

Title of Article: Modified micro-superior percutaneously-assisted total hip: early experiences & case reports

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Product(s): SuperPath®, PATH®, SUPERCAP®

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 article was the first to detail the SuperPath® technique.
- “The early results of this modified micro-invasive approach demonstrate safety and reliability in the short-term, with results better or comparable to those reported by studies regarding other hip approaches.”

Publication Summary

Initial SuperPath® Experience

2-year follow-up of the first 110 SuperPath® total hip arthroplasties (THAs) performed by a single surgeon was described

- The mean hospital stay was 1.7 days
- No hip precautions were used and all patients received an accelerated post-operative care regimen (anticipatory medical care, oral pain control, and a standard physical therapy protocol)
- Radiographs from 66 consecutive THAs (of the 110 cohort) were independently evaluated by a third party
 - Satisfactory component alignment was achieved: mean acetabular component inclination of 40.13±6.30°
 - All femoral and acetabular components were well-seated

The author stated he has completed 330 primary SuperPath® THAs

- Of these patients, 9 complications have been observed in an evenly distributed manner over the past 3 years, without a “learning curve” bias toward the early cases.
 - 4 complications were directly related to the primary THA surgeries and all occurred in patients with documented histories of osteoporosis (2 femur fractures, 1 acetabular fracture, and 1 loss of acetabular fixation)
 - 3 complications were due to high-energy trauma unrelated to the surgery
 - 2 complications were potentially unrelated to the THA surgeries: 1 a greater trochanteric fracture found intraoperatively and treated with a claw and cables and greater trochanteric fracture found 3-weeks postoperatively (not seen on intraoperative, immediate postoperative, or 1-week postoperative radiographs)

First Case Report

- 54 yr old, 450 pounds, male workman’s compensation patient who had previously had primary THA at 24 years of age and 5 revision THAs after the primary procedure

- SuperPath® procedure performed for aseptic loosening of his acetabular component with a massive posterior deficiency and pelvic defect
- Outcome:
 - Operative time: 3 hrs
 - Estimated blood loss: 500 mL
 - Discharge on post-op day 2
 - Patient progressed to full weight bearing over a 6 week period

Second Case Report

- 77 yr old, female presented with an infected THA after failed acetabular ORIF (Open Reduction and Internal Fixation)
- Patient was wheelchair bound for 2 years due to left hip pain and had chronic shortening of the left limb
- Outcome:
 - Infection was treated with staged revision with an antibiotic spacer and re-implantation was completed in the same micro-superior fashion; fracture was located in the femur during distal reaming preparation of the revision stem (treated with strut allografts and cables)
 - **No abduction pillow or postoperative precautions** were used; Estimated blood loss: 600 mL; the patient required 1 unit of blood transfusion
 - Patient transitioned to full weight bearing at 6 weeks postoperatively

Overall Conclusion

- **“The early results of this modified micro-invasive approach demonstrate safety and reliability in the short-term, with results better or comparable to those reported by studies regarding other hip approaches.”**
- **The micro-posterior techniques (SuperPath®, PATH®, SUPERCAP®) described are low cost, as no additional special tables or equipment other than the tooling supplied with the implants are required.**