

Title of Article: Percutaneously Assisted Total Hip Arthroplasty (PATH): A Preliminary Report
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Product(s): PATH®, Profemur® Z

Disclaimer: Individual results and activity levels after surgery vary and depend on many factors including age, weight and prior activity level. There are risks and recovery times associated with surgery and there are certain individuals who should not undergo surgery.

Publication Highlights

- **This study presented the first immediate outcomes of 250 primary THAs in 226 patients using the PATH® technique.**
- **The authors believe that this technique is user-friendly and likely linked to a shorter learning curve.**
- **“This technique can safely result in accelerated recovery and does not compromise intraoperative visualization, bone preparation, or component positioning.”**

Publication Summary

Methods

Patients

- Prospective clinical study of 250 primary THAs (226 patients) evaluating the PATH® technique
- Mean Age: 64.9 yrs (range, 38-90); 52% female (118 females; 108 males); mean BMI: 30.2 kg/m² (range, 20-42 kg/m²)
- Indications for surgery: osteoarthritis (80.5%), osteonecrosis (13.7%), posttraumatic arthritis (3.1%), developmental dysplasia (2.2%), and rheumatoid arthritis (0.4%)
- No patients were excluded on the basis of body mass index or hip pathology
- Minimum follow-up of 2 yrs (range, 24-36 mo)

Surgical Technique

- This technique **preserves and repairs the joint capsule with only release of the piriformis or conjoined tendon required**
- **Acetabular reaming and cup impaction occur through a distally placed 1 cm portal.**
- Patients are positioned in the lateral decubitus position with the patient as far anterior as possible. This **minimizes the trauma to the gluteus maximus muscle and posterior skin edge** during femoral preparation and implant insertion.

Results

- Mean incision length: 8.3 cm
- Mean Estimated Blood Loss: 200 mL (range, 100-500 mL); 10% transfusion rate
- Mean Operative Time: 65 min (range, 55-90 min)
- Mean Hospital Stay: 3 days
- Varus/Valgus Alignment within 2° for 97% of hips (243/250)
- Harris Hip Score (HHS): Preoperative: 47.41; 3-6 Months Postoperative: 95.6 (scores of 90-100 are in the excellent range)
- No hip precautions were used and all patients received an accelerated physical therapy protocol (on average, patients returned to driving on the 12th postoperative day)
- No dislocations, nerve injuries, wound problems, or DVTs observed in this early cohort.

Overall Conclusions

- “It now appears possible to perform a successful total hip arthroplasty while preserving the integrity of the iliotibial band, the quadrates, and all short external rotators, except for the piriformis.”
- During this short-term evaluation, the PATH® technique has not been associated with increased risk of component malposition, dislocation, or other adverse effects.