Use of idarucizumab to reverse the anticoagulant effect of dabigatran in cardiac transplant surgery. a multicentric experience in Spain

INTRODUCTION AND OBJECTIVES: Anticoagulation in heart transplant (HT) recipients increases the risk of serious hemorrhagic complications during the perioperative period, so the urgent and correct reversal of anticoagulation is of great importance. Dabigatran, a direct thrombin inhibitor, is increasingly being used for anticoagulation in patients with non-valvular atrial fibrillation (NVAF) whose effect can be reversed by idarucizumab in situations where urgent surgery such as a HT may be needed. Aim: To present the preliminary experience of the use of idarucizumab for the urgent reversal of dabigatran in patients receiving a HT in Spain. METHODS: Observational study, carried out in 12 adult HT Spanish centers to analyze the clinical outcomes of the use of Idarucizumab (5 mg) for urgent reversal of dabigatran effects at the HT surgery. RESULTS: 53 patients were included, 81.1% male. One patient required a rescue dose. 7.5% required redo surgery in the immediate postoperative period to control bleeding and 66% needed transfusion of blood products. The average length of stay in the intensive care unit was 5 days and the total hospital stay was 23 days. The 30-day survival was 92.4%. There were 4 deaths during hospitalization, three of them in the first five days after HT. In 3 cases, death was not related to bleeding. In one case, a patient transplanted because a congenital heart disease with previous sternotomy, death occurred at 2 days post-HT associated to surgical problems, right ventricular failure, cardiac arrest and bleeding (bleeding occurred 12 hours after HT surgery) CONCLUSION: These results may support the use of dabigatran as an alternative to vitamin K antagonists in patients with HT who require anticoagulation for NVAF. More studies are needed to corroborate these observations.