LIVER TRANSPLANTATION IN JEHOVAH'S WITNESSES: A SINGLE CENTER EXPERIENCE.

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Background: For religious reasons most of the Jehovah's witnesses (JW) refuse infusions of any blood product, including autologous or homologous pre-donated blood, platelets, fresh frozen plasma, coagulation factor concentrates, or human albumin. However, they may accept solid organ transplantation. The authors report their experience of liver transplantation (LT) in JW over a 20-year period.

Patients and Methods: 22 LT (16 DBD, 2DCD, and 4 LRLT with JW living donors) were performed in 21 JW patients (10 males, 11 females), mean age: 48 years (ranges: 6-70). Indications for LT were HCV with (3) or without (1) HCC, PBC (2), PSC (1), HBV (2), autoimmune hepatitis (1), antitrypsin deficiency (1), sarcoidosis (2), amyloidosis (3), polycystic liver disease (1), alcoholic cirrhosis with HCC (1), cryptogenic (3), hepatic artery thrombosis (1). All patients received perioperative iron supplementation and erythropoietin. Two patients had percutaneous spleen embolization to increase platelet level. At transplant, mean pre-operative hematocrit was 41% (ranges: 22-50), mean platelet level was $140x10^3/mm^3$ (ranges: 33-355), and mean INR was 1.25 (ranges: 0.84-2.18). Anti-fibrinolytic (aprotinin or tranexamic acid) was administrated during LT and meticulous surgical hemostasis was achieved, helped by argon beam coagulation. Continuous circuit cell salvage and reinfusion whereby scavenged blood was maintained in continuity with the patient's circulation, was used in all patients. Veno-venous bypass was avoided during LT to minimize the coagulation disorders.

Results: One LRLT recipient died at day 11 from aspergillosis and anemia, and another DBD recipient at day 28 due to complications after hepatic artery thrombosis. One patient finally accepted to be transfused for severe anemia. The mean hospital stay was 31 days (10-137). Kaplan-Maier patient survival was 85%, 85%, 72%, 72% at 1, 5, 10 and 15 years, respectively

Conclusion: LT may be successful in selected and prepared JW patients who should not be a priori excluded from this life saving procedure. The experience with this particular group of patients helped the team to reduce transfusion needs in the non-JW patients.