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RISK OF STROKE IN ANIMALS OLDER THAN 5 YEARS

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Introduction. A stroke is a serious condition that can occur in both humans and animals. It is characterized by a disruption of blood flow in the brain, which can lead to uncontrolled movements, paralysis, or loss of consciousness. Strokes can occur in animals older than 5 years, and studying the risks of stroke in this age group becomes a relevant issue for veterinary medicine.

Stroke is one of the most common causes of death and disability in humans, but its impact on animals older than 5 years is still not sufficiently researched. With the increasing lifespan of pets and growing attention to their health, understanding the risks of stroke in this category of animals becomes an increasingly important task for veterinary professionals. Studying the causes, symptoms, and prevention of strokes in animals older than 5 years can help develop effective strategies for prevention and treatment of this disease, improve the quality of life of pets, and reduce veterinary care costs.

Our study **aim**ed to describe the significance, manifestations, and prevalence of stroke in dogs. This research is based on **method**s of literature review and assessment of disease prevalence indicators in dogs.

Results of the study. Major risk factors contributing to the occurrence of stroke in older animals include aspects such as age, gender, genetic characteristics, pre-existing conditions (such as hypertension, cardiovascular diseases), injuries, improper nutrition, lack of physical activity, and stressful situations. Advanced age is one of the most important risk factors for strokes in animals, as the likelihood of developing chronic diseases that may cause disruptions in blood flow to the brain increases with age.

Understanding the epidemiology and risk factors of stroke in older animals allows scientists and veterinarians to develop effective strategies for prevention and treatment of this disease, as well as improve animal care to reduce its prevalence and consequences.

The risk of stroke in animals older than 5 years reflects a complex interplay of factors affecting their health and organism functioning. Primarily, in older animals, stroke may be associated with the natural aging process, which is accompanied by changes in blood circulation and viscosity, as well as an increased risk of pathological processes in the blood vessels of the brain. Additionally, the presence of pre-existing conditions such as arterial hypertension, diabetes, and cardiovascular diseases may increase the likelihood of stroke in animals.

Another risk factor is adverse external influences, such as poor nutrition, lack of physical activity, stress, poisoning, infections, and injuries. For example, excessive eating, especially fatty and calorie-rich food, may contribute to the development of atherosclerosis and thrombus formation in the brain. Disordered eating behavior and irregular feeding patterns may affect the cardiovascular system and increase the risk of stroke.

Some animal breeds are more prone to stroke due to genetic characteristics; for instance, certain dogs and cats are more predisposed to hypertension and ischemic brain damage. Age and gender can also influence the risk of stroke in animals.

Overall activity and physical exercise play a crucial role in reducing the risk of stroke. Inadequate physical activity may contribute to weight gain and affect the cardiovascular system, which can increase the risk of stroke.

The pathogenesis of stroke in animals older than 5 years is similar to that observed in humans. Stroke in animals can be caused by various factors, such as disturbances in blood circulation in the brain (ischemic stroke), bleeding into brain tissue (hemorrhagic stroke), or restricted access to

oxygen in brain tissue. Atherosclerosis, which leads to the formation of thrombi or emboli that block arteries supplying the brain, is often the primary cause of stroke in older animals.

The pathogenesis of stroke involves a disruption of blood circulation in specific areas of the brain, which can lead to necrosis and damage to nerve cells. Necrosis of brain tissue can occur due to insufficient supply of oxygen and nutrients as a result of blood circulation cessation or bleeding.

Clinical symptoms of stroke in animals older than 5 years can be diverse but include general signs of central nervous system disorders, such as balance disturbances, weakness or paralysis of certain body parts, coordination problems, loss of appetite, changes in behavior, alterations in consciousness (from drowsiness to coma), and difficulties in understanding and perceiving the surrounding environment. Clinical manifestations may vary depending on the localization and severity of brain damage. Timely diagnosis and treatment are important for maximizing brain function recovery and supporting the animal during rehabilitation.

Effective stroke prevention in animals older than 5 years requires a comprehensive approach aimed at ensuring overall health and preventing risk factors. First and foremost, it is important to provide animals with a balanced diet that includes sufficient vitamins, minerals, and other nutrients. Regular physical activity helps maintain normal cardiovascular function and reduces the risk of thrombus formation. Additionally, it is important to ensure access to fresh water and resting areas for animals. Regular medical check-ups and consultations with a veterinarian help identify and treat possible medical problems that may lead to stroke. Following these recommendations helps preserve animal health and reduce the likelihood of stroke.

It is important to avoid stressful situations and excessive activity that may increase the risk of stroke. Providing comfortable conditions and paying attention to the mental state of animals play an important role in preventing this disease. Regular monitoring of stroke symptoms and prompt response to them allows timely provision of assistance and medical care if necessary. Considering all these aspects and implementing timely preventive measures can significantly reduce the risk of stroke in animals older than 5 years and ensure them a long and healthy life.

Conclusion. The risk of stroke in animals older than 5 years is a serious problem that requires attention and a comprehensive approach to prevention and treatment. Taking into account internal and external risk factors, such as health status, lifestyle, genetic characteristics, and housing conditions, can reduce the likelihood of this disease and improve the quality of life for animals. Proper attention to preventive measures, including proper nutrition, regular physical activity, medical monitoring, and timely treatment, can significantly reduce the risk of stroke in this target group of animals.

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