



# What is the best hip approach for total hip arthroplasty?

Ahmed Siddiqi, Nicolas S. Piuzzi

Department of Orthopaedic Surgery, Cleveland Clinic Foundation, Cleveland, OH, USA

Correspondence to: Nicolas S. Piuzzi, MD. Department of Orthopaedic Surgery, Cleveland Clinic, 9500 Euclid Avenue/ND20, Cleveland, OH 44195, USA. Email: piuzzin@ccf.org.

Received: 08 June 2020. Accepted: 14 July 2020; Published: 15 January 2021.

doi: 10.21037/aoj-20-90

View this article at: <http://dx.doi.org/10.21037/aoj-20-90>

Pincus and colleague's (1) well-designed population-based propensity-matched study found direct anterior approach (DAA) total hip arthroplasty (THA) to have a small but increased major complication risk versus lateral and posterior approaches at 1-year. These findings further increase the debate: what is the best THA approach and what drives an increased interest in DAA? Is it evidence-based driven by patient functional outcome superiority, or is it marketing driven in an attempt to capture business?

A large trend study showed 76% of DAA-surgeons reported increased patient market share while 66% of non-performers recognized lost patient referrals (2). Although another study showed the most significant factors influencing THA surgical approach choice was residency/fellowship training, a smaller percentage (10%) reported changing their approach due to "marketing pressure (3)." Increased DAA-THA complications could be from surgeons stirring outside their "comfort-zone" to keep pace with market demand or expanding indications without adequate risk-stratification. Therefore, it is important to differentiate marketing from scientific data. Shofoluwe *et al.* (4) demonstrated that >20% of Hip/Knee Surgeon members promoted DAA, claiming faster recovery and decreased pain benefits, 9-times more frequently than any potential procedural risk. It is imperative to understand DAA is not ubiquitously indicated and that marketing is likely compelling surgeons to learn/perform DAA to sustain patient referrals, especially in competitive urban regions.

Importantly, any surgical approach can achieve excellent outcomes, if performed well. Each approach has its own risks, benefits, indications, and contraindications. Although DAA advocates promote early recovery and low dislocation risk (5), this study found DAA having greater dislocation rates, significantly higher than current literature. Posterior

approach supporters claim utilitarian nature, while critics indicate increased instability (5). Although lateral approach has inherent stability, opposers focus on persistent postoperative Trendelenburg gait risk (6).

In the face of largely inconclusive data to definitely support one approach superiority, and in an era of value-based comprehensive care, it is vital to acknowledge that successful THA outcomes involve alignment of various perioperative phases of care and establishing a multidisciplinary team. Optimizing patient selection, comorbidities, care-coordination, patient education, shared decision making, and setting patient expectations is as important in THA success as an individual's surgical approach. Therefore, the question regarding the best surgical THA approach remains. Studies, like this current one, helps highlight that greatly marketed DAA is not without complications. Despite excellent outcomes through any hip approach, further evidence-based approaches need to be developed to establish value-base care and personalized selection of approach based on patient characteristics and disease severity.

## Acknowledgments

*Funding:* None.

## Footnote

*Provenance and Peer Review:* This article was an unsolicited submission to the journal. The article did not undergo external peer review.

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org>).

[org/10.21037/aoj-20-90](https://doi.org/10.21037/aoj-20-90)). NSP reports grants from Zimmer, grants from RegenLab, grants from OREF, outside the submitted work. AS has no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

## References

1. Pincus D, Jenkinson R, Paterson M, et al. Association Between Surgical Approach and Major Surgical Complications in Patients Undergoing Total Hip Arthroplasty. *JAMA* 2020;323:1070-6.
2. Patel NN, Shah JA, Erens GA. Current Trends in Clinical Practice for the Direct Anterior Approach Total Hip Arthroplasty. *J Arthroplasty* 2019;34:1987-93.e3.
3. Moss L, Schwarzkopf R, Vigdorichik J, et al. Current Practice Patterns of Fellowship-Trained Arthroplasty Surgeons: Has the Influence of Fellowship Training Been Undervalued? *J Arthroplasty* 2019;34:1003-1007.e3.
4. Shofoluwe AI, Naveen NB, Inabathula A, et al. Internet Promotion of Direct Anterior Approach Total Hip Arthroplasty by Members of the American Association of Hip and Knee Surgeons. *J Arthroplasty* 2018;33:167-70.e1.
5. Rodriguez JA, Deshmukh AJ, Rathod PA, et al. Does the direct anterior approach in THA offer faster rehabilitation and comparable safety to the posterior approach? *Clin Orthop Relat Res* 2014;472:455-63.
6. Parvizi J, Restrepo C, Maltenfort MG. Total Hip Arthroplasty Performed Through Direct Anterior Approach Provides Superior Early Outcome: Results of a Randomized, Prospective Study. *Orthop Clin North Am* 2016;47:497-504.

doi: 10.21037/aoj-20-90

**Cite this article as:** Siddiqi A, Piuze NS. What is the best hip approach for total hip arthroplasty? *Ann Joint* 2021;6:1.