

# TABLE OF CONTENTS

## Blood Pressure in Cats and Dogs A Clinical Manual

### **1. Blood pressure**

Introduction

Blood pressure measurement methods

Normal values

Factors influencing blood pressure

Blood pressure regulation mechanisms

Immediate regulation: rapid control mechanisms

Delayed regulation:

mid-term control mechanisms

Delayed regulation: long-term control  
mechanisms

### **2. Blood pressure measurement**

Introduction

Blood pressure dynamics

Anatomical locations for measuring blood  
pressure

Measurements at the base of the tail

Measurements on a forelimb

Measurements on a hindlimb

Blood pressure measurement protocol for  
clinical practice

### **3. Blood pressure measurement**

techniques

Introduction

What other methods are available?

Doppler systems

Oscillometric systems

High-definition oscillometry (HDO)

Plethysmography and photoplethysmography

Which parameters are measured?

#### **4. Arterial hypertension**

Introduction

Values obtained

Diseases that cause hypertension in cats

and dogs

Hypertension and kidney disease

Hypertension and obesity

Hypertension and endocrine disorders

Target organ damage

The central nervous system

The heart

The eyeballs

The kidneys

The blood vessels

#### **5. Drug treatment of hypertension**

Introduction

Courses of action to reduce blood pressure

Modification of cardiac output

Control over circulating volume

Vasodilation

Antihypertensive drugs

Adrenergic receptor blockers

Calcium channel blockers

Angiotensin-converting enzyme inhibitors (ACEIs)

Angiotensin II receptor antagonists (AIIIRAs)

Endothelin receptor antagonists

Renin inhibitors

Direct vasodilators

Centrally acting antihypertensives

Catecholamine-depleting drugs

Aldosterone antagonists

## **6. Hypotension**

Introduction

Causes of hypotension in cats and dogs

Diseases and procedures that cause hypotension

Heart failure

Diabetic coma or ketoacidosis

Hypoadrenocorticism

Hypothyroidism

Direct alterations in blood vessels

## **7. Drug treatment of hypotension**

Introduction

Courses of action to increase blood pressure

Drugs for treating hypotension

Sympathomimetic drugs

Phosphodiesterase inhibitors

Other cardiac stimulants

Fluid therapy solutions

References.