Use of desmopressin and erythropoietin in an anaemic Jehovah's Witness patient with severely impaired coagulation capacity undergoing stentless aortic valve replacement


Cardiac surgery in Jehovah's Witness patients remains a challenge in the presence of concomitant congenital or acquired coagulation disorders and anaemia. We report a case of a 66-year-old female Jehovah's Witness suffering from severe calcified aortic valve stenosis requiring aortic valve replacement. The anaemic patient suffered from concomitant platelet dysfunction and deficiency of factors V and VII due to gammopathy of immunoglobulin G. The patient was preoperatively treated with recombinant erythropoietin in combination with folic acid and iron, which resulted in an increase of haematocrit from 0.335 to 0.416 after 22 days of treatment. Hemostasis was improved by high dose of aprotinin and additional desmopressin, which could be demonstrated to be effective by a preoperative test. The patients intra- and postoperative course was uneventful, her total chest tube loss was 130 ml, and she was able to be discharged without the need of any blood transfusions. The beneficial properties of erythropoietin and desmopressin in Jehovah's Witness patients are discussed.

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