The Lawrence D. Dorr Surgical Techniques & Technologies Award

“Running Two Rooms” Does Not Compromise Outcomes or Patient Safety in Total Joint Arthroplasty

William G. Hamilton, MD, Henry Ho, MS, Nancy L. Parks, MS, James F. McDonald, III, BS, Robert H. Hopper, Jr., PhD, Nitin Goyal, MD, Kevin B. Fricka, MD, C. Anderson Engh, MD

Introduction: There has been recent scrutiny from the media and federal government regarding the safety of one surgeon doing cases in two operating rooms (ORs) on the same day, but little data exists to address potential concerns. Over the past 11 years, surgeons at our institution have done total joint cases in one of two ways: either consecutively in one OR on a given day or overlapping using two ORs. This study reviews cases done via these two different methods with a focus on comparing revisions and complications between the two groups.

Methods: Using an institutional database, all primary hip and knee arthroplasties from 2006 thru 2016 were identified. Six surgeons performed a total of 16,950 cases, including 7,530 total hips and 9,420 knee arthroplasties. 7,065 (42%) were consecutive cases (CCs) and 9,885 (58%) were overlapping cases (OCs). The database was queried to compare the incidence of any component revision and complications within 90 days of surgery between the CC and OC groups.

Results: There was no difference in 90-day component revision rates among the CC and OC groups (0.6% vs. 0.8% respectively for all cases, p=0.20; 0.7% vs. 1.1% respectively for hips, p=0.12; 0.5% vs. 0.5% respectively for knees, p=0.79). There was also no difference in 90-day complication rates among the CC and OC groups (3.4% vs. 3.7% respectively for all cases, p=0.36; 4.2% vs. 4.0% respectively for hips, p=0.70; 2.9% vs. 3.5% respectively for knees, p=0.17).

Conclusions: This large study from a single institution with multiple surgeons over an 11-year period shows no compromise in patient safety or outcomes when comparing cases done in either consecutive or overlapping rooms.