

Best Articles I Read in the Past Year

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The John Charnley Award: Highly Crosslinked Polyethylene in Total Hip Arthroplasty Decreases Long-term Wear: A Double-blind Randomized Trial

Glyn-Jones S, Thomas GE, Garfjeld-Roberts P, Gundle R, Taylor A,
McLardy-Smith P, Murray DW.

Method

Fifty-four patients were randomized to receive hip arthroplasties with either UHMWPE liners or HXLPE liners.

Three-dimensional penetration of the head into the socket was determined at 10 years using a radiostereometric analysis system.

Results

At 10 years

HXLPE 0.003 mm/year, volumetric penetration was 98 mm³

UHMWPE 0.030 mm/year, volumetric penetration was 14 mm³

Conclusion

HXLPE has little detectable steady-state in vivo wear.

This may result in fewer reoperations from loosening.

The Otto Aufranc Award: Modifiable versus Nonmodifiable Risk Factors for Infection After Hip Arthroplasty

Guy Maoz MD, Michael Phillips MD, Joseph Bosco MD, James Slover MD, MS, Anna Stachel MPH, Ifeoma Inneh MPH, Richard Iorio MD

Methods

A series of 3672 primary and 406 revision hip arthroplasties performed at a single specialty hospital over a 3-year period were reviewed.

Results

BMI \geq 40 kg/m²

operating time > 115 minutes

nonsame-day surgery

revision surgery

Tobacco use and *S aureus* colonization were additive risk factors

Discussion

Modifiable risk factors in our patient population include operating time, elevated BMI, tobacco use, and *S aureus* colonization.

When reporting deep PJI rates, stratification into preventable versus nonpreventable infections may provide a better assessment of performance on an institutional and individual surgeon level.

One Size Does Not Fit All: Involve Orthopaedic Implant Patients in Deciding Whether To Use Prophylactic Antibiotics With Dental Procedures.

American Academy of Orthopaedic Surgeons and American Dental Association: Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures: Evidence-Based Guideline and Evidence Report.

1. High-strength evidence suggests that antibiotic prophylaxis reduces the incidence of post-dental procedure–related bacteremia, but there is no evidence that bacteremia increases the risk of PJI.
2. Oral topical antimicrobials
3. Maintenance of good oral hygiene.

MANAGEMENT OF HIP FRACTURES IN THE ELDERLY

AAOS CPG

- Strong evidence supports regional analgesia to improve preoperative pain control in patients with a hip fracture.
- Moderate evidence supports a benefit to total hip arthroplasty in properly selected patients with unstable (displaced) femoral neck fractures.
- Moderate evidence supports the preferential use of cemented femoral stems in patients undergoing arthroplasty for femoral neck fractures.
- Moderate evidence supports higher dislocation rates with a posterior approach in the treatment of displaced femoral neck fractures with hip arthroplasty.
- Strong evidence supports a blood transfusion threshold of no higher than 8g/dL in asymptomatic postoperative hip fracture patients.
- Strong evidence supports multimodal pain management after hip fracture surgery.