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N. P. Ivanov, A. M. Namet, R. S. Sattarova, K. M. Shynybaev,
N. Zh. Akmyrzaev, B. Zh. Issakulova, F. A. Bakiyeva

LLP "Kazakh Scientific research Veterinary Institute", Almaty, Kazakhstan.
E-mail: akademik-vet@mail.ru; ainamet@mail.ru, ranosaitomarovna@gmail.com; shynybaev.k@mail.ru, nurlan.90.92@inbox.ru, bahitzhamal_i@mail.ru, flurachka-78@mail.ru

MORAXELLOSIS IN CATCHES OF DIFFERENT BREEDS OF MEAT DIRECTION OF PRODUCTIVITY

Abstract. On the basis of the results of the investigations, an episode analysis was carried out. It has been determined that many business entities of the Republic of the Quartet Systromes, the Republic of the Middle East and South Ossetia, the Republic of the Middle East and South Africa have been tracked by other large countries from other districts of the Far East and the Middle East and South Africa. When identifying the causes of some of them, in particular, infectious diseases of the eye, it was revealed that the causative agent of the disease is a bacterium of the genus Moraxell. The study of the episodes situation was carried out in the management of "Bayserke-Agro" LLP in Almaty region of Kazakhstan.

As a result, 883 animals from different herds of the same economy were observed, 47 of them with clinical signs revealed 47, which was 5.3%. From living with signs of eye disease infectious etiology, bio-material is taken. In the result, cultures were isolated, which were subsequently identified as a culture of Moraxelle security, according to the distributor M.A. Sidorova (1995) [1]. It was not possible to isolate the moraxellian cultures during the second survey on the same farm.

Key words: moraxellosis, import of livestock, breeds, distribution, damage, epizootic situation.

Relevance of the topic. By the present time in many economic entities of the Republic of Kazakhstan, there are imports of large coal from other districts. In this case, it is noted that there are cases among the livelihoods of diseases that are not registered in our country before, among which there are moraxellosis.

According to official statistical data, for the period 2012-2017, 29 356 animal parts of the Aberdeen-Ingusov of the Meat Production Unit were imported into the Republic. Of the aforementioned number of 11,738 heads, which was 39.9%, had a depression in the eyes of corycoconjunctivitis. In the dissection, the regions of the live animals with inclined eyes vary from 39.8 to 40.0.

In terms of the development of modern animal husbandry eye diseases remain an urgent problem. One of the most common diseases that manifests itself in damage to the organs of sight in cattle is infectious keratoconjunctivitis (ICH), which is registered in many countries of the world, and in recent years cases of this disease have been detected in the Republic of Kazakhstan. Monitoring of infectious keratoconjunctivitis in the Republic of Kazakhstan shows that ONE of the main causes of the spread of the disease is the massive importation of imported breeding stock, among which there were sick animals, and the movement of infected animals through the regions of the Republic of Kazakhstan without corresponding diagnostic studies led to an intensive spread of the disease and an increase in the number of disadvantaged farms. [2]

In this case, it is important to note that earlier in our country this disease was not registered and the means and methods of dealing with it were far from it.

It is worth noting that out of 5,290 animals with a free-flowing gland of a case of ocular disease, no cases of Aberdeen-Angus animals have been reported.

There are observations on the presence of disease among some other breeds, in particular, of the Kazakh white. Obviously the potential for further complications of the aforementioned disease among other CSCs, who are proprietors on the territory of the Republic of Kazakhstan.

According to the special literature, in some countries of the Near and Far abroad, the economic damage caused by moraxellouskeratoconjunctivitis reaches significant proportions and is composed of a reduction in the growth of live weight of the animal, not obtaining additional offspring, reducing milk production, as well as the cost of treatment and veterinary and sanitary measures [3-8].

The highest incidence is observed in calves aged 1-6 months. (50-70%). In the groups of rearing and fattening, especially when the cattle is on sites with a large population density, the disease is registered up to 30%. IKC among the dairy herd varies from 10-12% [2].

On animal-breeding complexes, the disease is recorded year-round, but most massively in the summer months, when cattle are on pasture and are susceptible to attack by stinging insects that carry the pathogen. The disease is characterized by lacrimation, hyperemia of the conjunctival vessels, photophobia, serous purulent outflow, clouding and ulceration of the cornea, deformity of the eyeball in the form of keratoglobus or keratoconus, partial or complete loss of vision of the affected eye of the animal [2].

The purpose of research: clarification of the epizootic situation of moraxellosis among various breeds with the aim of developing antiepizootic measures

Materials and methods. The studies were carried out in the framework of the program "Scientific and methodological support of veterinary and sanitary well-being and increasing the productivity of animal husbandry, on the example of "Bayserke-Agro" LLP.

The study of the episodes of the situation with the CPC moraxellosis in the economic entities of the Republic of Kazakhstan was carried out by analyzing the data of the Meat Union of Kazakhstan of the Ministry of Agriculture of the Republic of Kazakhstan and its own research during trips to business entities of various regions of the republic.

Work was done in the laboratory of bacteriology KazSRVI.

During the period of investigations, a clinical examination of a large rogue cluster was conducted, biomaterial was taken, and bacteriological studies were carried out.

In a clinical study of bovine infectious keratoconjunctivitis drew attention to their General condition, the presence (absence) of epiphora, photophobia, hyperemia of the vessels of the conjunctiva, blepharospasm, iridoplasty, serous – mucous or sero – purulent flow from the eyes of turbidity, and (or) ulceration of the cornea.

The study of the biological properties of selected cultures of moraxels and the selection of the most promising ones for the manufacture of immunological drugs was carried out in strict accordance with the sanitary rules "Safety of working with microorganonisms of the I - II groups of pathogenicity".

Results and analysis of the data. During the stay at the Zamantal site of "Baiserke-Agro" LLP, it was revealed that the cattle of the Aberdeen-Angus and Hereford breeds are kept on the pasture areas of the foothills of the Dzungarian Alatau in 5 herms, of which 4 are concentrated in Aberdeen-Angus and 1 are in animals Hereford breeds:

The animals are on pasture keeping with relatively good grass stand and provided with a flowing watering. In general, the animals are quite well-fed, with the exception of the individual, having a disease of the eyes and lung lesions (pneumonia).

Epizootic situation is characterized by the following indicators:

In herd No. 1 we contained 179 heifers and adult heifers. Among them, 4 animals with eye lesions were detected, of which 4 (2.3%) were detected and 3 animals with signs of pneumonia (1.6).

In the herd № 2 112 heifers and adult heifers were found 3 animals with eye disease, of which 1 bull (only 3.5%), 2 (1.7%) heifers with clinical signs of pneumonia.

Herd No. 3 there were 204 adults heifers and heifers, 2 (8,6%) with eye lesions 1 (0,49) with diseases Lekha.

The herd №4 contained 202 heifers and adult heifers, including 1 (0.4%) animal with clinical signs of pneumonia.

In the herd №5 contained cattle breed Hereford in the amount of 186 heifers and adult heifers, of which 10 (5.3%) animals with eye damage.

In addition, a separate group collected 62 heads of young 2-3 months of age, of which 15 (24.2%) have eye damage.

In total, we found 7 animals with clinical signs of pneumonia and 19 with eye damage among the adult population, which is 0.79% and 2.15%, respectively.

The clinical examination revealed the following signs of eye lesions: animal disease was manifested first in the form of swelling of the conjunctiva and lacrimation, then there was a accumulation of mucous and purulent exudate.

Later, more or less pronounced corneal opacities appeared and on the 6th-10th day, erosion with a diameter of about 1 mm developed in its center, which soon turned into an ulcer. Corneal opacities spread rapidly in all directions from the ulcer.

Over the next 10-15 days on the edge of the lesion appeared the development of the vascular network, and in some, especially severe cases, it surrounded the entire cornea on the periphery, forming a red rim.

These changes led to thickening of the cornea and loss of its transparency. There were cases when the vessels sprouted to the center of the cornea and formed an elevation in the form of a nipple. In the future, the blood flow ceased, and the bright color of a plexus of vessels took a pale shade.

Within 25-50 days, the vascular seal decreased in size, and the eyeball deformed.

In some animals, all layers of the cornea as a result of its ulceration were perforated and the vitreous body flowed. As a result, there was one - or two-sided blindness. Damage is usually observed in one eye and if both on different stages of course.

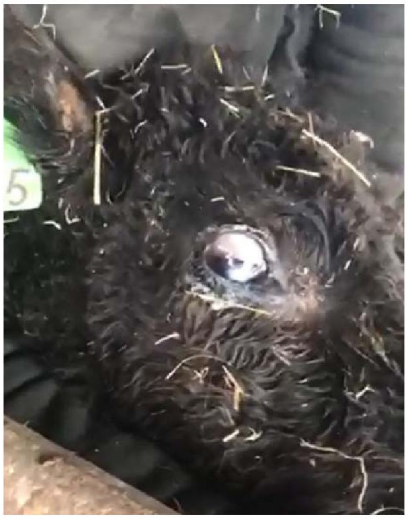

Figure 1 – Right eye damage

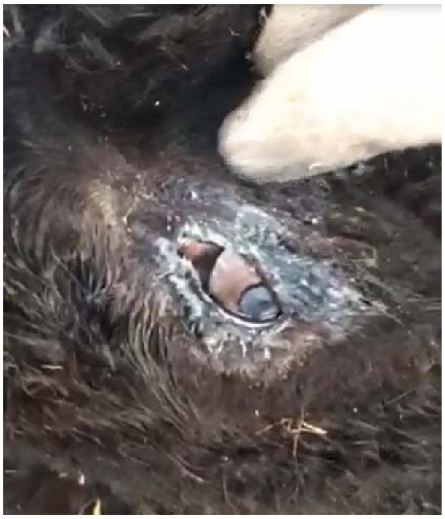

Figure 2 – Ulceration of the eye

Sick animals show anxiety and stay in the shade, reduced appetite and productivity, and animals who have lost sight completely, can take food only after direct feeding them in any capacity.

These features of development of diseases of animals marked during the examination of a number of cattle contained in bayserke –agro on distant plot Amantel.

In on distant area Amental in 2017, a survey of 883 animals, 47 of them (5,3%) with clinical signs of eye disease. Biomaterial is taken from these animals. As a result of biomaterial studies, bacteria of the genus Moraxella were isolated.

In 2018 re-conducted epidemiological survey of the site "Amental" and to date, the cases morcellator do not exist.

The site contained cattle in the amount of 274 animals. The clinical examination revealed 16 sick animals with eye damage. Biomaterial for laboratory studies was taken from animals with clinical signs.

All animals subjected to the therapeutic effects of antibiotics and immunotherapies protivotuberkuleznoe vaccine. The causative agent could not be identified.

Conclusion. Many economic entities of the Republic of Kazakhstan imports of cattle from foreign countries c is not enough clear epizootologicheskie characteristics.

When placing imported from outside the livestock of animals in the territory of our country, the subsequent examination revealed cases of clinical manifestations of eye disease.

When determining the causes of eye disease in animals found the presence of their pathogen - bacteria of the genus Moraxella.

Previously, this disease was not found in the territory of the Republic of Kazakhstan and, in this regard, it was required to study the epizootic situation in the territory of our country and study the biological properties of the pathogen secreted from animals.

Н. П. Иванов, А. М. Намет, Р. С. Саттарова, К. М. Шыныбаев, Н. Ж. Акмырзаев, Б. Ж. Исакулова, Ф. А. Бакиева

Қазақ ветеринария ғылыми-зерттеу институты, Алматы, Қазақстан

ӘР ТҮРЛІ ТҰҚЫМДЫ ЕТ ӨНДІРУ БАҒЫТЫНДАҒЫ ІҚМ МОРАКСЕЛЛЕЗІ

Аннотация. Алынған зерттеу нәтижелері негізінде індеттік ахуалға талдау жүргізілді. Қазақстан Республикасының көптеген шаруашылық жүргізуші субъектілері алыс шетелдерден ірі қара малдың импортын жүзеге асыратыны анықталды. Олардың кейбірінің, атап айтқанда, көздің жұқпалы ауруларының себептерін анықтау кезінде жануарларда ауру қоздырғышының - моракселл тектес бактериялардың болуы анықталды. Індеттік ахуалды зерттеу ҚР Алматы облысындағы "Байсерке Агро" ЖШС-нің шаруашылығында жүзеге асырылды.

Нәтижесінде бір шаруашылықтың әртүрлі табындарынан 883 мал тексеріліп, оның ішінде клиникалық белгілері бар 47 мал анықталды, бұл 5,3% құрады. Жұқпалы этиология көз аурулары белгілері бар малдардан биоматериал алынған. Нәтижесінде М. А. Сидоровтың (1995) анықтамасына сәйкес өсінді ретінде моракселл бовис бөлініп алынды. Осы шаруашылықта қайта зерттеген кезде моракселл өсіндісін бөліп көрсетуге мүмкіндік болмады.

Түйін сөздер: моракселлез, мал импорты, тұқым, аурудың таралуы, шығын, індеттік ахуал.

Н. П. Иванов, А. М. Намет, Р. С. Саттарова, К. М. Шыныбаев, Н. Ж. Акмырзаев, Б. Ж. Исакулова, Ф. А. Бакиева

ТОО «Казахский научно-исследовательский ветеринарный институт», Алматы, Казахстан

МОРАКСЕЛЛЁЗ У КРС РАЗНЫХ ПОРОД МЯСНОГО НАПРАВЛЕНИЯ ПРОДУКТИВНОСТИ

Аннотация. На основании полученных результатов исследований проведен анализ эпизоотической ситуации. Было выяснено, что многие хозяйствующие субъекты Республики Казахстан осуществляют импорт крупного рогатого скота из стран Дальнего зарубежья среди которых встречаются ранее не регистрировавшиеся в нашей стране заболевания. При выяснении причин некоторых из них, в частности, инфекционных болезней глаз, выявлено наличие у животных возбудителя заболевания - бактерии рода Моракселла. Изучение эпизоотической ситуации осуществлялось в хозяйстве ТОО «Байсерке Агро» Алматинской областей РК.

В результате было осмотрено 883 животных из разных гуртов одного хозяйства, из них с клиническими признаками выявлено 47, что составило 5,3%. От животных с признаками заболеваний глаз инфекционной этиологии взят биоматериал. В итоге было изолированы культуры, которые в последующем идентифицированы как культура моракселлабовис, согласно определителю М. А. Сидорова (1995) [1]. При повторном обследовании в этом же хозяйстве культур моракселл выделить не удалось.

Ключевые слова: моракселлез, импорт скота, породы, распространение, ущерб, эпизоотическая ситуация.

Information about authors:

Ivanov Nikolai Petrovich, chief researcher, doctor of veterinary sciences, professor, academician of the National Academy of Sciences of the Republic of Kazakhstan; Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; akademik-vet@mail.ru; https://orcid.org/0000-0003-1964-241X

Namet Aidar Myrzakhmetuly, chief researcher, doctor of veterinary sciences, Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; ainamet@mail.ru; https://orcid.org/0000-0001-9639-4208

Sattarova Rano Saitomarovna, senior researcher, candidate of veterinary sciences, Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; rano_mail.ru@mail.ru; https://orcid.org/0000-0001-9105-4415

Shynybaev Kuandyk Muhametkalievich, senior researcher, Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; k.shynybaev@mail.ru; https://orcid.org/0000-0002-7702-1390

Akmyrzaev Nurlan Zharylkasynuly, junior researcher, Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; nurlan.90.92@inbox.ru; https://orcid.org/0000-0001-8896-3482

Issakulova B. Zh., junior scientist, LLP "Kazakh Scientific research Veterinary Institute", Almaty, Kazakhstan; bahitzhamal_i@mail.ru; https://orcid.org0000-0001-6560-5607

Bakieva Flyura Albertovna, senior research scientist, Candidate of Veterinary Sciences, Kazakh Scientific Research Veterinary Institute LLP, Almaty, Kazakhstan; flurachka-78@mail.ru; https://orcid.org/0000-0003-0627-2608

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