International Journal for Innovative Engineering and Management Research
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IJIEMR Transactions, online available on 30th March 2022.
Link: https://ijiemr.org/downloads/Volume-11/Issue-03
DOI: 10.48047/IJIEMR/V11/I03/42

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Volume 11, Issue 03, Pages 237-241

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THE IMPORTANCE OF TUBERCULINIZATION IN THE DIAGNOSIS OF TUBERCULOSIS IN CATTLE

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ABSTRACT: The research work describes the rules of tuberculinization in cattle, the determination of the results of the reaction, the types of tuberculinization, methods of conduction, the essence and importance.

Keywords: allergen, tuberculin, altuberculin, allergic reactions (anergic, normergic, hypoergic, hyperergic), allergy, anaphylaxis, ophthalmic test, skin test, PPD - for birds, PPD - for black cattle, KAM - mycobacterial complexes, noant species of mycobacteria positive reaction, negative reaction, amplification, cantamination.

INTRODUCTION

In recent years, the government has made a number of decisions to develop livestock in the country, to ensure food security, to meet the demand for livestock products (meat, milk, eggs). In particular, the Decree of the First President of the Republic of Uzbekistan dated March 23, 2006 No. PP-308 "On measures to encourage the increase of livestock in personal assistants, farmers and farms" and April 21, 2008 "On measures to encourage livestock breeding in private assistants, farmers and farms PQ-842 "On additional measures to strengthen the expansion of production" in addition, in subsequent years, No. 845 of October 18, 2017 "On measures to strengthen the feed base of livestock and fisheries", March 16, 2018 "Karakul and desert ecology Bukhara Branch of the Research Institute No. PQ-4243 of March 18, 2019 "On measures to further develop and support the livestock sector" is aimed at accelerating the development of a number of livestock and meeting the growing demand of our people for livestock products. However, tuberculosis, a common disease among domestic animals, especially cattle, is a significant obstacle to the rapid development of livestock in the above-mentioned livestock farms.

Tuberculosis is a zooanthroponotic disease, a very dangerous infectious disease that occurs in our country. Tuberculosis is transmitted to humans through the products of sick animals (unharmed), aerogenous, dusty infection, contact routes. Tuberculosis is a political and social damage to humanity, the compulsory destruction of sick animals is a material damage, the cost of improving the environment, the cost of improving livestock, labor, preventive, diagnostic measures are huge. In conclusion, it is the duty of every veterinarian to have an excellent knowledge of TB diagnosis, control and preventive measures, and the ability to apply them in practice.

The purpose of scientific research work. Ophthalmic testing of allergic examination of tuberculosis in cattle, complete, perfect mastery of the diagnosis using subcutaneous testing methods and the formation of knowledge, skills, complete mastery of the results of the examination.

The task of scientific research work. Knowledge and skills of ophthalmic testing of tuberculinization, intercutaneous testing in cattle farms of Samarkand region, calculation of results.

Research methods of scientific research. Ophthalmic tests, intercutaneous tests (with and without needles) were performed on cattle on the designated farm, and the results were studied, compared, and summed up. Perfect mastery of tuberculinization.

Object and subject of scientific research work. Koktepa Zamin Agro farm in Payarik district of Samarkand region has 201 dairy cows, 45 heifers, 5 bulls and 125 calves. A total of 376 head of cattle underwent ophthalmic testing, intercutaneous testing in 73 head of cattle for allergy testing for tuberculosis, and the results were analyzed.

Research results and their analysis. First of all, it should be noted that Mamadullaev G.H. An allergy test was conducted in accordance with the "Guidelines for the diagnosis of animal tuberculosis" developed in 2011 and approved by the DVBB of the Republic of Uzbekistan. The author's instructions in this regard were fully followed. This instruction is based on the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated January 26, 2011 No. 21 "On additional measures to implement the UN Millennium Development Goals in Uzbekistan in 2011-2015" and the Decree of the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan dated January 30, 2011. - Development of interdepartmental normative documents on veterinary and sanitary treatment and prevention of animal tuberculosis in accordance with the digital order. 1. General rules. 1.1. Tuberculosis is an infectious, chronic, zooanthropanosis, infectious disease that affects all animals, birds and humans and is characterized by the formation of special tubercles (nodules) in the internal organs and tissues. The pathogens belong to the genus Mycobacteria and more than 38 species have been identified. M. bovis - in cattle, M. humanis - in humans, M. avium - in birds. Each species is pathogenic to other species, in addition to causing disease in its own animals, humans and birds. The M. bovis type is mainly pathogenic in cattle. In addition, all mammals and humans are prone to this type. In addition to humans, pigs, goats, cats, and dogs are prone to M.humanis. M.avium causes tuberculosis in domestic and wild birds. This species causes both pathological changes in the body of pigs, and can briefly sensitize the body of cattle to tuberculin. Some species or associations of atypical (atypical) mycobacteria can sensitize the organism of cattle, pigs and poultry to tuberculin, in some cases notypical mycobacteriosis cause pathomorphological changes in the lymph nodes of pigs, and such changes are indistinguishable from tuberculosis-specific foci.

1.2. Epizootological, clinical, pathoanatomical, histological, bacteriological, allergic and molecular genetic polymer chain reaction (PCR) methods are used in the diagnosis of animal tuberculosis. The most widely used methods of veterinary practice in tuberculosis are subcutaneous tuberculin testing (cattle, sheep and goats), palpebral testing in fur animals and foxes, and ophthalmic testing in horses. In healthy farms on tuberculosis, isolation of animals that have a positive reaction to tuberculin and additional allergy testing and intravenous administration of tuberculin are carried out. If a

positive result is obtained, it is mandatory to submit to the meat.

1.3. The diagnosis of tuberculosis in cattle is confirmed in the following cases:

- pathological anatomical changes are fully consistent;

- PCR and biopsy method give a positive result in the absence of clear clinical signs;

- bacteriological examination reveals M. bovis or M. humanis species;

- If a positive result is obtained in biosynthesis.

1.4. Only PPD developed for cattle is used for allergy testing in cattle. The PPD bottle must be used on the day of opening.

1.5. Subcutaneous delivery of PPD is carried out using needleless injectors (BI - 7, IBV - 01, IBV - 02), special syringes and needles of 1-2 ml with needles, and eye pipettes.

1.6. Tuberculinization is carried out in cattle from 2 months of age.

1.7. Tuberculinization can be performed after 21 days if the animals have been vaccinated against infectious diseases and helminths.

1.8. Tuberculin is injected into cattle 0.2 ml between the skin of the neck (in the center of the neck).

Before sending tuberculin, the hair of this area is cut and cleaned and wiped with 700 alcohol swabs. The result of the reaction is determined after 72 hours. In unhealthy points, tuberculinization is performed twice, and the result of the reaction is determined 24 hours after the second delivery.

Simultaneous testing - the number of animals that respond positively to the animals being tested should not be less than 6, which is a prerequisite for assessing the epizootic situation.

In our research work, 70 heads of dairy cows and calves, 2 heads of pedigree bulls, 20 heads of heifers underwent a complete veterinary examination and allergy testing.

For the first time, a subcutaneous injection of PPD was performed. A total of 62 head of animals were sent to the neck center, 0.2 ml PPD, needle method, the result was determined by measuring the volume of the tumor in the skin with a caliper (barbell caliper) after 72 hours. Positive - a positive reaction - 4 head of dairy cows and 4 head of calves are calves of those cows. The bulls reacted negatively. Two of the heifers reacted positively.

One month later, an ophthalmic test was performed in these animals, and the results obtained when administered subcutaneously were similarly positive in this method.

In consultation with experienced veterinarians in the district, it was recommended to check by PCR, bacteriological examination, bioassay methods. Epizootiological analyzes showed that the sites we tested were confirmed to be unhealthy areas for tuberculosis.

Conclusion:

1. We consider it expedient to conduct tuberculin testing on all farms according to the plan.

2. We believe that it is necessary to hold seminars and trainings for farm managers on the elimination of the most dangerous infectious diseases.

3. Improving the sanitary and zoohygienic culture of farms remains a pressing issue today.

4. We consider it necessary to take measures to diagnose tuberculosis and strictly control the movement of the herd.

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