

обміні речовин можуть спровокувати розвиток ожиріння та цукрового діабету, таким стерилізованим собакам показана низькокалорійна дієта; найпоширеніше ускладнення стерилізації у собак – нетримання сечі. Може розвинути протягом року після операції або пізніше. Особливо часто це ускладнення діагностують у боксерів, доборманів, ріже минауцерів, ірландських сетерів.

Проаналізувавши переваги та недоліки стерелівації собак, вважаю, що якщо собака не планується використовувати для розмноження, то після проведення певних діагностичних досліджень, провести стерилізацію, щоб уникнути більш складних проблем, але потім придержуватися дієтичної годівлі тварини.

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PREVALENCE OF ANISAKIDAE NEMATODES IN WALRUS COLONIES FROM WEST COAST OF SPITSBERGEN

Nematodes of the Anisakidae family are parasites whose life cycle covers several stages, starting with the egg and then successively, the embryo which develops to the L1 – L3 stages within the egg and enters the water in this form, then is devoured by krill and cephalopods (where it transforms into or remains in L3) which the fish hunt. The life cycle closes when the fish is eaten by the final host, i.e. the pinniped (*Pseudoterranova decipiens*, *Contracaecum osculatum*) or the cetacean (*Anisakis simplex*), which then releases eggs along with the faeces [1].

These parasites are a crucial threat to humans because they reside in the meat of the fish, so the human can become an accidental host. The nematode penetrates the mucosa of the digestive system and in favorable conditions the parasites can get located in the pancreas, liver, spleen and lungs and also cause a firm allergic reaction. The disease they lead has been called Annisakidosis and is caused by eating undercooked or raw meat. This problem concerns fish caught in areas where the ultimate hosts live. The most common cases are in places where there is a tradition of eating raw fish [2].

Studies on Antarctic pinnipeds have documented cases of broad gastrointestinal ulceration. An example is: nodular hyperplasia and ulceration of the stomach and small intestine in Weddel seal, also infected with tapeworms, and sea elephants (mainly *A. simplex* and *C. osculatum*), cases of similar to this were also found in sea lions. Large numbers of nematodes and hookworms can also cause obstruction and anemia, while severe ulceration can result in peritonitis and death [3]. Infections with parasites from the Anisakidae family can bring walrus depopulation. As the species is at risk of extinction, it would be useful to monitor the presence of parasites in the colonies.

Many studies have shown a high prevalence among seal regions of the Arctic. This test aims at detecting the presence of parasite eggs in walrus faeces (*Odobenidae*) by a flotation test. The material for the research are faecal samples collected from several colonies staying in the summer season off the coast of Spitsbergen and Prins Karls

Forland. The ideal situation would be to gain access to the walrus digestive system and count the number of parasites per section of the digestive tract. Due to the protection of the species and the difficulty in taking off the body, it is not possible. However, there is still a possibility of faecal examination.

Literature

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COMPARISON OF SPERM STAIN® AND SPERM BLUE® STAINS IN THE CASES OF PHYSIOLOGICAL AND PATHOLOGICAL CANINE EJACULATES ANALYSED BY CASA SYSTEM

In recent years, we have been struggling with an increased number of canine sperm pathologies. The main causes of consistently decreasing dogs' sperm counts and incorrect morphology are not only irreversible genetic defects eg. cryptorchidism but also environmental and lifestyle factors. Additionally, breeding problems and troubleshooting are generating high medical costs.

The purpose of this study was to perform a cheap, valuable in-house protocol for canine spermogram and to compare two commonly used stains in veterinary practice using a standard optical microscope and Computer Assisted Semen Analysis (CASA, Microptic, Spain).

All participating dogs (n=13) underwent general clinical examination as well as detailed examination of male reproductive system. In this study preheated and previously washed with sterile PBS artificial vagina was used to obtain the samples. 6 physiological and 7 pathological ejaculates were obtained from dogs aged between 1,5 and 7 years. Semen volume, sperm concentration, motility, and morphology were analyzed. For microscopical sperm assessment CASA Sperm Class Analyzer 5.4.0.0 SCA Research Edition- Motility module (Microptic, Spain) system was used. Sperm concentration, motility and progressively motile sperm percentage were determined. Morphology samples were prepared by smearing on a glass slide. Samples were air-dried and stained using Sperm-Stain® and Sperm-Blue®. Stains chosen and used in this study are the most available and widely used in laboratories and veterinary practices due to their price and repeatability. Both stains were used according to the manufacturer protocols designed for dog sperm assessment.