

Maximally Invasive Surgery for Minimally Invasive Surgery

Background: Minimally invasive total hip and knee replacement have been recently introduced into the orthopedic armamentarium. Substantial controversy has erupted as to whether these procedures provide outcomes comparable to conventional total hip and knee arthroplasty, procedures known to have excellent long-term results. We have noticed a substantial increase in revisions performed for early failure of minimally invasive hip and knee arthroplasties.

Description of Methods: A series of 40 small incision total hip replacements with increased complications in the first 10 hips is discussed. Catastrophic complications requiring revision are reviewed in nine patients referred for revision. Most common reasons for revision of minimally invasive surgery are discussed.

Results: Three complications including one requiring revision occurred in the first 10 hips of a series of 40 small incision total hip replacements. No specific advantage other than cosmetic was noted from small incision total hip replacement. Nine revisions performed for early failure after minimally invasive surgery showed several common variants. Lateral subluxation from reaming of the lateral wall appears to be common complication of small incision hip arthroplasty. Infection rates of minimally invasive surgery appear to be increased when compared to conventional arthroplasty.

Conclusion: Small incision surgery and minimally invasive hip and knee surgery appear to have a significant learning curve. While the promises of faster rehabilitation, lower blood loss and a decreased hospital stay appear enticing no specific advantage is seen at this time. Further study of new approaches is necessary to determine whether these approaches are safe and reproducible.