

1-2020

Selective Serotonin Reuptake Inhibitors Are Associated with Increased Bleeding Related Complications Following Primary Total Hip and Total Knee Arthroplasty

Kyle Plusch

Thomas Jefferson University, kyle.plusch@jefferson.edu

John Stammers, MBBS, FRCS

Thomas Jefferson University, john.stammers@jefferson.edu

Alexus M. Cooper

Thomas Jefferson University, alexus.cooper@jefferson.edu

Chi Xu, MD and additional works at: https://jdc.jefferson.edu/si_ctr_2022_phase1

Thomas Jefferson University, chi.xu@jefferson.edu

Part of the [Orthopedics Commons](#), [Surgery Commons](#), and the [Translational Medical Research Commons](#)

Paul Kitei, MD

Thomas Jefferson University, paul.kitei@jefferson.edu

[Let us know how access to this document benefits you](#)

See next page for additional authors

Recommended Citation

Plusch, Kyle; Stammers, MBBS, FRCS, John; Cooper, Alexis M.; Xu, MD, Chi; Kitei, MD, Paul; Parvizi, MD, FRCS, Javad; and Lonner, MD, Jess H., "Selective Serotonin Reuptake Inhibitors Are Associated with Increased Bleeding Related Complications Following Primary Total Hip and Total Knee Arthroplasty" (2020). *Phase 1*. Paper 23.

https://jdc.jefferson.edu/si_ctr_2022_phase1/23

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Authors

Kyle Plusch; John Stammers, MBBS, FRCS; Alexis M. Cooper; Chi Xu, MD; Paul Kitei, MD; Javad Parvizi, MD, FRCS; and Jess H. Lonner, MD

Selective Serotonin Reuptake Inhibitors Are Associated with Increased Bleeding Related Complications Following Primary Total Hip and Total Knee Arthroplasty

John Stammers, MBBS FRCS; Alexis M. Cooper, BS; Kyle Plusch, BA; Chi Xu, MD; Paul Kitei, MD; Javad Parvizi, MD, FRCS*; Jess H. Lonner, MD

Introduction

Approximately 10-22% of patients undergoing total hip arthroplasty (THA) and total knee arthroplasty (TKA) are diagnosed with depression. Pre-operative depression is associated with poorer patient reported outcomes, costs and increased complications. Selective serotonin-reuptake inhibitors (SSRIs) are first-line treatment for depression due to their efficacy and low side effect profile. There are conflicting studies regarding SSRI-related bleeding complications. This study compares the rate of bleeding-related complications in THA and TKA patients taking SSRI's to a control group of non-SSRI users.

Methods

A retrospective single institution study of 16,407 primary THA and TKA's from 2008 to 2018 was performed. Patients with THA for fracture, conversion arthroplasty with existing hardware, revision TJA, and uni-compartmental knee arthroplasty. Patients taking SSRIs (2,588) were compared to non-SSRI users (13,819). Patient demographics were reviewed and matched at a 3:1 ratio. Multivariate logistic regression analysis was performed and adjusted to control for potential confounders.

Results

Patients on SSRI had a significant increase in transfusion, post-operative anemia, irrigation and debridement (I&D) and superficial infection. There was a trend towards increased hematoma and revision. There was a significantly higher rate of pulmonary embolism for

SSRI users compared to non-SSRI. Rates of 1-year PJI, hematoma removal or calculated blood loss did not differ.

Discussion

The rate of bleeding related complications is significantly greater in SSRI users undergoing TKA and THA. Poorer outcomes in depression may be due to the intrinsic nature of the disease; however, increased pain due to swelling and wound complications may be due to increased rates of bleeding in SSRI users.