English Lectures 10 "Cubital tunnel syndrome/ Radial head replacement"

Feb. 4th (Sat) 16:50～17:50
Room 1 (Yamagin Kenmin Hall 2F Main Hall)

English Lectures 10 (L10-1)

Treatment for Ulnar Neuritis Around the Elbow in Adolescent Baseball Players

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[Aim] Although several reports demonstrated successful short-term outcomes of surgical treatment for ulnar neuritis around the elbow, the mid- to long-term outcomes are still unknown. The aim of this study is to investigate the surgical outcomes for ulnar neuritis around the elbow with a minimum 5-year follow-up in young baseball players.

[Materials and methods] Twenty-four of 26 cases could be interviewed by telephone. All cases were male, and the mean age at the surgery was 17 (range, 12-28) years old. The affected side was throwing-side in all. Anterior subcutaneous transposition in 23 cases and simple decompression in one. Ten cases had a partial ulnar collateral ligament (UCL) injury, but no simultaneous UCL reconstruction was performed. Return to baseball and reoperation were investigated. The mean follow-up period was 75 (range, 60-103) months. Return to sport (complete return: return to previous sports activity level, incomplete return: at a lower level, retired baseball, and revision surgery), the period of playing baseball, and recurrence were investigated.

[Results] Twenty-two cases (92%) returned to baseball with their previous level at a mean of 2.3 (range, 1.5-4.5) months postoperatively. At the final follow-up, three cases continued playing baseball without elbow pain, and 19 cases retired for academic reasons without elbow symptoms at the mean of 4 (range, 2-8) years postoperatively. One case with a concomitant partial UCL injury had moderate elbow pain and played baseball for 2 years with a lower level. The remaining one case without concomitant UCL injury remained elbow pain and underwent reoperations (ulnar nerve release and UCL reconstruction), but he gave up playing baseball due to elbow pain. One case recurred at 95 months and underwent reoperation at 99 months postoperatively.

[Conclusion] The surgery for ulnar neuritis in young baseball players provided satisfactory mid-term outcomes.

【Curriculum Vitae】

2004	Graduation on Yamagata University
2006	Department of Orthopaedic Surgery, Yamagata University Faculty of Medicine
2017	Visiting Scholar, Goodman lab, Department of Orthopaedic Surgery, Stanford University
2018	Doctor of Philosophy (Medicine), Major of Medicine, Graduate School of Medical Science, Yamagata University
2018	Postdoctoral Visiting Scholar, Goodman lab, Department of Orthopaedic Surgery, Stanford University
2019	Overseas Research Fellowships of the Japan Society for the Promotion of Science (JSPS)
2021	Assistant Professor, Yamagata University

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English Lectures 10 (L10-2)

Metallic Radial Head Arthroplasty designs and clinical application

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Metallic radial head arthroplasty is currently accepted for the treatment of unreconstructible radial head fractures combined with elbow instability. A variety of prostheses have been developed and used in the markets. Based on the different concepts, these implants differ in head articulation, stem fixation, and metallic composition. The author reviews the characteristics and clinical outcomes of different types of radial head prostheses, and also discusses specific designs of implants currently used in the market.

A primary technical goal of radial head arthroplasty is the insertion of an implant that closely replicates the native radial head. The major pitfall when using a metallic radial head prosthesis is the insertion of a longer implant, which results in overstuffing of the radiocapitellar joint. Satisfactory clinical results can be anticipated when a radial head prosthesis is used for the correct indications and when a systemic approach is undertaken to ensure proper sizing. However, we need data regarding the long-term outcomes and comparison of the various types of prostheses.

The main complications of prostheses include loosening, capitellar erosion, and elbow arthritis—regardless of design or type. There are other complications inherent to specific design of implants. The disassembly of bipolar implants and relatively high incidence of osteolysis in the press-fit stem are reported. It will be necessary to conduct future research about the advancement of implant technology, including stable articulation and wear reduction.

【Curriculum Vitae】

Position: Chief, Department of Orthopedic surgery
Director, Sports Medical Center
Professor, Korea University Medical College

Work Experience:

2018 - Chief and Professor, Department of Orthopedic surgery
2017-2018 Visiting professor, Regeneration research center, MGH, Boston, MA, USA
2014-2016 Professor, Orthopedic Surgery, Korea University Guro Hospital, Seoul, Korea
2009-2014 Associate professor, Orthopedic Surgery, Korea University Guro Hospital, Seoul, Korea
2007-2009 Research Fellow, Biomechanics Lab, Mayo Clinic, Rochester, MN, USA
2004-2006 Clinical Assistance professor, Orthopedic Surgery, Korea University Guro Hospital

Education:

1988-1994 Korea University Medical College, Seoul, Korea
1999-2004 Master degree, Orthopedic surgery, Korea University Postgraduate School, Seoul, Korea
2004-2007 PhD, Orthopedic surgery, Korea University Postgraduate School, Seoul, Korea