Kinamed’s CarboJet® System Employed in Study Showing Tourniquetless Total Knee Arthroplasty Decreases Pain and Opioid Consumption in Women

Given the opioid crisis in America, surgical protocols that minimize opioid consumption are highly sought after. A recently published study shows that elimination of the tourniquet during TKA may be one such protocol.

CAMARILLO, Calif. (PRWEB) December 11, 2018 -- A new clinical study published in the Journal of Arthroplasty comparing total knee replacement (TKR) surgery with and without use of the traditional thigh tourniquet demonstrated that female patients in the no-tourniquet group experienced significantly less post-operative pain and consumed fewer opioids as compared to female patients in the tourniquet group.

In 2017, there were approximately 50,000 opioid drug overdose deaths in the United States. Although opioids are effective at reducing pain after surgery, patients receiving prescription opioids are at risk for developing an opioid use disorder. Therefore, development of surgical protocols that reduce post-operative pain and the need for opioid medication are of critical importance and are highly sought after.

Maintaining appropriate penetration and inter-digitation of bone cement is extremely important for ensuring long-term success of TKR, because aseptic implant loosening has been identified as a leading failure mode in the modern TKA procedure. When performing knee arthroplasty without a tourniquet, achieving an optimal “cement technique” can be a challenge because of the additional fluid debris present in the bone and at the implant-interfaces. The CarboJet® CO2 Bone Preparation system employed in this study addresses this challenge by using medical-grade compressed carbon dioxide gas to remove lipids/fatty marrow elements, blood, and saline from the bone surface prior to the application of bone cement. The lead author of this study, R. Michael Meneghini, MD, Associate Professor of Clinical Orthopedic Surgery at Indiana University School of Medicine, chose to employ the CarboJet system to manage these blood and lipid debris and optimize cement penetration for his patients.

With nearly 800,000 procedures performed in the United States each year, knee replacement surgery is one of the most widely accepted and effective treatments for relieving the pain and disability associated with degenerative osteoarthritis. Because of the sheer number of knee replacements being performed, approaches that can reduce opioid consumption as demonstrated in this study are noteworthy.

About Kinamed
Kinamed is a leading developer, manufacturer, and distributor of innovative specialty orthopedic, neurosurgical, and cardiothoracic medical devices. In addition to the CarboJet system, Kinamed’s other orthopedic products include: the SuperCable® Iso-Elastic Polymer Cerclage system: a revolutionary cabling system that eliminates problems associated with traditional metal cables; and the KineMatch® Patello-Femoral Replacement: a patient–specific (custom) unicompartmental joint replacement implant. Since the company’s founding, Kinamed has manufactured and sold over 2.5 million surgical implants.

For additional information on Kinamed, Inc., please visit www.Kinamed.com.

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