Increased Heart Attack Risk With Hip, Knee Surgeries

Total hip replacement (THR) and total knee replacement (TKR) surgeries were associated with increased risk of acute myocardial infarction in the first two weeks after the surgical procedures, according to a report published online by *Archives of Internal Medicine,* a JAMA Network publication. These surgical procedures are performed an estimated 1.8 million times annually around the world.

"This study demonstrated an increased risk of AMI during the first two weeks after THR (25-fold) and TKR (31-fold) surgery compared with matched controls. The risk of AMI sharply decreased after this period, although it remained significantly elevated in the first six weeks for THR patients. The association was strongest in patients 80 years or older, whereas we could not detect a significantly increased risk in patients younger than 60 years," Arief Lalmohamed, Pharm.D., of Utrecht University, the Netherlands, and colleagues comment.

"Furthermore, a previous AMI in the six months before surgery increased the risk of new AMI during the first six weeks after THR and TKR (4-fold increase) surgery but did not modify the relationship between THR or TKR and AMI," the authors conclude.

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In a commentary, Arthur W. Wallace, M.D., Ph.D., of the University of California, San Francisco, writes: "The perioperative period is stressful to patients … The present study once again confirms that the perioperative period increases cardiac risk. Physicians must go further than establishing risk factors; physicians must actively work to reduce perioperative risk.It is important for physicians caring for patients in the perioperative period to recognize the potential for cardiac morbidity and mortality and then appropriately use the armamentarium of medical therapies we now have to reduce cardiac risk, prevent perioperative MIs (myocardial infarction, heart attack), and prevent cardiac deaths," Wallace continues.