Joint Diseases and Related Surgery

Jt Dis Relat Surg
2025;36(2):428-429

REVIEW

Evidence-based controversies for outpatient joint arthroplasties

O. Şahap Atik, MD

President, Turkish Joint Diseases Foundation, Ankara, Türkiye

Recently, the number of total joint arthroplasty (TJA) surgeries has markedly increased.[1-5] The aging population have led to an increased rate of joint arthroplasty procedures, specifically total knee arthroplasty (TKA) and total hip arthroplasty (THA). These surgeries are associated with increased hospital length of stay (LOS) and, consequently, higher costs.[1-5]

In the literature, there is a considerable amount of data supporting the use of enhanced recovery after surgery (ERAS) and multimodal analgesia protocols in orthopedic surgery, which has culminated into a formal 2020 consensus statement for perioperative care in TJA.[6]

Owing to the advances in surgical techniques, improvements in patient safety and patient selection process, more assertive physical therapy efforts, and enhanced anesthetic techniques for intraoperative and postoperative pain management, LOS has gradually decreased over the years.[1-5] The American Academy of Orthopaedic Surgeons (AAOS) reports that while the first total hip replacements required a hospital admission of up to three months, this has been reduced over the years to as little as one night in the hospital or even same-day surgery.[7]

Despite the benefits of outpatient surgery, only a small percentage of TJAs are done in this manner. The most up-to-date trends for outpatient TJA for a successful outpatient program include the proper patient selection process and most available anesthetic and analgesic options, along with their risks and benefits.[7]

Risk stratification tools, such as the Outpatient Arthroplasty Risk Assessment (OARA), are helpful for predicting outcomes regarding outpatient TJA, and neuraxial anesthesia should be considered to minimize complications and facilitate early discharge. A multimodal analgesia regimen can be also effective for pain management in outpatient TJA, and the currently recommended peripheral nerve blocks for THA and TKA are the fascia iliaca compartment block and adductor canal block, respectively.[7]

Enhanced recovery after surgery protocols help to guide perioperative care teams and allow for improved patient recovery, decreased LOS, and increased patient satisfaction.[6]

In conclusion, recent evidence-based studies are attempting to elucidate and resolve controversies in surgical methods, proper patient selection, pain management, patient discharge readiness, and patient safety and outcomes for outpatient TJA programs.[8]

Data Sharing Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Received: March 25, 2025
Accepted: March 25, 2025
Published online: April 10, 2025

Correspondence: O. Şahap Atik, MD. Turkish Joint Diseases Foundation, Mustafa Kemal Mah., Dumlupınar Bul., 274/2, C2 Blok, Ofis 5, 06900 Çankaya, Ankara, Türkiye.
E-mail: satikmd@gmail.com

Citation: Atik OŞ. Evidence-based controversies for outpatient joint arthroplasties. Jt Dis Relat Surg 2025;36(2):428-429. doi: 10.52312/jdrs.2025.57929.

©2025 All right reserved by the Turkish Joint Diseases Foundation

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes (http://creativecommons.org/licenses/by-nc/4.0/).

Conflict of Interest: The author declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding: The author received no financial support for the research and/or authorship of this article.

REFERENCES

1. Xiong A, Li G, Liu S, Chen Y, Xu C, Weng J, et al. Anterolateral approach may be superior to posterolateral approach in controlling postoperative lower limb discrepancy in primary total hip arthroplasty: A single-center, retrospective cohort study. Jt Dis Relat Surg 2023;34:32-41. doi: 10.52312/jdrs.2022.763.
2. Balato G, De Matteo V, Guarino A, De Mauro D, Baldi D, Cavaliere C, et al. A comparison between 3D printed models and standard 2D planning in the use of metal block augments in revision knee arthroplasty. Jt Dis Relat Surg 2024;35:473-82. doi: 10.52312/jdrs.2024.1591.
3. Wu L, Yang XC, Wu J, Zhao X, Lu ZD, Li P. Short-term outcome of artificial intelligence-assisted preoperative three-dimensional planning of total hip arthroplasty for developmental dysplasia of the hip compared to traditional surgery. Jt Dis Relat Surg 2023;34:571-82. doi: 10.52312/jdrs.2023.1076.
4. Uysal ÖS, Atik OŞ. Are we causing early undesirable situations by using a tourniquet in total knee arthroplasty? Jt Dis Relat Surg 2024;35:242-3. doi: 10.52312/jdrs.2023.57919.
5. Li X, Liu J, Wang H, Ding Y. Controlled hypotension technology can improve patient recovery in the early postoperative period after total knee arthroplasty: A prospective, randomized controlled clinical study. Jt Dis Relat Surg 2024;35:36-44. doi: 10.52312/jdrs.2023.1379.
6. Wainwright TW, Gill M, McDonald DA, Middleton RG, Reed M, Sahota O, et al. Consensus statement for perioperative care in total hip replacement and total knee replacement surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations. Acta Orthop 2020;91:3-19. doi: 10.1080/17453674.2019.1683790.
7. Osman BM, Ghaffaripoor S, D'Apuzzo MR, Hernandez VH. Updates on evidence-based controversies for outpatient joint arthroplasties. J Am Acad Orthop Surg Glob Res Rev 2024;8:e24.00241. doi: 10.5435/JAAOSGlobal-D-24-00241.
8. Osman BM, Tieu TG, Caceres YG, Hernandez VH. Current trends and future directions for outpatient total joint arthroplasty: A review of the anesthesia choices and analgesic options. J Am Acad Orthop Surg Glob Res Rev 2023;7:e22.00259. doi: 10.5435/JAAOSGlobal-D-22-00259.