

THE USE OF INHALATION ANESTHESIA FOR THE COMBINED ANESTHESIA IN SURGICAL OPERATIONS IN SMALL CATTLE AT THE DEPARTMENT OF SURGERY AT THE VITEBSK STATE ACADEMY OF VETERINARY MEDICINE

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In this article I would like to share the experience of using inhalation anesthesia during combined anesthesia in small cattle on the example of sheep and goats at the Department of Surgery of the Vitebsk Academy of Veterinary Medicine. Taking into account the world's trends, sheep breeding is the most acceptable and promising for the republic, there are meat and meat-haired areas of sheep productivity. Treatment and prevention of diseases in these animals requires a lot of economic costs and modern approaches in the treatment and prevention of diseases. But also it requires modern approaches and ways to provide medical care for these animals as xylazine in mono mode is not enough for some operations.

Research was conducted in 2018-2020 on the basis of the surgical clinic, vivaria, laboratory of the Department of Surgery of the Vitebsk State Academy of Veterinary Medicine, also using animals received for treatment from private farms. Animals such as sheep and goats belong to the group of small cattle. Drugs: anesthefol 1%, sedamedine, allervet1%, lactic acid. In ruminants the use of anesthesia is complicated by the specific anatomy and physiology of animals of this species. To reduce the likelihood of complications, we predict before surgery and monitor the patient after surgery. Pre-medicine is a set of measures designed to prepare patients for general anesthesia and surgery. As a preliminary medicine, we kept the animals on a 24-hour starvation diet, 12 hours before the operation was limited to water, and 0.5 hours before the operation, the animal was given "80% lactic acid" diluted with water as a means against fermentation [1], allergic reactions, and also it helps to reduce the impact of external stress factors on the body during the preparation of the animal for surgery. Also, "allervet 1%" potentiates the

action of many drugs used for sedation and anesthesia. After the introductory anesthesia, we put the animal in a side position on the right side. After installing the tube, we inflate the cuff of the tube in the animal's trachea, and the other end can be fixed and on the lower jaw of the animal, such as a piece of bandage. We put the concentration of the inhalation mixture at the level of 2-3%. Depending on the operation and the patient's indicators, this concentration can be changed [3]. The monitoring of vital indicators is carried out by an anesthesiologist with the help of the patient's monitor (it shows such important indicators as body temperature, pulse, heart rate, systolic and diastolic pressure, pulseoxymetry - the amount of oxygen in the blood, capnography - concentration of carbon dioxide in the inhaled and exhaled mixture, the number of breathing motions) [2]. Monitoring allows to identify in the early stages of deviation, to start a set of measures to eliminate complications, thereby preventing more serious, non-reversible consequences in the body, which can lead to organ failure and death of the animal. At the end of the operation, the animal was also monitored by an anesthesiologist and a patient monitor, and the monitoring is carried out until a swallowing reflex appears, which tells us that the endotracheal tube can be removed. After removing the tube, the goats and sheep usually quickly begin to be active, after 20-30 minutes after the removal of the tube, they stand on their own limbs and move. After surgery and anesthesia, rumination was measured every hour (the number of reductions in most cases increases over time). After 5-6 hours after surgery, the animals reached about 3-5 movements depending on the type and the sex of animal underwent surgery [4].

In comparison with other methods of general anesthesia, the use of combined anesthesia has a number of advantages: low level of toxicity of drugs used for combined anesthesia; rapid awakening of the patient; the possibility of using during long operations; high analgesic effect in combination of drugs; it has minimal impact on the internal organs, which allows to use this method of anaesthesia when handling animals are in a serious condition or in old age. Our research has shown that the combined anesthesia has a large list of advantages compared to other methods. With proper postoperative care, the survival rate of patients in

the postoperative period and their recovery are faster, compared to other types of anesthesia.

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GRASS OF THE DESERT: COMPOSITION, PROPERTIES, VETERINARY USE

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Motherwort herb was widely used in the Middle Ages, then it was forgotten. Only at the end of the XIX century it was again used as a remedy for heart diseases. In the 30s. of the XX century grass motherwort began to replace valerian. As for its sedative effect, motherwort was 1.5 times more effective than drug valerian [1]. Motherwort grass is collected in the phase of the beginning of flowering and dried grass of a wild-growing and cultivated perennial herb of the heartwort (motherwort ordinary) – *Leonurus cardiaca* L. and five-bladed motherwort – *Leonurus quinquelobatus* Gilib., Family Lamiaceae (Lamiaceae). Only these species of the motherwort genus are used as medicinal raw materials.

Motherwort grasses bloom in July – September and bear fruit in August – September [3]. Cardiac motherwort is widespread in the Mediterranean, Atlantic, Central and Eastern Europe, Scandinavia, Asia Minor, Mongolia, China, as an alien plant in North America [4].