Singapore, Prof. Nakamura and Dr. Ingaki from Japan. Day one of the meeting was dedicated shoulders and day two to the elbows.

Dr. Biglani talked about Hemiarthroplasty for Four part fractures; surgical out comes, pitfalls and how to avoid complications were discussed. He also presented talk about Reverse shoulder arthroplas-

Fig. 1. With Dr. Louis U Bigliani, from Columbia University, United states who attended the 15th meeting of Korean Shoulder and Elbow Society at Konkuk university hospital, Seoul.

ty. This could be inferred from the talk that on the basis of the current design and results, the reverse prosthesis should be considered a salvage procedure. As of now it's should be used in severe pain related to cuff deficiency with poor function in elderly patients with age above 70 years. This prosthesis is not for young patients who will demand more from the prosthesis than it is designed for[2].

There were special presentations from two Japanese fellows Dr. Naoko Mizuno from Yukiola Hospital and Dr. Kazuhide Suzuki from Fujigaoka rehabilitation Hospital. There were interesting symposia regarding Traumatic anterior instability and controversies in rotator cuff management.

Prof. Yong-Girl Rhee's presentation regarding the three sister portals for the arthroscopic repair of massive rotator cuff tears was very fascinating. Prof. Rhee et al described a new posterior infraspinatous portal used along with Neviaser and subclavian portals to access all parts of the cuff with minimal rotation of the arm.

On the second day of the conference, elbows were the focus. Elbow instability was nicely discussed by Dr. Jeff Hughes and Prof. In Ho Jeon. Intercondylar fractures of the distal humerus was topic of debate. Best method of exposure and plan of fixation (90~90° placement of the plates or plates placed over the supracondylar ridges) were the prime topics of discussion. Dr. Bernard Morrey presented his talks about pathophysiology of the stiff elbow and complications and revisions of failed elbow arthroplasty. Dr. Inagaki's talk regarding open management of stiff elbow was very interesting. Arthroscopic release of stiff elbow by Prof. Min-Jong Park from Samsung Medical Center was very impressive. I also presented on paper regarding "Arthroscopic ECRB release for the management of lateral epicondylitis (Fig. 2).

Fig. 2. I presented on paper regarding "Arthroscopic ECRB release for the management of lateral epicondylitis in the podium of 15th annual meeting of Korean Shoulder and Elbow Society.

On tenth of March, I presented a talk on acromioclavicular dislocation in shoulder meeting of Local surgeons at Catholic University. This meeting, was also attended by the Japanese traveling fellows. After the meeting we went to a Japanese restaurant. To have raw fish (Sashimi) was a different experience for me.

Third Month

I went to attend spring annual meeting of KOA at Chungju. This meeting was a good academic feast. I also visited military hospital with Prof. Jeon to operate a case of posterolateral rotatory instability elbow. In this both the advancement and reinforcement of LUCL was done using palmaris longus. Fixation was achieved by biotenodesis screw (Arthrex)[3]. Fixation of tendon with a interference screw was a new concept to me (Fig. 3).

On 30th march I visited Daegu Fatima

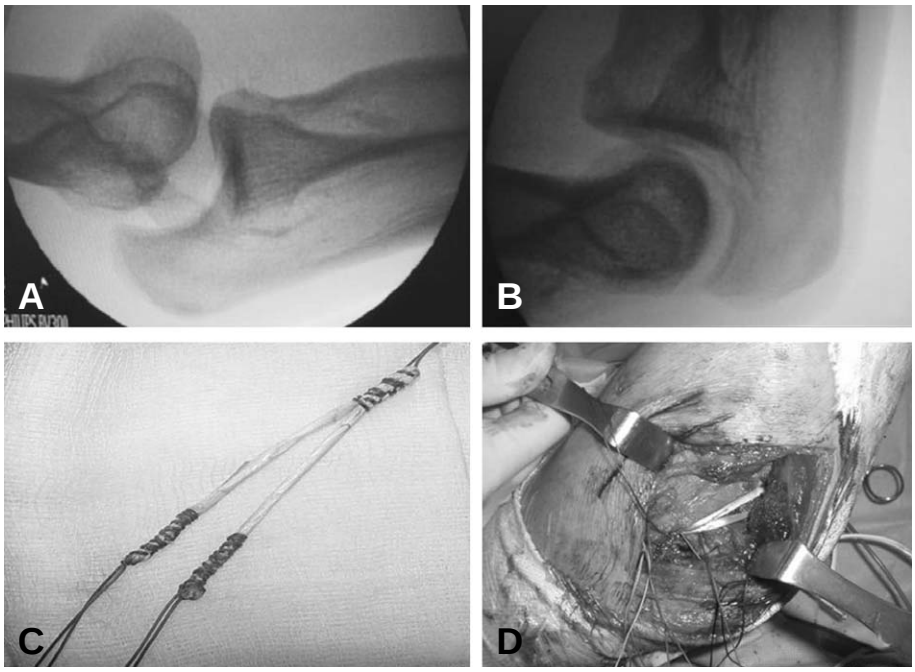

Fig. 3. Posterolateral rotatory instability elbow. (**A**) Positive pivot shift test with elbow supination, valgus and axial loading. (**B**) The elbow joint is reduced at flexion over 90 degrees. (**C**) Palmaris longus tendon graft was used. D. The advancement and reinforcement of LUCL was done using palmaris longus. Fixation was achieved by Biotenodesis screw. Fixation of tendon with a interference screw was a new concept to me.

Hospital to Dr. Dong-Ju Shin. He showed me his interesting cases. I participated with him for repair of rotator cuff repair using suture bridge technique. After the surgery we went to a traditional Korean dinner.

I also visited Prof. Hyng-Bin Park at Gyung sang University hospital in Jinju. I found Jinju unlike other cities of Korea. The city was very beautiful and calm. I was taken straight to the operation room. I learned from him the lateral placement of anchor in rotator cuff repair cases.

My last presentation in the department was on posterolateral rotatory instability (PLRI) elbow. Reconstruction of LUCL (lateral ulnar collateral ligament) using palmaris longus and fixation with biotenodesis was discussed. Time flies very fast. During the course of three months, I learned a lot. I wish I could have some time to visit again.

I am very thankful to the department chairman Prof. Kim Shin Yoon for encouragement and support. I also covey my thanks and regards to Prof. Kim Poong Taek for his affection and support. I am also thankful to Prof. Park Il Hyung, Prof. Park Byung Chul, Prof. Kyung Hee Soo, Prof. Oh Chang Wug and Prof. Min Woo Kie for their support. I also thank residents of the department for there love, affection and support.

REFERENCES

1) **Cohen SB, Towers JD, Bradley JP**: *Rotator Cuff Contusions of the Shoulder in Professional Football Players: Epidemiology and Magnetic Resonance Imaging Findings. Am J Sports Med,*

35: 442-447, 2007.

2) **Boileau P, Watkinson D, Hatzidakis AM, Hovorka I**: *The Grammont reverse shoulder prosthesis: results in cuff tear arthritis, fracture sequelae, and revision arthroplasty. J Shoulder Elbow Surg, 15: 527-540, 2006.*

3) **Lee SK, Kubiak EN, Liporace FA, Parisi DM, Iesaka K, Posner MA**: *Fixation of tendon grafts for collateral ligament reconstructions: a cadaveric biomechanical study. J Hand Surg Am, 30: 1051-1055, 2005.*