Abstract

Transfusion therapy is a major resource that can improve the patient's capability to overcome the underlying disease. However, the effects of whole blood infusion, and how they affect the patient's outcome, are not yet clear. For this study, a protocol was developed in order to monitor a group of 15 animals (9 dogs, 6 cats) that received a total of 19 transfusions; 3 animals received more than one transfusion each. The most common indications for blood transfusion included acute blood loss (47%), coagulopathy (33%) and other anaemias (20%). The mean pre-transfusion packed cell volume (PCV) of animals with acute blood loss (18%) was higher than in the group of coagulopathy (15%) or other anaemias (15%). The survival rates at 6 days after transfusion were greater in the coagulopathy (80.0%) and other anaemias (66.7%) than in the group of acute blood loss (42.9%).

After transfusion, pulse rate (p <0.01) and platelet count (p <0.05) decreased significantly, and there was a significant increase in body temperature of the animals that suffered from hypothermia before the transfusion (p <0.05). Overall survival was predictable based upon posttransfusion body temperature, observed PCV change, the difference between the obtained and the calculated PCV, and administered transfusion volume (p <0.05)

Keywords

Transfusion effects, hemotherapy, whole blood, blood transfusion.