

## **Early Outcomes after Direct Anterior vs. Mini-Posterior Approaches for THA: A Prospective Multicenter Study**

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Many authors and surgeons have recently claimed superior results using a Direct Anterior Approach (DAA) over a Mini-Posterior Approach (MPA). They claim that because the DAA utilizes natural tissue intervals for the dissection and “cuts no muscle,” it provides superior results to other approaches. However, this has never been proven definitively and is based only on anecdotes and speculation.

Claims of less muscle damage are speculative at best. The MPA splits (does not cut) the fibers of the gluteus maximus and transects only 4 of the 6 small external rotator muscles. In fact, the DAA has been shown in a cadaver study to cause more damage to the tensor fascia lata and rectus femoris muscles than the MPA and inadvertently transects the external rotator muscles in ½ of the specimens studied<sup>1</sup>. Additionally, the technique is somewhat difficult to master with a relatively prolonged learning curve.

We have set out to answer the question by studying the 2 procedures, head-to-head, in a prospective, comparative study looking at early functional results, operative and post-operative complications, component position, and patient satisfaction with the 2 procedures. Patients receiving a total hip through the MPA will be performed by myself while patients undergoing total hip through a DAA will be performed by a surgeon well-versed in that procedure.

I hope that this study will help to answer the question of whether one procedure is superior to the other, or whether they might actually be equivalent.

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<sup>1</sup> Meneghini RM, Pagnano M, et al. Muscle Damage During MIS Total Hip Arthroplasty. Smith-Peterson versus Posterior Approach. Clin Orthop. 2006; 453:293