

Arthroplasty

[View the current Arthroplasty InDepth page on BioPortfolio.com \(PDF\)](#)

(<http://www.bioportfolio.com/indepth/Arthroplasty.html>) - Regularly Updated.

Arthroplasty is an operative procedure of orthopaedic surgery performed, in which the arthritic or dysfunctional joint surface is replaced with something better or by remodeling or realigning the joint by osteotomy or some other procedure. Previously, a popular form of arthroplasty was interpositional arthroplasty with interposition of some other tissue like skin, muscle or tendon to keep inflammatory surfaces apart or excisional arthroplasty in which the joint surface and bone was removed leaving scar tissue to fill in the gap. Other forms of arthroplasty include resection arthroplasty, resurfacing arthroplasty, mold arthroplasty, cup arthroplasty, silicone replacement arthroplasty, etc. Osteotomy to restore or modify joint congruity is also an arthroplasty. For the last 45 years the most successful and common form of arthroplasty is the surgical replacement of arthritic or destructive or necrotic joint or joint surface with prosthesis. For example a hip joint that is affected by osteoarthritis may be replaced entirely with a prosthetic hip. This would involve replacing both the acetabulum and the head and neck of the femur. The purpose of this procedure is to relieve pain, to restore range of motion and to improve walking ability, thus leading to the improvement of muscle strength. Indications for arthroplasty include: *osteoarthritis *rheumatoid arthritis *avascular necrosis or osteonecrosis *congenital dislocation of the hip joint *acetabular dysplasia *frozen shoulder, loose shoulder*traumatized and malaligned joint*joint stiffness

Category: Orthopedics
sh: Artroplastikaro: Artroplastie

Arthroscopy Arthroscopy is a minimally invasive surgical procedure in which an examination and sometimes treatment of damage of the interior of a joint is performed using an arthroscope, a type of endoscope that is inserted into the joint through a small incision. Arthroscopic procedures can be performed either to evaluate or to treat many orthopaedic conditions including torn floating cartilage, torn surface cartilage, ACL reconstruction, and trimming damaged cartilage. The advantage of arthroscopy over traditional, open surgery is that the joint does not have to be opened up fully. Instead, only two small incisions are made - one for the arthroscope and one for the surgical instruments. This reduces recovery time and may increase the rate of surgical success due to less trauma to the connective tissue. It is especially useful for professional athletes, who frequently injure knee joints and require fast healing time. There is also less scarring, because of the smaller incisions. The surgical instruments used are smaller than traditional instruments. Surgeons view the joint area on a video monitor, and can diagnose and repair torn joint tissue, such as ligaments and menisci. Arthroscopy is used for joints of the knee, shoulder, elbow, wrist, ankle and hip. ([From the Wikipedia article Arthroplasty.](#))

Recent Publications on Arthroplasty:



- [Long-term Followup of Total Hip Arthroplasty in Patients with Cerebral Palsy.](#)
BACKGROUND: Patients with cerebral palsy (CP) are at risk for hip... 20th November, 2009
Department of Orthopedic Surgery, Hospital for Special Surgery, 535 East- Clin Orthop Relat Res.
2009 Nov 19. ([DOI Direct Link](#))
- [Accuracy of soft tissue balancing in TKA: comparison between navigation-assisted gap balancing and](#)

[conventional measured resection.](#)

*Equalized rectangular extension and flexion gaps are considered desirable...*20th November, 2009
Department of Orthopaedic Surgery, Korea University School of Medicine,- Knee Surg Sports Traumatol Arthrosc. 2009 Nov 19. ([DOI Direct Link](#))

- [The Early and Delayed Analgesic Effects of Ketamine After Total Hip Arthroplasty: A Prospective, Randomized, Controlled, Double-Blind Study.](#)
*BACKGROUND: Ketamine has been shown to have a morphine-sparing effect soon...*20th November, 2009
Service d'Anesthesie Reanimation 2, Hopital Trousseau, Chambray les Tours,- Anesth Analg. 2009 Dec;109(6):1963-1971. ([DOI Direct Link](#))
- [SEPTIC ARTHRITIS CAUSED BY ERYSIPELOTHRIX RHUSIOPATHIAE IN A PROSTHETIC KNEE JOINT.](#)
*We describe the third case of prosthetic infection due to E....*20th November, 2009
Infectious and Tropical Diseases Department, La Source Hospital, Orleans,- J Clin Microbiol. 2009 Nov 18. ([DOI Direct Link](#))
- [Quality Improvements of Antimicrobial Prophylaxis in Coronary Artery Bypass Grafting.](#)
*BACKGROUND: Although the principles of antibiotics prophylaxis are well...*20th November, 2009
Department of Surgery, Buddhist Tzu Chi General Hospital, Hualien, Taiwan;- J Surg Res. 2009 Aug 3. ([DOI Direct Link](#))
- [Results of Selective Hip Arthroplasty Revision in Isolated Acetabular Failure.](#)
*BACKGROUND: Controversy exists over whether to remove well-fixed...*20th November, 2009
Department of Orthopedics, Rui Jin Hospital, Shanghai Jiao Tong University- J Surg Res. 2009 Jul 17. ([DOI Direct Link](#))
- [Microbiology of the infected knee arthroplasty: Report from the Swedish Knee Arthroplasty Register on 426 surgically revised cases.](#)
*Surgically revised deep infected primary knee arthroplasties reported to...*20th November, 2009
Department of Orthopaedics, Clinical Sciences, Lund University, Lund,- Scand J Infect Dis. 2009;41(11-12):831-840.
- [Stem modularity alone is not effective in reducing dislocation rate in hip revision surgery.](#)
*BACKGROUND: Dislocation is a serious complication following total hip...*19th November, 2009
Department of Orthopaedic Surgery, University School of Medicine, Verona,- J Orthop Traumatol. 2009 Nov 18. ([DOI Direct Link](#))
- [Postoperative analgesia with minidose intrathecal morphine for bipolar hip prosthesis in extremely elderly patients.](#)
*PURPOSE: It is known that an optimal dose of intrathecal morphine for...*19th November, 2009
Department of Anesthesia, Nagasaki Rosai Hospital, Sasebo, Japan.- J Anesth. 2009 Nov;23(4):504-507. Epub 2009 Nov 18. ([DOI Direct Link](#))
- [Arthroplasty: critical scientometric analysis of current benchmarking and evaluation procedures.](#)
*PURPOSE: It is known that an optimal dose of intrathecal morphine for...*19th November, 2009
Department of Sports Medicine, The Institute of Occupational Medicine,- Arch Orthop Trauma Surg. 2009 Nov 17. ([DOI Direct Link](#))
- [A Comparison of Sensory and Motor Loss After a Femoral Nerve Block Conducted With Ultrasound Versus Ultrasound and Nerve Stimulation.](#)
*BACKGROUND:: Controversy exists regarding the need for nerve stimulation...*19th November, 2009
From the Department of Anesthesiology, Dartmouth Medical School,- Reg Anesth Pain Med. 2009 September/October;34(5):508-513. ([DOI Direct Link](#))
- [Value of the autotransfusion of blood recovered from the post-operative wound in arthroplasty patients.](#)
*SummaryThe authors present their experiences with autotransfusion of blood...*19th November, 2009
Oddzial Ortopedii i Traumatologii Narzadu Ruchu Specjalistyczny Szpital- Ortop Traumatol Rehabil. 2009 Oct 30;11(5):449-459.
- [Tranexamic acid in hip fracture surgery: a randomized controlled trial.](#)
*BACKGROUND: /st> Hip fracture surgery may be associated with substantial...*29th July, 2009
Department of Anaesthesiology and Intensive Care and.- Br J Anaesth. 2009 Nov 18. ([DOI Direct Link](#))

- [Long-term results of the ABG-1 hydroxyapatite coated total hip arthroplasty: Analysis of 111 cases with a minimum follow-up of 10 years.](#)
INTRODUCTION: Medium-term studies of ABG-1 cementless total hip...29th July, 2009
Department of Orthopaedics and Traumatology, Caremeau Teaching Hospital- Orthop Traumatol Surg Res. 2009 Nov 16. ([DOI Direct Link](#))
- [Major orthopaedic surgeries for haemophilia with inhibitors using rFVIIa.](#)
Summary. Between 2000 and 2008, 11 major orthopaedic surgeries for 7...29th July, 2009
Department of Joint Surgery, Research Hospital of the Institute of Medical- Haemophilia. 2009 Nov 18. ([DOI Direct Link](#))

BioNews Results for Arthroplasty

- [Serum TSH values and risk of vertebral fractures in euthyroid post-menopausal women with low bone mineral density](#)
MDLinx: Nov 20 2009 10:30AM Matching: arthroplasty
- [Minimally Invasive Subvastus Approach: Improving the Results of Total Knee Arthroplasty: A Prospective, Randomized Trial](#)
MDLinx: Nov 19 2009 11:08AM Matching: arthroplasty
- [Principles of Treatment for Periprosthetic Femoral Shaft Fractures Around Well-fixed Total Hip Arthroplasty](#)
MDLinx: Nov 13 2009 10:56AM Matching: arthroplasty
- [How Active are Patients Undergoing Total Joint Arthroplasty?: A Systematic Review](#)
MDLinx: Nov 12 2009 1:12PM Matching: arthroplasty
- [A Comparison between Robotic-assisted and Manual Implantation of Cementless Total Hip Arthroplasty](#)
MDLinx: Nov 12 2009 1:12PM Matching: arthroplasty
- [Benefits of Steroid Use After Knee Arthroplasty Studied](#)
Modern Medicine: Nov 10 2009 3:30PM Matching: arthroplasty
- [Outcomes of Silicone Arthroplasty for Rheumatoid Metacarpophalangeal Joints Stratified by Fingers](#)
MDLinx: Nov 9 2009 11:36AM Matching: arthroplasty
- [Efficacy of Multimodal Pain Control Protocol in the Setting of Total Hip Arthroplasty](#)
MDLinx: Nov 6 2009 10:23AM Matching: arthroplasty
- [Surgical Planning and Procedures for Difficult Total Knee Arthroplasty](#)
Orthopedics Today: Nov 5 2009 12:54AM Matching: arthroplasty
- [Acetabular Cup Malalignment After Total Hip Resurfacing Arthroplasty: A Case for Elective Revision?](#)
Orthopedics Today: Nov 3 2009 10:03PM Matching: arthroplasty
- [Fat Emboli in Total Knee Arthroplasty: A Prospective Randomized Study of Computer-Assisted Navigation vs Standard Surgical Technique](#)
MDLinx: Nov 3 2009 10:21AM Matching: arthroplasty
- [Tibial Component Alignment After Total Knee Arthroplasty with Intramedullary Instrumentation: A Prospective Analysis](#)
MDLinx: Nov 3 2009 10:21AM Matching: arthroplasty
- [Patellar Resurfacing Compared with Nonresurfacing in Total Knee Arthroplasty](#)
MDLinx: Nov 3 2009 10:21AM Matching: arthroplasty
- [Survivorship of a Charnley Total Hip Arthroplasty](#)
MDLinx: Nov 3 2009 10:21AM Matching: arthroplasty
- [Golf After Total Knee Arthroplasty: Do Patients Return to Walking the Course?](#)
American Journal of Sports Medicine: Oct 29 2009 2:43AM Matching: arthroplasty

Arthroplasty Clinical Trials:



- [Cognition Following Computer Assisted Total Knee Arthroplasty](#)

Arthroplasty Patents:



- 7585316- [Interspinous spacer](#)
- 7592339- [Substituted oxazolidinones and their use in the field of blood coagulation](#)
- 7594879- [Rotary rehabilitation apparatus and method](#)
- 7598080- [Diagnostic assay for source of inflammation](#)
- 7600999- [Systems and methods for fabricating a dental template](#)
- 7601130- [Dynamic hand splint](#)
- 7601154- [Unicondylar knee instrument system](#)
- 7601170- [Inter-cervical facet implant and method](#)
- 7604637- [Apparatus and method for minimally invasive total joint replacement](#)
- 7604639- [Patellar cutting guide](#)
- 7604641- [System and method for joint resurface repair](#)
- 7591856- [Apparatus for total hip replacement for cases of hip ankylosis and severe joint infection](#)
- 7591854- [Apparatus, system and method for intraoperative performance analysis during joint arthroplasty](#)
- 7591851- [Inter-cervical facet implant and method](#)
- 7585325- [Intervertebral implant](#)
- 7585328- [Minimally invasive knee arthroplasty](#)
- 7585329- [Modular proximal body trial](#)
- 7587945- [Device for measuring tibio-femoral force amplitudes and force locations in total knee arthroplasty](#)
- 7588574- [Kits for enabling axial access and procedures in the spine](#)
- 7588578- [Surgical measurement systems and methods](#)
- 7588590- [Spinal facet implant with spherical implant apposition surface and bone bed and methods of use](#)
- 7588592- [System and method for immobilizing adjacent spinous processes](#)
- 7591796- [Automatic portable pneumatic compression system](#)
- 7591821- [Surgical technique and instrumentation for minimal incision hip arthroplasty surgery](#)
- 7604665- [Glenoid component for shoulder arthroplasty](#)
- 7604666- [Elbow prosthesis](#)
- 7615052- [Surgical instrument and method](#)
- 7615054- [Bicompartmental knee implant and method](#)
- 7615075- [Plastic implant impregnated with a degradation protector](#)
- 7615081- [Femoral components for knee arthroplasty](#)

- 7615083- [Biologically reabsorbable acetabular constraining components and materials for use with a hip replacement prosthesis and bioreabsorbable materials to augment hip replacement stability and function](#)
- 7618421- [Tools for femoral resection in knee surgery](#)
- 7618439- [Instrumentation and methods for use in implanting a cervical disc replacement device](#)
- 7618451- [Patient selectable joint arthroplasty devices and surgical tools facilitating increased accuracy, speed and simplicity in performing total and partial joint arthroplasty](#)
- 7618453- [Facet joint replacement](#)
- 7618455- [Multiple facet joint replacement](#)
- 7612050- [Drug for the treatment of osteonecrosis and for the management of patients at risk of developing osteonecrosis](#)
- 7611653- [Manufacturing and material processing for prosthetic devices](#)
- 7611541- [Femoral implant for hip arthroplasty](#)
- 7607079- [Multi-input reporting and editing tool](#)
- 7608104- [Prostheses, tools and methods for replacement of natural facet joints with artificial facet joint surfaces](#)
- 7608105- [Methods of inserting conically-shaped fusion cages](#)
- 7608106- [Facet arthroplasty devices and methods](#)
- 7608111- [Methods and devices for resurfacing the wrist joint](#)
- 7608112- [Hip arthroplasty trialing apparatus and method](#)
- 7608258- [Method for treatment of tendinosis using platelet rich plasma](#)
- 7610100- [Methods and systems for treating osteoarthritis](#)
- 7611516- [Bone resection apparatus](#)
- 7611540- [Extra-articular implantable mechanical energy absorbing systems and implantation method](#)
- 7618462- [System and method for joint resurface repair](#)

Resources from the [NCBI](#) used in this document, [NCBI's standard disclaimer applies](#).

Nothing in this document should be used in place of personal medical advice from your own qualified medical practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:Peter.Barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Stafford House, 10 Prince of Wales Road, Dorchester, Dorset, DT1 1PW, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2009 - BioPortfolio Limited.

