What is the Most Effective Technique to Stabilize Patients on the Operating Table During Total Hip Arthroplasty (THA)?

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Thank you!

- California Orthopaedic Association
- J. Harold LaBriola
- Dr. William McGann
- Taylor Laboratory

Total Hip Arthroplasty

- Approximately 300,000 THA per year in the US
- Extremely successful procedure
 - Outcomes, survivorship, cost-effectiveness
- Component positioning critical
 - Functional outcome
 - Longevity/wear

Complications

- Infection
 - Increasing in revisions
- Comorbidities
 - Obesity
- Component composition/wear
- Component mal-positioning
 - "Safe zone"



Hip Stability during THA



Hip Positioners

De Mayo Hip Positioner' Systems

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Methods

- Sensor attached to full cadaver pelvis (ASIS)
- Bilateral THAs performed on full cadaver
- All movements recorded with OptoTrak Camera System
- Pelvic displacement recorded throughout



Results



Peak Displacement



Total Displacement



Displacement over Time



Summary/Discussion/Future Studies

- Padded A (DeMayo) positioner held the pelvis in the most stable position throughout THA
- First study to quantify movement throughout THA using different hip positioners
- Potential to change clinical practice and improve patient outcomes
- Reproducible with obese model?

Questions/Comments



Thank You!



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