

NHSBT Board Meeting

January 2019

Patient Story

18 months ago, a patient with myeloma, treated at a Bristol hospital, was nearing the point where autologous transplant was indicated. The decision to proceed required further consideration due to their beliefs as a Jehovah's Witness.

Autologous stem cell transplantation using high-dose chemotherapy is standard for fit patients with multiple myeloma. This significantly extends periods of life free from treatment for this bone marrow cancer. Despite this, patients will usually require blood component transfusion before bone marrow function is restored. NHSBT are involved in collecting stem cells by apheresis, cryopreserving in our stem cell laboratories and storing until use, as well as providing the blood components.

The vast majority of Jehovah's Witnesses refuse donor blood components. Most also refuse to be transfused their own (autologous) blood. Some, but not all, will accept autologous blood if it is 'recycled' via a cell salvage machine. This usually occurs in theatre and requires a continuous circuit between the site where the blood being removed from the body and the vein into which the washed, salvaged blood is being infused. It is not therefore usually feasible to do this or other autologous collections for support for chemotherapy. Many Jehovah's witnesses will, however, accept fractionated blood products which includes human albumin solution.

Over many years, NHSBT has collaborated with groups including Jehovah's Witnesses to produce protocols to define the beliefs of the individual and procedures to manage their treatment whilst avoiding blood transfusion. This has helped inform our "Patient Blood Management" strategy for all patients.

In this case, an NHS Blood & Transplant consultant arranged a meeting with the patient and the Jehovah's Witness hospital liaison team to discuss all aspects of the transplant. The patient agreed for stem cell collection (considered them bone marrow not blood cells). He was not happy for them to be cryopreserved by our normal technique which uses patient's own plasma. The use of human albumin solution as an alternative was acceptable to the patient. Through careful planning, we successfully collected stem cells on our Therapeutic Apheresis Services unit and altered our standard practice to cryopreserve using human albumin solution at Filton.

The transplant went smoothly, using stem cell growth factors to prevent the need for blood components. The patient has sustained a partial response with no further cancer treatment needed. Our learning through this patient has informed a national policy written with the Jehovah's Witness hospital liaison team regarding stem cell transplantation. NHS Blood & Transplant have subsequently used this protocol to support further Jehovah's Witness patients to receive autologous stem cell transplants at both St George's Hospital, Tooting and Musgrove Park Hospital, Taunton.

Dr James Griffin