

INTRODUCTION

Steroid responsive meningitis-arteritis (SRMA) is an immune-mediated disease that causes inflammation of the meninges and associated arteries in young dogs (6-18 months). It causes cervical hyperesthesia, pyrexia, neutrophilic pleocytosis and increased protein concentration in the cerebrospinal fluid (CSF). Examination of CSF is the most important diagnostic tool. Any breed can develop the disease; however, some breeds seem to be predisposed. The standard treatment is based on prednisone starting at 4 mg/kg/day and gradually decreasing this dose until at least 6 months.

OBJECTIVES

- To determine which factors of SRMA are the most recurrent in HCV.
- To compare the results to existing literature.

CLINICAL SIGNS

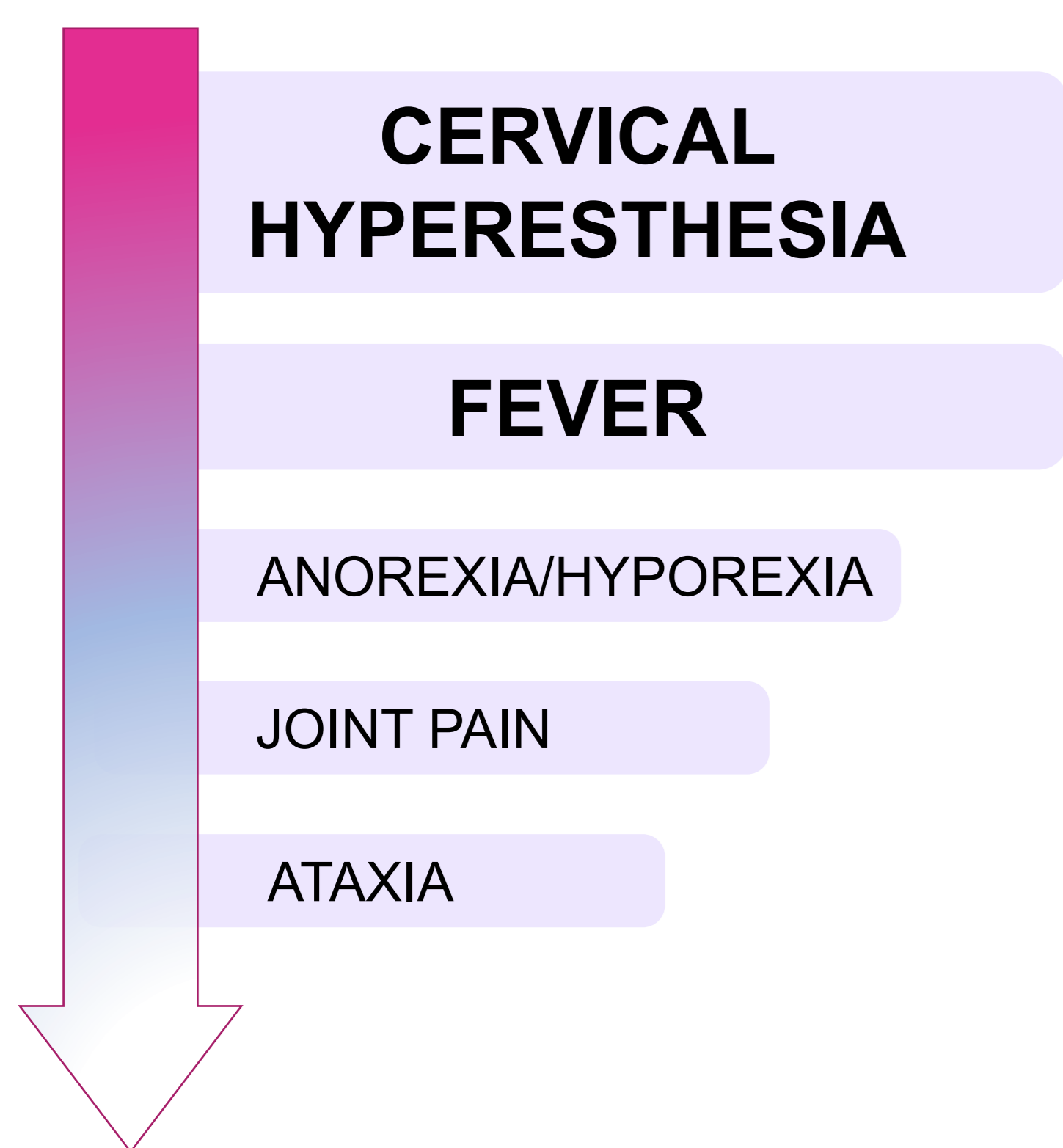


Figure 2. Beagle exhibiting neck pain due to inflammatory condition SRMA. Platt S, Freeman AC. "Neck and back pain". In: BSAVA Manual of Canine and Feline Neurology. British Small Animal Veterinary Association; 2013

EPIDEMIOLOGY

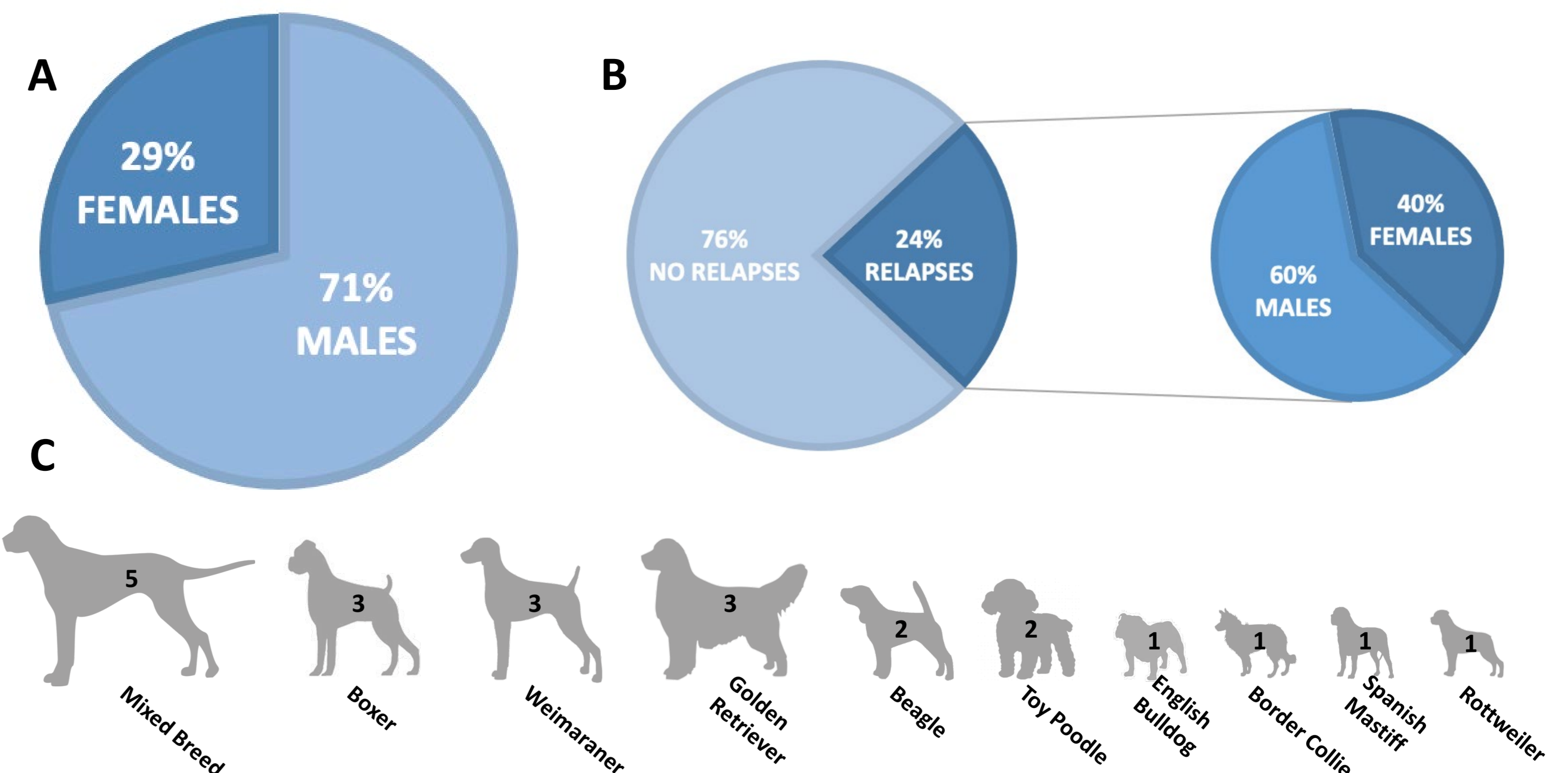


Figure 1. Sex, breed and count of relapses in the studied cases, 21 in total. (A) Sex of the animals. (B) Amount of relapses and male/female distribution in percentages. (C) SRMA affected breed distribution.

TREATMENT

Described prednisone monotherapy typically lasts between 5 and 14 months. First dose (4 mg/kg/d) is administered intravenously. In the studied cases longer treatments than the standard have been generally found.

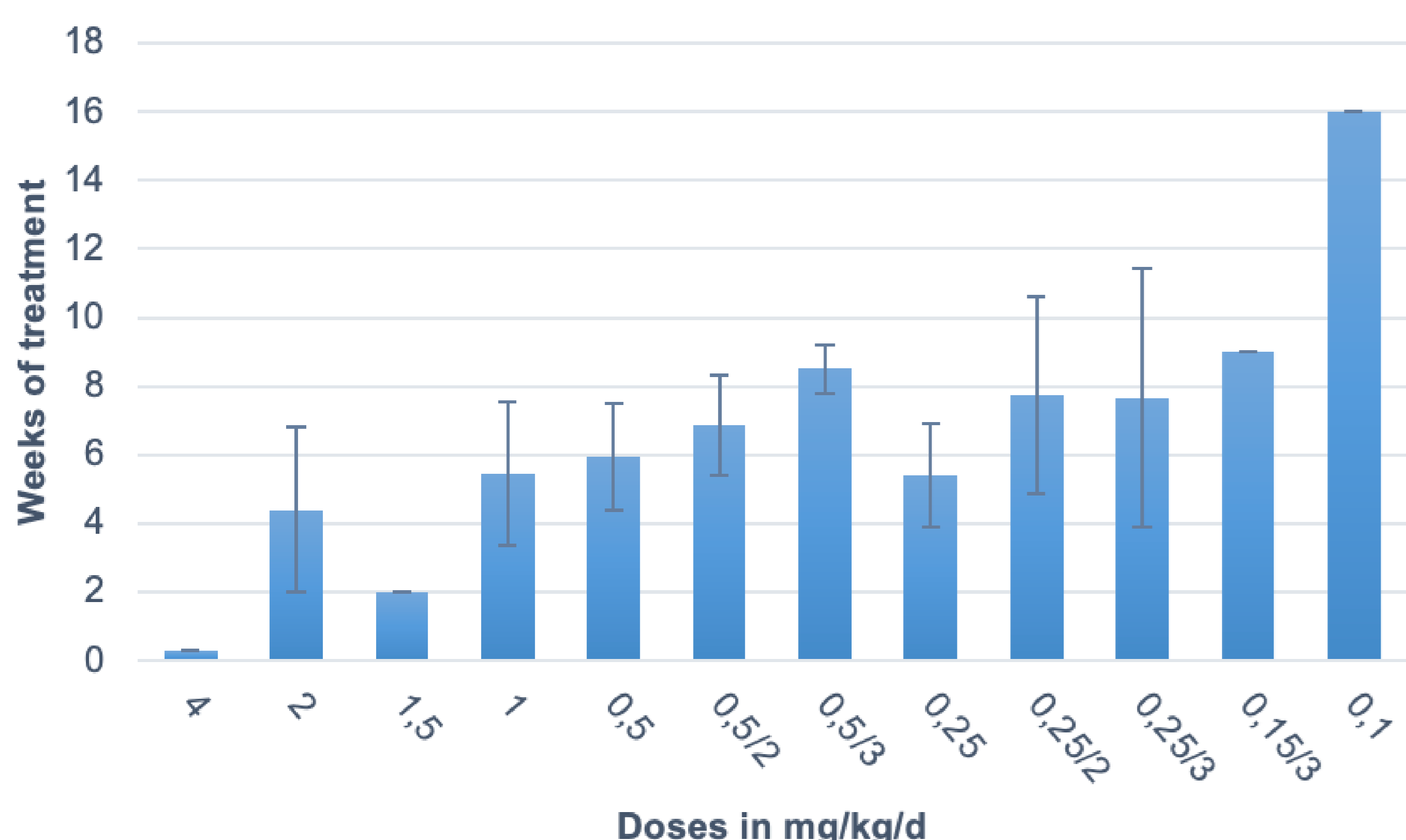


Figure 4. Prednisone treatment dose and duration in weeks. Sample size is 17 dogs. Error bars show the standard deviation of the average values.

CSF ANALYSIS

Cytology	Cases/total tested
Neutrophils	
>50%	5/7
<50%	2/7
Monocytes	
<25%	2/7
>25%	5/7
Lymphocytes	
<10%	5/7
>10%	2/7

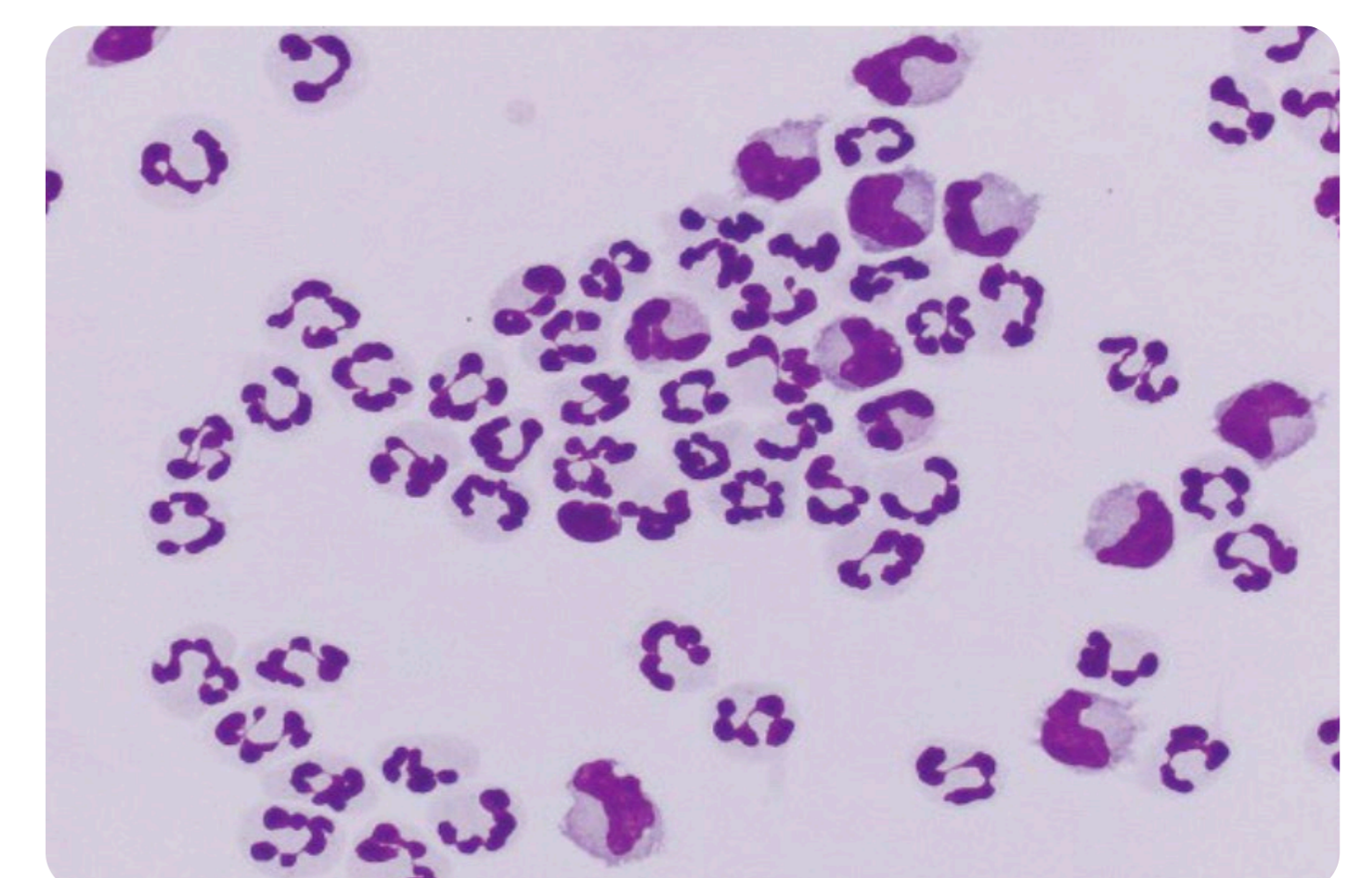


Figure 3. Neutrophilic pleocytosis in a dog with SRMA. Whitney MS and Coates JR. Cerebrospinal Fluid Analysis in the Dog and Cat. In: Veterinary Cytology. Wiley Blackwell; 2020.

Method/result	Cases/total tested
Cervical nucleated cell count	
0-500 WBCs/ μ l	9/21
500-1000 WBCs/ μ l	7/21
>1000 WBCs/ μ l	5/21
Cervical protein concentration	
0-100 mg/dl	9/18
100-200 mg/dl	5/18
>200 mg/dl	4/18

CONCLUSIONS

- A neurological exam is meant to be performed in juvenile dogs with lethargy, raised temperature and showing no response to conventional treatment.
- Less invasive diagnostic techniques are needed.
- SRMA has still many unknown aspects that require further research or improvements.
- The majority of animals overcome the disease despite some of them may relapse.