

Hemophiliac Arthritis Patients with Simultaneous Multiple Joint Arthroplasty Have a Minimal Risk of Perioperative Hemorrhage

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Abstract

Background: Double TJA can reduce repeat hospitalizations and total coagulation factors usage in HA patients with multiple joints involvement, but the risk of perioperative adverse events with Double TJA must be considered. **Methods:** We reviewed 50 patients with hemophilia A, including 26 single TJA (STJA) (13 TKA and 13 THA) and 24 simultaneous double TJA (Sim-DTJA) (including 10 bilateral TKAs, 10 bilateral THAs and 4 patients with simultaneous THA and TKA). Length of hospitalization, blood loss, total FVIII usage, perioperative FVIII levels, perioperative APTT, perioperative transfusion rates and postoperative complications were assessed and compared. **Results:** Perioperative FVIII levels and APTT were no significance between Sim-DTJA and STJA. Total blood loss (1216.0 ± 450.36 ml) and hidden blood loss (1020.0 ± 419.9 ml) were slightly higher in Sim-DTJA than in STJA (1062.0 ± 371.8 ml and 929.9 ± 351.6 ml, respectively) ($P=0.192$, $P=0.416$, respectively). The length of hospitalization between the Sim-DTJA (10.6 ± 1.8 days) and the STJA (10.4 ± 1.7 days) was no significance ($P=0.802$). The perioperative FVIII usage was 30063 ± 6466 IU for Sim-DTJA and $26,077 \pm 12524$ IU for STJA ($P=0.008$). No postoperative adverse events and prosthesis-related complications were reported in any of the patients. Two cohorts had no perioperative transfusion of erythrocyte and platelets. **Conclusion:** In HA patients with multiple joint involvement, Sim-DTJA can achieve clinical efficacy without significantly increasing perioperative blood loss, length of hospitalization and postoperative complications.

Keywords

Hemophilic Arthritis, Simultaneous Double TJA, Bilateral TJA, Perioperative Hematological Management, Blood Loss