

# 小林医師 業績

(当院に赴任する前の業績も含む)

2023年4月1日現在

## 著書

---

変形性膝関節症. 今日の診断指針 第7版, 1566-8.

関節外科診療ファーストステップ. 2-9, 35-38, 258-266.

人工関節周囲感染診断の基本と鎮静化までの基本手術. OS NOW Instructions 24 膝関節の難治性病態に対する手術, 64-74.

TKA 後のスポーツ活動についての現状分析と今後の課題. 関節外科, 2012, 31(11): 43-8.

主訴からみる診察フローチャート. 膝. 関節外科, 2014, 33(4): 74-91.

高位脛骨骨切り術の実際. 整形外科看護, 2015, 20(2): 82-7.

PJI 治療 (一次的または二期的再置換術) ①TKA. 関節外科, 2015, 34(9): 53-60.

Femoral bowing 例に対するナビゲーションの有用性について. 関節外科, 2016, 35(9): 949-55.

人工関節周囲感染対策における国際コンセンサス. 2016, 165-174.

人工膝関節全置換術. 整形外科看護, 2017, 22(7): 43-8.

足関節捻挫・靭帯損傷. 整形外科看護, 2018, 23(4): 49-52.

## 論文発表 (英文のみ)

---

Kobayashi H, Takeno M, Saito T, Takeda Y, Kirino Y, Noyori K, Hayashi T, Ueda A, Ishigatsubo Y: Regulatory role of heme oxygenase 1 in inflammation of rheumatoid arthritis. *Arthritis Rheum*, 54(4): 1132-42, 2006.

Kobayashi H, Mahovlic D, Bauer TW; Feature Article: Interpreting and Avoiding Histologic Artifacts in Hard-Tissue Research. *J histotechnol*, 29(4): 223-8, 2006.

Kobayashi H, Fujishiro T, Belkoff SM, Kobayashi N, Turner AS, Seim HB, Zitelli J, Hawkins M, Bauer TW: Long- term evaluation of a calcium phosphate bone cement with carboxymethyl cellulose in a vertebral defect model. *J Biomed Mat Res A*, 88(4): 880-8, 2009.

Kobayashi H, Oethinger M, Tuohy MJ, Procop GW, Hall GS, Bauer TW. Improved Detection of Biofilm-Formative Bacteria on Polymethylmethacrylate by Vortexing and Ultrasonication: a pilot study. *Clin Orthop Rel Res*, 467(5): 1360-4, 2009.

Kobayashi H, Oethinger M, Tuohy MJ, Hall GS, Bauer TW. Improving clinical significance of PCR: use of propidium monoazide to distinguish viable from dead *Staphylococcus aureus* and *Staphylococcus epidermidis*. *J Orthop Res*, 27(9): 1243-7, 2009.

Kobayashi H, Oethinger M, Tuohy MJ, Hall GS, Bauer TW. Unsuitable distinction between viable and dead *Staphylococcus aureus* and *Staphylococcus epidermidis* by ethidium bromide monoazide. *Lett Appl Microbiol*, 48(5): 633-8, 2009.

Kobayashi H, Oethinger M, Tuohy MJ, Procop GW, Hall GS, Bauer TW. Limiting false-positive polymerase chain reaction results: detection of DNA and mRNA to differentiate viable from dead bacteria. *Diagn Microbiol Infect Dis*, 64(4): 445-7, 2009.

Kobayashi H, Hall GS, Tuohy MJ, Knothe U, Procop GW, Bauer TW. Bilateral periprosthetic joint infection caused by *Salmonella enterica* serotype Enteritidis, and identification of *Salmonella* sp using molecular techniques. *Int J Infect Dis*, 13(6): e463-6, 2009.

Kobayashi H, Turner AS, Seim HB, Kawamoto T, Bauer TW. Evaluation of a silica-containing

bone graft substitute in a vertebral defect model. *J Biomed Mat Res A*, 92(2): 596-603, 2010.

Kobayashi H, Oethinger M, Tuohy MJ, Hall GS, Bauer TW. Distinction between intact and antibiotic-inactivated bacteria by real-time PCR after treatment with propidium monoazide. *J Orthop Res*, 28(9): 1245-51, 2010.

Kobayashi H, Akamatsu Y, Taki N, Ota H, Mitsugi N, Saito T. Spontaneous dislocation of a mobile-bearing polyethylene insert after posterior-stabilized rotating platform total knee arthroplasty: a case report. *Knee*, 18(6): 496-8, 2011.

Kobayashi H, Mitsugi N, Mochida Y, Taki N, Akamatsu Y, Aratake M, Ota H, Ishii K, Harigane K, Ideno T, Saito T. Mid- term results of stryker scorpio plus mobile bearing total knee arthroplasty. *Sports Med Arthrosc Rehabil Ther Technol*, 4(1): 38, 2012.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Ishigatsubo R, Muramatsu S, Saito T. The surgical epicondylar axis is a consistent reference of the distal femur in the coronal and axial planes. *Knee Surg Sports Traumatol Arthrosc*, 22(12): 2947-53, 2014.

Kobayashi H, Aratake M, Akamatsu Y, Mitsugi N, Taki N, Saito T. Reproducibility of condylar twist angle measurement using computed tomography and axial radiography of the distal femur. *Orthop Traumatol Surg Res*, 100(8): 885-90, 2014.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Aratake M, Saito T. Is the surgical epicondylar axis the center of rotation in the osteoarthritic knee? *J Arthroplasty*, 30(3): 479-83, 2015.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Ishigatsubo R, Mitsunashi S, Kobayashi A, Aratake M, Saito T. The use of factor Xa inhibitors following opening-wedge high tibial osteotomy for venous thromboembolism prophylaxis. *Knee Surg Sports Traumatol Arthrosc*, 25(9): 2929-35, 2017.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Aratake M, Saito T. Influence of coronal bowing on the lower alignment and the positioning of component in navigation and conventional total knee arthroplasty. *Orthop Traumatol Surg Res*. 103(2): 251-6, 2017.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Saito T. Radiographic and computed tomographic evaluation of bone union after medial opening wedge high tibial osteotomy with filling gap. *Knee*. 24(5): 1108-17, 2017.

Kobayashi H, Akamatsu Y, Kumagai K, Kusayama Y, Okuyama H, Hiroto K, Shinohara K, Saito T. Edoxaban is effective in reducing the incidence of asymptomatic phlebographic events following closed-wedge high tibial osteotomy. *Orthop Traumatol Surg Res*. 103(8): 1193-6, 2017.

Kobayashi H, Saito S, Akamatsu Y, Kumagai K, Nejima S, Inaba Y. The relationship between the "Fujisawa point" and anatomical femorotibial angle following simulated open wedge high tibial osteotomy. *BMC Musculoskelet Disord*. 23: 776, 2022.

Takeda Y, Takeno M, Iwasaki M, Kobayashi H, Kirino Y, Ueda A, Nagahama K, Aoki I, Ishigatsubo Y; Chemical induction of HO-1 suppresses lupus nephritis by reducing local iNOS expression and synthesis of anti-dsDNA antibody. *Clin Exp Immunol*, 138, 237-44, 2004

Kirino Y, Takeno M, Murakami S, Kobayashi M, Kobayashi H, Miura K, Ideguchi H, Ohno S, Ueda A, Ishigatsubo Y: Tumor necrosis factor alpha acceleration of inflammatory responses by down-regulating heme oxygenase 1 in human peripheral monocytes. *Arthritis Rheum*, 56(2): 464-75, 2007.

Fujishiro T, Bauer TW, Kobayashi N, Kobayashi H, Sunwoo MH, Seim HBIII, Turner AS: Histological evaluation of an impacted bone graft substitute composed of a combination of mineralized and demineralized allograft in a sheep vertebral bone defect. *J Biomed Mater Res A*, 82(3): 538-44, 2007.

Kobayashi N, Procop GW, Krebs V, Kobayashi H, Bauer TW. Molecular Identification of Bacteria from Aseptically Loose Implants. *Clin Orthop Rel Res*, 466(7): 1716-25, 2008.

Oethinger M, Warner DK, Schindler SA, Kobayashi H, Bauer TW (4/5). Diagnosing periprosthetic infection: false-positive intraoperative Gram stains. *Clin Orthop Relat Res*, 469(4): 954-60, 2011.

Akamatsu Y, Mitsugi N, Mochida Y, Taki N, Kobayashi H, Takeuchi R, Saito T. Navigated

opening wedge high tibial osteotomy improves intraoperative correction angle compared with conventional method. *Knee Surg Sports Traumatol Arthrosc*, 20(3): 586-93, 2012.

Akamatsu Y, Mitsugi N, Taki N, [Kobayashi H](#), Saito T. Medial versus lateral condyle bone mineral density ratios in a cross-sectional study: a potential marker for medial knee osteoarthritis severity. *Arthritis Care Res*, 64(7): 1036-45, 2012.

Akamatsu Y, Mitsugi N, Hayashi T, [Kobayashi H](#), Saito T. Low bone mineral density is associated with the onset of spontaneous osteonecrosis of the knee. *Acta Orthop*, 83(3): 249-55, 2012.

Zmistowski B, Della Valle C, Bauer TW, Malizos KN, Alavi A, Bedair H, Booth RE, Choong P, Deirmengian C, Ehrlich GD, Gambir A, Huang R, Kissin Y, [Kobayashi H](#), Kobayashi N, Krenn V, Drago L, Marston SB, Meermans G, Perez J, Ploegmakers JJ, Rosenberg A, Simpendorfer C, Thomas P, Tohtz S, Villafuerte JA, Wahl P, Wagenaar FC, Witzo E. Diagnosis of periprosthetic joint infection. *J Arthroplasty*, 29(2 Suppl): 77-83, 2014.

Zmistowski B, Della Valle C, Bauer TW, Malizos KN, Alavi A, Bedair H, Booth RE, Choong P, Deirmengian C, Ehrlich GD, Gambir A, Huang R, Kissin Y, [Kobayashi H](#), Kobayashi N, Krenn V, Lorenzo D, Marston SB, Meermans G, Perez J, Ploegmakers JJ, Rosenberg A, C Simpfendorfer, Thomas P, Tohtz S, Villafuerte JA, Wahl P, Wagenaar FC, Witzo E. Diagnosis of periprosthetic joint infection. *J Orthop Res*, 32(1 Suppl): 98-107, 2014.

Saito T, Kumagai K, Akamatsu Y, [Kobayashi H](#), Kusayama Y. Five-to ten-year outcome following medial opening-wedge high tibial osteotomy with rigid plate fixation in combination with an artificial bone substitute. *Bone Joint J*, 96-B(3): 339-44, 2014.

Kusayama Y, Akamatsu Y, Kumagai K, [Kobayashi H](#), Aratake M, Saito T. Changes in synovial fluid biomarkers and clinical efficacy of intra-articular injections of hyaluronic acid for patients with knee osteoarthritis. *J Exp Orthop*, 1(1): 16, 2014.

Akamatsu Y, [Kobayashi H](#), Kusayama Y, Aratake M, Kumagai K, Saito T. Predictive factors for the progression of spontaneous of the knee. *Knee Surg Sports Traumatol Arthrosc*, 25(2): 477-84, 2017.

Kumagai K, Akamatsu Y, [Kobayashi H](#), Kusayama Y, Koshino T, Saito T. Factors affecting cartilage repair after medial opening-wedge high tibial osteotomy. *Knee Surg Sports Traumatol Arthrosc.* 25(3): 779-84, 2017.

Akamatsu Y, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Comparative Study of Opening-Wedge High Tibial Osteotomy With and Without a Combined Computed Tomography-Based and Image-Free Navigation System. *Arthroscopy.* 32(10): 2072-81, 2016.

Akamatsu Y, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Femoral shaft bowing in the coronal and sagittal planes on reconstructed computed tomography in women with medial compartment knee osteoarthritis: a comparison with radiograph and its predictive factors. *Arch Orthop Trauma Surg.* 136(9):1227-32,2016.

Akamatsu Y, Sotozawa M, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Usefulness of long tibial axis to measure medial tibial slope for opening wedge high tibial osteotomy. *Knee Surg Sports Traumatol Arthrosc.* 24(11):3661-7, 2016.

Akamatsu Y, Ohno S, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Coronal subluxation of the proximal tibia relative to the distal femur after opening wedge high tibial osteotomy. *Knee.* 24(1): 70-5, 2017.

Kumagai K, Akamatsu Y, [Kobayashi H](#), Kusayama Y, Saito T. Mosaic Osteochondral Autograft Transplantation Versus Bone Marrow Stimulation Technique as a Concomitant Procedure with Opening-Wedge High Tibial Osteotomy for Spontaneous Osteonecrosis of the Medial Femoral Condyle. *Arthroscopy.* 34(1): 233-40, 2018.

Mitsuhashi S, Akamatsu Y, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Combined CT-based and image-free navigation systems in TKA reduces postoperative outliers of rotational alignment of the tibial component. *Arch Orthop Trauma Surg.* 138(2): 259-66, 2018.

Akamatsu Y, [Kobayashi H](#), Kusayama Y, Kumagai K, Saito T. Opening Wedge High Tibial Osteotomy Using Combined Computed Tomography-Based and Image-Free Navigation System. *Arthrosc Tech.* 6(4): e1145-51, 2017.

Akamatsu Y, Kumagai K, [Kobayashi H](#), Tsuji M, Saito T. Effect of Increased Coronal Inclination of the Tibial Plateau After Opening-Wedge High Tibial Osteotomy. *Arthroscopy*. 34(7): 2158-69, 2018.

Akamatsu Y, [Kobayashi H](#), Tsuji M, Nejima S, Kumagai K, Saito T. Should sagittal osteotomy line be parallel to tibial posterior slope in high tibial osteotomy? *BMC Musculoskelet Disord*. 19(1): 338, 2018.

Tsuji M, Akamatsu Y, [Kobayashi H](#), Mitsugi N, Inaba Y, Saito T. Joint line convergence angle predicts outliers of coronal alignment in navigated open-wedge high tibial osteotomy. *Arch Orthop Trauma Surg*. 140(6): 707-15, 2020.

Nejima S, Akamatsu Y, [Kobayashi H](#), Tsuji M, Mitsuhashi S, Sasaki T, Kumagai K, Inaba Y. Relationship between lower limb torsion and coronal morphologies of the femur and tibia in patients with medial knee osteoarthritis. *BMC Musculoskelet Disord*. 21(1): 254, 2020.

Nejima S, Kumagai K, [Kobayashi H](#), Yamada S, Akamatsu T, Ogino T, Sotozawa M, Inaba Y. Varus inclination of the tibia is related to patellofemoral osteoarthritis in Japanese female patients with moderate knee osteoarthritis. *Knee Surg Sports Traumatol Arthrosc*. 29(2): 652-58, 2021.

Nejima S, Kumagai K, [Kobayashi H](#), Yamada S, Akamatsu T, Ogino T, Sotozawa M, Inaba Y. Coronal shaft bowing of the femur affects varus inclination of the surgical transepicondylar axis in varus knee osteoarthritis. *Knee Surg Sports Traumatol Arthrosc*. 29(3): 814-9, 2021.

Sasaki T, Akamatsu Y, [Kobayashi H](#), Mitsuhashi S, Nejima S, Kumagai K, Saito T, Inaba Y. Rotational changes in the distal tibial fragment relative to the proximal tibial fragment at the osteotomy site after open-wedge high tibial osteotomy. *Biomed Res Int*. *In press* 2021.

Akamatsu Y, Nejima S, Tsuji M, [Kobayashi H](#), Muramatsu S. Open-wedge high tibial osteotomy using intraoperative control of joint line convergence angle with reference to preoperative supine radiograph. *Arch Orthop Trauma Surg* 2021, 141(4): 645-53.

Akamatsu Y, Nejima S, Tsuji M, [Kobayashi H](#), Muramatsu S. Joint line obliquity was maintained after double-level osteotomy, but was increased after open-wedge high tibial osteotomy. *Knee Surg Sports Traumatol Arthrosc*. 30(2): 688-97, 2021.

Nejima S, Kumagai K, Kobayashi H, Fujimaki H, Yamada S, Sotozawa M, Hisatomi K, Inaba Y. Medialization of the mechanical axis of the tibia is related to lateralization of the tibial tuberosity in knee osteoarthritis. *Knee*. 30: 134-40, 2021.

Akamatsu Y, Kobayashi H, Nejima S, Schroter S. Can double-level osteotomy prevent patellofemoral osteoarthritis progression compared with open wedge high tibial osteotomy? *Arch Orthop Trauma Surg*. 143(4): 2073-85, 2023.