Reducing Costly Falls of Total Knee Replacement Patients

Abstract:

The objective of the study was to determine whether an adductor canal nerve block (ACB) reduces patient falls when compared to a femoral nerve block in conjunction with a knee immobilizer (FNB + KI) after total knee arthroplasty (TKA). We conducted a retrospective study to investigate fall rates before and after introduction of ACB as the preferred analgesia after TKA at our institution, University of Virginia Hospital. We examined data of all-cause falls that occurred on the orthopedic surgery unit from January 2013 to August 2016. There were a total of 834 patients that had TKA with FNB + KI between January 2013 and December 2014. Of those patients, 16 (2%) experienced a fall during their hospital stay. One patient had an ankle fracture necessitating operative fixation. One patient sustained facial laceration which required sutures. Three patients’ injuries necessitated x-rays of their extremity after their fall, though no fractures were identified. In contrast, there were a total of 791 patients that had TKA with ACB between January 2015 and August of 2016. Only two (0.25%) falls were recorded during their hospital stay. Of the two falls, one patient had a past medical history of multiple falls. The difference between the two groups achieves statistical significance (P = .04). Given the considerable costs associated with hospital falls and the significant reduction in falls after ACB compared to FNB + KI as shown in this study, it is recommended that all TKA patients should have ACB as standard practice. It was also noted that out of all 18 patients that fell, 14(77%) of the patients had right TKA, which warrants further investigation.