

Prof. Dr. med. Michael Müller

Liste der im Science citation index(SCI) oder im Science citation index extend (SCIE) gelisteten wissenschaftlichen Publikationen

Publikationen als Erst-/Letztautor

Müller M, Stöckle U, Trampuz A, Felix S, Kramer A, Wassilew G. Coronavirus Pandemic - SARS-CoV-2 in Orthopedics and Trauma Surgery. Z Orthop Unfall. 2020 Nov 5. doi: 10.1055/a-1208-0182. Online ahead of print

Kienzle A, Walter S, von Roth P, Fuchs M, Winkler T, **Müller M**. High Rates of Aseptic Loosening After Revision Total Knee Arthroplasty for Periprosthetic Joint Infection. JBJS Open Access. 2020 Aug 12;5(3):e20.00026. doi: 10.2106/JBJS.OA.20.00026. eCollection Jul-Sep 2020.

Müller M., Böttner F, Karczewski D, Janz V., Felix S, Kramer A., Wassilew G. I. Dealing with the COVID-19 pandemic in orthopaedics: experiences and procedure in Germany. Bone Joint Open 2020;1-6:309-. 315.

Kilgus S, Karczewski D, Passkönig C, Winkler T, Akgün D, Perka C, **Müller M**. Failure analysis of infection persistence after septic revision surgery: a checklist algorithm for risk factors in knee and hip arthroplasty. Arch Orthop Trauma Surg. 2020 Apr 15. doi: 10.1007/s00402-020-03444-0.

Müller M, Rakow A, Wassilew GI, Winkler T, Perka C. Prediction of time to prosthesis implantation as a function of joint anatomy in patients with developmental dysplasia of the hip. J Orthop Surg Res. 2019 Dec 30;14(1):471. doi: 10.1186/s13018-019-1511-4

Müller M, Winkler T, Märdian S, Trampuz A, Renz N, Perka C, Karczewski D. The worst-case scenario: treatment of periprosthetic femoral fracture with coexistent periprosthetic infection-a prospective and consecutive clinical study. Arch Orthop Trauma Surg. 2019 Aug 20. doi: 10.1007/s00402-019-03263-y. [Epub ahead of print]

Hipfl C, Winkler T, Janz V, Perka C, **Müller M**. Management of Chronically Infected Total Knee Arthroplasty With Severe Bone Loss Using Static Spacers With Intramedullary Rods. J Arthroplasty. 2019 Mar 29. pii: S0883-5403(19)30309-2. doi: 10.1016/j.arth.2019.03.053.

Karczewski D, Winkler T, Renz N, Trampuz A, Lieb E, Perka C, **Müller M**. A standardized interdisciplinary algorithm for the treatment of prosthetic joint infections OUTCOME IN A CENTRALIZED AND SPECIALIZED DEPARTMENT. Bone Joint J. 2019 doi:10.1302/0301-620X.101B2

Karczewski D, Winkler T, Perka C, **Müller M**. The Preoperative Microbial Detection is No Prerequisite for the Indication of Septic Revision in Cases of Suspected Periprosthetic Joint Infection. Biomed Res Int. 2018 Jun 21;2018:1729605. doi: 10.1155/2018/1729605. eCollection 2018.

Janz V, Wassilew GI, Perka C, **Müller M**. Cerclages after Femoral Osteotomy Are at Risk for Bacterial Colonization during Two-Stage Septic Total Hip Arthroplasty Revision. *J Bone Jt Infect*. 2018 Jul 6;3(3):138-142. doi: 10.7150/jbji.24819.

Müller M, Trampuz A, Winkler T, Perka C. The Economic Challenge of Centralised Treatment of Patients with Periprosthetic Infections. *Z Orthop Unfall*. 2018 Feb 7. doi: 10.1055/s-0044-100732.

Fuchs M, Sass FA, Dietze S, Krämer M, Perka C, **Müller M**. Cemented Hemiarthroplasties Are Associated with a Higher Mortality Rate after Femoral Neck Fractures in Elderly Patients. *Acta Chir Orthop Traumatol Cech*. 2017;84(5):341-346.

Feihl S, Renz N, Schütz M, **Müller M**. Antibiotic strategies in trauma surgery : Treatment of implant-associated infections. *Unfallchirurg*. 2017 Jun;120(6):486-493.

Wilck A, **Müller M**. Korrekturosteotomien bei Hüft dysplasie – Pfannenschwenk. *Physiopraxis* 2017; 15(04): 30-33 DOI: 10.1055/s-0043-101658

Sitterlee F, Kirschbaum S, Perka C, **Müller M**. [Surgical hip dislocation : Current status in the treatment of femoral acetabular impingement]. *Orthopade*. 2017 Feb 8. doi: 10.1007/s00132-017-3394-6. [Epub ahead of print] German

Wassilew GI, Janz V, Perka C, **Müller M**. [Treatment of acetabular defects with the trabecular metal revision system]. *Orthopade*. 2017 Jan 12. doi: 10.1007/s00132-016-3381-3

Kirschbaum SM, Sitterlee F, Perka C, **Müller M**. [Mini-open Approach Shows Good Results in Treatment of Femoroacetabular Impingement]. *Z Orthop Unfall*. 2017 Jan 12. doi: 10.1055/s-0042-118886.

Müller M, Abdel MP, Wassilew GI, Duda G, Perka C. Do post-operative changes of neck-shaft angle and femoral component anteversion have an effect on clinical outcome following uncemented total hip arthroplasty? *Bone Joint J*. 2015 Dec;97-B(12):1615-22. doi: 10.1302/0301-620X.97B12.34654.

Müller M, Duda G, Perka C, Tohtz S. The sagittal stem alignment and the stem version clearly influence the impingement-free range of motion in total hip arthroplasty: a computer model-based analysis. *Int Orthop*. 2015 Jul 2. PMID: 26130287.

Müller M, Wassilew G, Perka C. [Diagnosis and therapy of particle disease in total hip arthroplasty]. *Z Orthop Unfall*. 2015 Apr;153(2):213-29. doi: 10.1055/s-0035-1545827

Müller M, Matziolis G, Falk R, Hommel H. The bicompartmental knee joint prosthesis Journey Deuce: failure analysis and optimization strategies. *Orthopade*. 2012 Nov;41(11):894-904. doi: 10.1007/s00132-012-1963-2.

Müller M, Schwachmeyer V, Tohtz S, Taylor WR, Duda GN, Perka C, Heller MO. The direct lateral approach: impact on gait patterns, foot progression angle and pain in comparison with a minimally invasive anterolateral approach. *Arch Orthop Trauma Surg*. 2012 May;132(5):725-31. doi: 10.1007/s00402-012-1467-x.

Müller M, Tohtz S, Dewey M, Springer I, Perka C. Muscle trauma in primary total hip arthroplasty depending on age, BMI, and surgical approach: minimally invasive anterolateral versus modified direct lateral approach. *Orthopade*. 2011 Mar;40(3):217-23. doi: 10.1007/s00132-010-1730-1.

Müller M, Tohtz S, Dewey M, Springer I, Perka C. Age-related appearance of muscle trauma in primary total hip arthroplasty and the benefit of a minimally invasive approach for patients older than 70 years. *Int Orthop*. 2011 Feb;35(2):165-71. doi: 10.1007/s00264-010-1166-6.

Müller M, Crucius D, Perka C, Tohtz S. The association between the sagittal femoral stem alignment and the resulting femoral head centre in total hip arthroplasty. *Int Orthop*. 2011 Jul;35(7):981-7. doi: 10.1007/s00264-010-1047-z.

Müller M, Dewey M, Springer I, Perka C, Tohtz S. Relationship between cup position and obturator externus muscle in total hip arthroplasty. *J Orthop Surg Res*. 2010 Jul 21;5:44. doi: 10.1186/1749-799X-5-44.

Müller M, Tohtz S, Springer I, Dewey M, Perka C. Randomized controlled trial of abductor muscle damage in relation to the surgical approach for primary total hip replacement: minimally invasive anterolateral versus modified direct lateral approach. *Arch Orthop Trauma Surg*. 2011 Feb;131(2):179-89. doi: 10.1007/s00402-010-1117-0.

Müller M, Tohtz S, Dewey M, Springer I, Perka C. Evidence of reduced muscle trauma through a minimally invasive anterolateral approach by means of MRI. *Clin Orthop Relat Res*. 2010 Dec;468(12):3192-200. doi: 10.1007/s11999-010-1378-5.

Müller M, Tohtz S, Winkler T, Dewey M, Springer I, Perka C. MRI findings of gluteus minimus muscle damage in primary total hip arthroplasty and the influence on clinical outcome. *Arch Orthop Trauma Surg*. 2010 Jul;130(7):927-35. doi: 10.1007/s00402-010-1085-4.

Müller M, Käab M, Tohtz S, Haas NP, Perka C. Periprosthetic femoral fractures: outcome after treatment with LISS internal fixation or stem replacement in 36 patients. *Acta Orthop Belg*. 2009 Dec;75(6):776-83.

Müller M, Morawietz L, Hasart O, Strube P, Perka C, Tohtz S. Histopathological diagnosis of periprosthetic joint infection following total hip arthroplasty: use of a standardized classification system of the periprosthetic interface membrane. *Orthopade*. 2009 Nov;38(11):1087-96. doi: 10.1007/s00132-009-1471-1. German.

Müller M, Morawietz L, Hasart O, Strube P, Perka C, Tohtz S. Diagnosis of periprosthetic infection following total hip arthroplasty--evaluation of the diagnostic values of pre- and intraoperative parameters and the associated strategy to preoperatively select patients with a high probability of joint infection. *J Orthop Surg Res*. 2008 Jul 21;3:31. doi: 10.1186/1749-799X-3-31.

Müller M, Disch AC, Zabel N, Haas NP, Schaser KD. Initial intramuscular perfusion pressure predicts early skeletal muscle function following isolated tibial fractures. *J Orthop Surg Res*. 2008 Apr 17;3:14. doi: 10.1186/1749-799X-3-14.

Fallberichte

Tkhilaishvili T, Winkler T, **Müller M**, Perka C, Trampuz A. Bacteriophages as adjuvant to antibiotics for the treatment of periprosthetic joint infection caused by multidrug-resistant *Pseudomonas aeruginosa*. *Antimicrob Agents Chemother*. 2019 Sep 16. pii: AAC.00924-19. doi: 10.1128/AAC.00924-19.

Müller M, Perka C, Tohtz S. Obturator externus impingement after total hip replacement. *Orthopade*. 2009 Nov;38(11):1113-6. doi: 10.1007/s00132-009-1469-8.

Publikationen als Coautor

Karczewski D, Pumberger M, **Müller M**, Andronic O, Perka C, Winkler T.J Implications for diagnosis and treatment of peri-spinal implant infections from experiences in periprosthetic joint infections-a literature comparison and review. *Spine Surg*. 2020 Dec;6(4):800-813. doi: 10.21037/jss-20-12.

Haffer H, **Müller M**, Ascherl R, Perka C, Winkler T. Diclofenac for prophylaxis of heterotopic ossification after hip arthroplasty: a systematic review. *Hip Int*. 2020 Dec 3:1120700020978194. doi: 10.1177/1120700020978194.

Stoffel K, Horn T, Zagra L, **Mueller M**, Perka C, Eckardt H. Periprosthetic fractures of the proximal femur: beyond the Vancouver classification. *EFORT Open Rev*. 2020 Aug 1;5(7):449-456. doi: 10.1302/2058-5241.5.190086. eCollection 2020 Jul

Ruckenstuhl P, Wassilew GI, **Müller M**, Hipfl C, Pumberger M, Perka C,Hardt S. Hardt S. Functional Assessment and Patient-Related Outcomes after Gluteus Maximus Flap Transfer in Patients with Severe Hip Abductor Deficiency. *Journal of Clinical Medicine*, 11 Jun 2020, 9(6)

Kramer A, Külpmann R, Brunner A, **Müller M**, Wassilew G. Risk assessment of mixed and displacement ventilation (LAF) during orthopedic and trauma surgery on COVID-19 patients with increased release of infectious aerosols. *GMS Hyg Infect Control*. 2020 May 14;15:Doc07. doi: 10.3205/dgkh000342. eCollection 2020.

Tkhilaishvili T, Winkler T, **Müller M**, Perka C, Trampuz A. Bacteriophages as adjuvant to antibiotics for the treatment of periprosthetic joint infection caused by multidrug-resistant *Pseudomonas aeruginosa*. *Antimicrob Agents Chemother*. 2019 Sep 16. pii: AAC.00924-19. doi: 10.1128/AAC.00924-19.

Renz N, Rakow A, **Müller M**, Perka C, Trampuz A. Long-term antimicrobial suppression prevents treatment failure of streptococcal periprosthetic joint infection. *J Infect*. 2019 Jul 13. pii: S0163-4453(19)30215-4. doi: 10.1016/j.jinf.2019.06.015.

Akgün D, **Müller M**, Perka C, Winkler T. High cure rate of periprosthetic hip joint infection with multidisciplinary team approach using standardized two-stage exchange. *J Orthop Surg Res*. 2019 Mar 13;14(1):78. doi: 10.1186/s13018-019-1122-0.

Akgün D, **Müller M**, Perka C, Winkler T. The serum level of C-reactive protein alone cannot be used for the diagnosis of prosthetic joint infections, especially in those caused by organisms of low virulence. *Bone Joint J.* 2018 Nov;100-B(11):1482-1486. doi: 10.1302/0301-620X.100B11.BJJ-2018-0514.R1.

Winkler T, Stuhler MGW, Lieb E, **Müller M**, von Roth P, Preininger B, Trampuz A, Perka CF. Outcome of short versus long interval in two-stage exchange for periprosthetic joint infection: a prospective cohort study. *Arch Orthop Trauma Surg.* 2018 Nov 15. doi: 10.1007/s00402-018-3052-4. [Epub ahead of print] PMID: 30443674

Akgün D, **Müller M**, Perka C, Winkler T. An often-unrecognized entity as cause of recurrent infection after successfully treated two-stage exchange arthroplasty: hematogenous infection. *Arch Orthop Trauma Surg.* 2018 Jun 5. doi: 10.1007/s00402-018-2972-3.

Wassilew GI, Heller MO, Janz V, Perka C, **Müller M**, Renner L. High prevalence of acetabular retroversion in asymptomatic adults: a 3D CT-based study. *Bone Joint J.* 2017 Dec;99-B(12):1584-1589. doi: 10.1302/0301-620X.99B12.37081.

Akgün D, **Müller M**, Perka C, Winkler T. A positive bacterial culture during re-implantation is associated with a poor outcome in two-stage exchange arthroplasty for deep infection. *Bone Joint J.* 2017 Nov;99-B(11):1490-1495. doi: 10.1302/0301-620X.99B11.BJJ-2017-0243-R1.

Pumberger M, von Roth P, Preininger B, **Müller M**, Perka C, Winkler T. Microstructural Changes of Tensor Fasciae Latae and Gluteus Medius Muscles Following Total Hip Arthroplasty: A Prospective Trial. *Acta Chir Orthop Traumatol Cech.* 2017;84(2):97-100.

Habicher M, Balzer F, Mezger V, Niclas J, **Müller M**, Perka C, Krämer M, Sander M. Implementation of goal-directed fluid therapy during hip revision arthroplasty: a matched cohort study. *Perioper Med (Lond).* 2016 Dec 13;5:31. doi: 10.1186/s13741-016-0056-x.

Renz N, **Müller M**, Perka C, Trampuz A. [Implant-associated infections - Diagnostics]. *Chirurg.* 2016 Oct;87(10):813-21. doi: 10.1007/s00104-016-0234-x.

Balzer F, Habicher M, Sander M, Sterr J, Scholz S, Feldheiser A, **Müller M**, Perka C, Treskatsch S. Comparison of the non-invasive Nexfin® monitor with conventional methods for the measurement of arterial blood pressure in moderate risk orthopaedic surgery patients. *J Int Med Res.* 2016 May 2. pii: 0300060516635383

Taylor WR, Szwedowski TD, Heller MO, Perka C, Matziolis G, **Müller M**, Janshen L, Duda GN. The difference between stretching and splitting muscle trauma during THA seems not to play a dominant role in influencing periprosthetic BMD changes. *Clin Biomech (Bristol, Avon).* 2012 Oct;27(8):813-8. doi: 10.1016/j.clinbiomech.2012.05.004.

Szwedowski TD, Taylor WR, Heller MO, Perka C, **Müller M**, Duda GN. Generic rules of mechano-regulation combined with subject specific loading conditions can explain bone adaptation after THA. *PLoS One.* 2012;7(5):e36231. doi: 10.1371/journal.pone.0036231.

Hartwig T, Streitparth F, Gross C, **Müller M**, Perka C, Putzier M, Strube P. Digital 3-dimensional analysis of the paravertebral lumbar muscles after circumferential single-level fusion. *J Spinal Disord Tech.* 2011 Oct;24(7):451-4. doi: 10.1097/BSD.0b013e3182055d74.

Kornaropoulos EI, Taylor WR, Duda GN, Ehrig RM, Matziolis G, **Müller M**, Wassilew G, Asbach P, Perka C, Heller MO. Frontal plane alignment: an imageless method to predict the mechanical femoral-tibial angle (mFTA) based on functional determination of joint centres and axes. *Gait Posture.* 2010 Feb;31(2):204-8. doi: 10.1016/j.gaitpost.2009.10.006..

Tohtz SW, **Müller M**, Morawietz L, Winkler T, Perka C. Validity of frozen sections for analysis of periprosthetic loosening membranes. *Clin Orthop Relat Res.* 2010 Mar;468(3):762-8. doi: 10.1007/s11999-009-1102-5.

Buchkapitel

Perka C, **Müller M**. Periprosthetic Infection. In: G. Bentley (ed.), *European Surgical Orthopaedics and Traumatology: The EFORT Textbook*, Springer-Verlag Berlin Heidelberg 2014

Müller M, Perka C. Resection Arthroplasty of the Hip. In: G. Bentley (ed.), *European Surgical Orthopaedics and Traumatology: The EFORT Textbook*, Springer-Verlag Berlin Heidelberg 2014

Vorträge

- Mehr als 150 Vorträge auf nationalen und internationalen Kongressen und Symposien (2016-2019)
- Nationale und internationale Referententätigkeit zur fachspezifischen Fort- und Weiterbildung