

Prevalence of AB blood group system in cats from Luanda – preliminary results

Ana C. Silvestre-Ferreira^{1,2,3*}, Ana C. Oliveira⁴, José R. Mendoza⁴, Maria Garcia Aura⁴, Hugo Vilhena^{2,3,5,6}, Josep Pastor⁷

¹Department of Veterinary Sciences, University of Trás-os-Montes and Alto Douro (UTAD), Vila Real, Portugal; ²Animal and Veterinary Research Centre (CECAV), University of Trás-os-Montes and Alto Douro (UTAD), Vila Real, Portugal; ³Associate Laboratory for Animal and Veterinary Science – AL4AnimalS; ⁴Casa dos Animais Veterinary Clinic, Luanda, Angola; ⁵Center for Investigation Vasco da Gama (CIVG), Department of Veterinary Sciences, Escola Universitária Vasco da Gama (EUVG), Coimbra, Portugal; ⁶Onevetgroup University Veterinary Hospital of Coimbra (HVUC), Coimbra, Portugal; ⁷Department of Animal Medicine and Surgery, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain. *Correspondence: aferreir@utad.pt

Introduction

The most important blood group system in the cat is AB, in which cats are classified as type A, B, or AB. Cats have antibodies against the blood type they do not have, called alloantibodies, as they do not require prior sensitization by transfusion or pregnancy. These are responsible for post-transfusion hemolytic reactions that can lead to the death of the animal if a type B cat receives type A or AB blood and neonatal isoerythrolysis.

Type A blood is the most prevalent throughout the world. The first studies in cats without pedigree reported blood types B and AB as rare. However, racial and geographic variations have been demonstrated.

Objectives

The objective of this preliminary study was to determine the prevalence of blood types A, B and AB of cats without pedigree in Luanda (Angola).

Materials and Methods

For this study, 35 blood samples collected to EDTA tubes from cats attended at Clínica Veterinária Casa dos Animais, Luanda, and needed blood work on their diagnostic plan were used. No blood samples were collected on purpose for this study. For A, B or AB blood type determination, an immunochromatographic strip technique (QuickTest BT A+B, Alvedia, Limonest, France). was used following the manufacturer's instructions.

Results

A total of 35 samples obtained from 19 male and 16 female cats, aged between 8 months and 17 years, were included in the study. The prevalence of blood types A, B and AB was 97.0% (n=34), 3% (n=1), 0% and respectively.

Table 1. Demographic characteristics and blood typing results of the 35 cats tested

	Nº of cats	Type A N (%)	Type B N (%)	Type AB N (%)
Gender				
Male	19	19 (100)	0 (0)	0 (0)
Female	16	15 (93.8)	1 (6.2)	0 (0)
Total	35	34 (97.0)	1 (3.0)	0 (0)



Conclusions

To the best of our knowledge, this is the first study on the AB blood group system in cats carried out on the African continent. The results underscore the usefulness of regional studies to identify different prevalences of feline blood types. Blood typing should be considered a fundamental test in cats of any origin as a way of guaranteeing a safe and efficient blood transfusion and preventing neonatal isoerythrolysis.

References

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