

Orthopedic Surgery (Adult Hip Service) (Seoul National University Hospital)

1. Introduction

Total hip replacement arthroplasty (THRA) using a metal-on-polyethylene articulation has become one of the most effective procedures for the surgical treatment for end-stage hip disease. However, polyethylene wear debris-induced osteolysis has been postulated to cause/contribute to the aseptic loosening of a THRA, and hence, is regarded to be an important factor in its in vivo longevity.

Low friction low wear ceramic-on-ceramic bearing surfaces are an attractive alternative to conventional metal-on-polyethylene articulation in terms of eliminating or reducing the problems related to polyethylene wear debris, and may offer a promising option for young active patients.

Since November 1997, more than 2,000 cases of a cementless ceramic-on-ceramic THRA have been performed at Seoul National University Hospital (SNUH). Kaplan-Meier survivorship analysis of SNUH cases with any implant revision for any reason as the end point, revealed a **cumulative survival rate of 99.0%** (95% confidence interval, 97.0% to 100%) at ten years after index arthroplasty. (Ref: Lee et al., J Bone Joint Surg Am. 2010 Jul 21;92(8):1715-9) Moreover, recently, SNUH hip service found a high 10-year survival of cementless ceramic-on-ceramic THRA (**98.9% survival rate**) in highly active patients younger than 30 years. (Ref: Yoon et al., Clin Orthop Relat Res. 2012 Dec;470(12):3530-6) In addition, SNUH hip service reported that the ceramic-on-ceramic bearing surfaces used for revision THRA in patients with osteolysis produce encouraging clinical results and implant survival rates at a minimum of 7 years postoperatively (**96.9% survival rate**) (Ref: Yoo et al., J Arthroplasty. 2013 Jan;28(1):132-8) **The outcome of THRA in SNUH is outstanding.**

The SNUH adult hip service can be the best option for the education of adult hip reconstruction for the global visitor supported by the highest number of cases in the world as well as structured and active research activities, even for a short duration of a few weeks.

2. Visiting Fellowship Program

2-1. Short-term visiting fellowship program

This is an integrated practical education course which provides experience of tens of hip disease patients within a few weeks and is purposed to let the trainee have a structured concept and knowledge of adult hip reconstruction surgery.

The trainee is expected to learn fundamental principles of adult hip reconstruction surgery mainly focused on hip arthroplasty including primary total hip arthroplasty, revision total hip arthroplasty, hip hemiarthroplasty, and so on. We hope this experience from relatively large number of hip disease patients could be effectively applied to their own practice in their own practical fields. It is also expected that the introduction and discussions on a number of researches that take place at SNUH may develop new collaborations of adult hip researches by two countries.

1) Duration: 2 weeks or 4 weeks program courses, which are basically similar in contents; however more chances of participating in operation and in-depth discussion on issues of adult hip reconstruction are available in 4 week's program.

2) Educational contents

Adult hip reconstruction surgery: Indication and technical principles of each operation technique

Post-operative care: post-operative rehabilitation, complication management, follow-up period and check-up lists

Conferences: decision making of difficult cases, discussion on interesting cases and updated publication

Research meeting: clinical, translational research activities of SNUH adult hip service

Other activities: Observation of outpatients clinic and invitation to other frequent meetings in hip society

2-2. Long-term visiting fellowship program

Six months or 1-year program courses are available in long-term visiting program.
Their educational contents are basically similar with those in short-term programs.

3. Faculty Member

Name	Position	E-mail
Hee Joong Kim	Professor	oskim@snu.ac.kr
Jeong Joon Yoo	Associate Professor	jjyos@snu.ac.kr

Staffs



Hee Joong Kim, M.D., Ph.D.

Professor of the Department of Orthopaedic Surgery,
College of Medicine, Seoul National University,
Laboratory of Musculoskeletal Biomedical Engineering

Academic background

1974-1980 College of Medicine, Seoul National University, Seoul, Korea

1980-1985 Internship and Residency in Orthopaedic Surgery, Seoul National University Hospital, Seoul, Korea

1989-1990 Clinical fellow, Department of Orthopedic Surgery, Seoul National University Hospital, Seoul, Korea

1993-1995 Research fellow, Department of Orthopedic Surgery, Mayo Clinic, Rochester, Minnesota, USA

Memberships

Chairman of the Board of Directors Elect of the Korean Orthopaedic Society

Board member and Ex-president of the Korean Hip Society

Board member and Ex-president of the Korean Orthopaedic Research Society

Member of the Orthopedic Research Society

Member of the Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT)

Ex-vice-president of the Association Research Circulation Osseous (ARCO)



Jeong Joon Yoo, M.D., Ph.D.

Associate Professor of the Department of Orthopaedic Surgery,
College of Medicine, Seoul National University,
Laboratory of Musculoskeletal Biomedical Engineering

Academic background

1987-1993 College of Medicine, Seoul National University, Seoul, Korea

1993-1998 Internship and Residency in Orthopaedic Surgery, Seoul National University Hospital,
Seoul, Korea

2001-2003 Clinical and Research fellow, Department of Orthopedic Surgery, Seoul National
University Hospital, Seoul, Korea

2008-2010 Research fellow and Clinical instructor, Department of Orthopedic Surgery,
Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA

Memberships

Secretary and Treasurer Elect of the Korean Orthopaedic Association

Secretary of the Editorial Committee of The Korean Hip Society

Secretary of the Research Committee of The Korean Society of Bone Metabolism

Member of the Korean Orthopaedic Research Society

Member of the Korean Tissue Engineering and Regenerative Medicine Society

Member of the The Korean Society for Biomaterials

Member of the Orthopaedic Research Society

Member of the Tissue Engineering and Regenerative Medicine International Society

Recent Publications

1. Revision total hip arthroplasty using an alumina-on-alumina bearing surface in patients with osteolysis.

Yoo JJ, Yoon PW, Lee YK, Koo KH, Yoon KS, Kim HJ.

J Arthroplasty. 2013 Jan;28(1):132-8.

2. Alumina-on-alumina THA Performed in Patients Younger Than 30 Years: A 10-year Minimum Followup Study.

Yoon HJ, Yoo JJ, Yoon KS, Koo KH, Kim HJ.

Clin Orthop Relat Res. 2012 Dec;470(12):3530-6.

3. Synthetic peptide-conjugated titanium alloy for enhanced bone formation in vivo.

Yoo JJ, Park YJ, Rhee SH, Chun HJ, Kim HJ.

Connect Tissue Res. 2012;53(5):359-65.

4. Metal neck and liner impingement in ceramic bearing total hip arthroplasty.

Lee YK, Yoo JJ, Koo KH, Yoon KS, Kim HJ.

J Orthop Res. 2011 Feb;29(2):218-22.

5. Alumina-on-alumina total hip arthroplasty: a concise follow-up, at a minimum of ten years, of a previous report.

Lee YK, Ha YC, Yoo JJ, Koo KH, Yoon KS, Kim HJ.

J Bone Joint Surg Am. 2010 Jul 21;92(8):1715-9.