Thrombocytopenia as a characteristic trait in the Polish ogar dog

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Abstract

The study was undertaken to ascertain if the normal thrombocyte count in Polish ogar dog differs from normal values in other dog breeds. The reason for this study was constatation that during routine blood analysis in healthy Polish ogar dogs, thrombocytopenia, not related to the clinical state of the animals, was frequently encountered. The study was carried out on 38 Polish ogar dogs. The control group consisted of 80 dogs of various breeds. All the animals were clinically healthy. A full hematological analysis was performed. The mean platelet value in all dog breeds without the Polish ogar dogs was 344.4 ± 6.85, while the mean number of platelets in the Polish ogar dogs amounted to 167 ± 11.6 G/l. The limited genetic material used to rebuild the Polish ogar breed after its drastic decline during the Second World War could be the reason for various, including hematological, abnormalities that with time became a normal characteristic traits for this breed.

Key words: dog, Polish ogar dog, thrombocytopenia

Introduction

Reference values are used for all laboratory parameters analyzed during the course of clinical evaluation of blood morphology and biochemistry parameters in veterinary patients similarly as in human medicine.

In some dog breeds and animal species, there are certain abnormal values for particular blood biochemistry or morphology parameters that are typical for that breed/species alone and that are not related to any pathological clinical state. An example of such a parameter can be a frequently high blood serum level of alkaline phosphate in the Scottish terrier (Stockham et al. 2002) or low T4 concentration in greyhound. Compared to other breeds, hematology analysis in many sighthounds, including the greyhound, saluki, Afghan hound and whippet shows an increase in the hematocrit value (Sullivan et al. 1998, Stockham et al. 2002). Compared to other breeds, the Otterhound and Cavalier King Charles spaniel have a higher mean platelet volume (Bown et al. 1994, Smedile et al. 1997, Stockham et al. 2002). As a result of a significant difference in the protein metabolism in the Dalmatian, the final product of this metabolism is uric acid, not urea as in other breeds. In Japanese Akita Inu and Shiba Inu, there is a pseudohyperkaliemia resulting from an increased level of potass-