Safe blood transfusion practices in dogs

During the recent years, blood transfusions in small animals have gained momentum in our country and hence, the identification of the highly immunogenic Dog Erythrocyte Antigen (DEA) 1.1 in dogs is mandatory to avoid potentially life-threatening transfusion reactions during subsequent unmatched transfusions. Compared to the western countries, the determination of the blood group antigens in dogs using DEA typing kits or Anti- sera are considerably nascent in India because of uncommon repeated transfusions to the same recipient dog, unavailability of Blood Typing kits, unavailability of blood typing antisera. The increase in demand for blood and blood products for anemic dogs has lead to multiple transfusions and advent of small animal transfusion practice at institutional levels and referral clinics in our country. Till date, it has been reported that the universal dog blood donor should be negative for DEA 1.1, DEA 1.2, DEA 3, DEA 5, DEA 7, and positive for DEA 4. In all practical aspects, the dog which has the absence of the highly antigenic DEA 1.1 is considered to be a safe donor worldwide by many institutional groups. In India, the ‘Chippipara’ hounds of Tamil Nadu have been found to have more DEA 1.1 negative blood types and hence can be used as a safe dog blood donor breed. Repeated whole blood transfusions on the same recipient need to be carried out with a DEA 1.1 negative group blood after a major and minor blood cross match mandatorily.

Biography

G R Baranidharan is an Assistant Professor at Madras veterinary college, Tamil Nadu Veterinary and Animal Sciences University, India. He is also blood bank officer at TANUVAS animal blood bank and senior veterinarian at The Ark veterinary clinic. He is specialized in small animal transfusion medicine.

grbvet@gmail.com