

Cat transfusions are relatively rare, complex, and usually confined to total blood support during serious, clinical anaemia.

Feline Blood Transfusion

In contrast with dogs, cats have numerous, natural alloantibodies directed against bloodgroup antigens which cause, sometimes fatal, transfusion reactions. Blood grouping is fundamental. The performance of compatibility tests (crossmatch) beginning with the very first transfusion helps to produce reliable results in spite of the absence of quick and reliable procedures..

EQUIPMENT NECESSARY



IMAGE 1

- Gloves
- Peripheral venous catheter dedicated to the transfusion for the recipient.
- Transfuser with filter (INFUSOMAT® Space Line type Transfusion – Luer Lock BBRAUN® or TRANSFUSEND SENDAL®)
- An infusion pump
- A bag of cat-blood compatible with the recipient's blood (Feline single/double blood collection bags ALVEDIA®)
- A bag of 0.9 % NaCl crystalloid solution
- A monitor for the recipient's electrocardiogram and arterial pressure
- A transfusion status record



1 Installation.

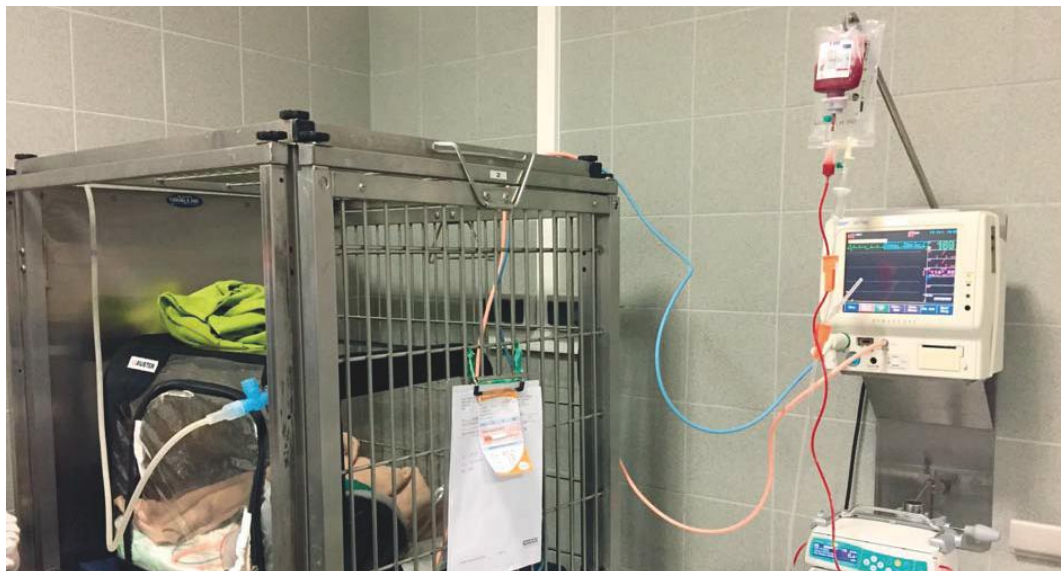
Compatibility between the donor's blood and that of the recipient must first be verified (blood group verification at minimum).

Connect the blood bag to the transfuser (infuser with filter).

Fill the tube with blood up to its tip before connecting it to the recipient's intravenous catheter.

Then place the tube into the infusion pump which precisely controls the blood-flow.

The handler uses gloves to perform all of these steps.



2 Transfusion.

A total volume of 10 to 20 ml/kg of blood is to be transfused in less than 4 hours. During the first half-hour, the transfusion is performed at a flow-rate of 1 ml/kg/hr and a clinical examination of the recipient is performed every 5 minutes to check for transfusion reactions and signs of excess volume. The flow-rate is then increased every 30 minutes to reach a maximum flow-rate of 5 ml/kg/hr, while monitoring the clinical status of the recipient. Since cats are sensitive to excess volume, do not make any other infusions in conjunction with the transfusion.



3 Monitor Transfusion Reactions.

A transfusion reaction may be clinically observed as a tachypnoea, a dyspnoea, a tachycardia, urticaria, a peripheral oedema, an erythema, hyperthermia and/or vomiting, which require a reduction in the transfusion flow-rate as well as an examination for haemolysis. In the case of haemolysis, the transfusion must be completely stopped, and a 0.9% NaCl infusion installed; an injection of 0.1 mg/kg dexamethasone may be performed. The transfusion compatibility and blood quality must be re-examined.



4 End of Transfusion.

At the end of the transfusion, connect a 100 mL bag of 0.9% NaCl to the transfuser in order to rinse out the tube. Ringer's Lactate solution is contraindicated due to the risk of calcium precipitation with the anticoagulant citrate.