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EARLY POST SLAUGHTERING DIAGNOSIS OF ANTHRAX IN SHEEP

/Following is the translation of an article by M. Vilchek, State Committee for the Coordination of Scientific Research, UZbek SSR, and N. Davydov, Directorate for the Meat and Dairy Industry of the Central Asian Council of the National Economy, published in the Russian-language periodical Myasnaya Promyshlemost (The Meat Industry), No. 1, 1964, pages 40-41. Translation performed by Sp/7 Charles T. Ostertag, Jr./

As is known, in the event that in the cattle slaughtering section carcasses of sheep infected with anthrax are detected, not only is the industrial rhythm disrupted, particularly on conveyor lines, but there is a considerable reduction in the quantity of valuable products from the slaughtering of healthy animals, suspected of being in contact with the sick animals. In addition to this in the existing system of veterinary-sanitary processing usually a considerable number of workers, operating the conveyors, come in contact with the anthrax infected carcass, which is by no means a desirable circumstance.

The main reason causing all of these negative factors in the late diagnosis of the disease. Actually under existing rules the veterinary-sanitary examination of livestock carcasses and organs is carried out only after the insides have been removed, that is, almost in the final stage of processing.

Under the industrial conditions of the Termezskiy and Tashkent Meat Processing Plants a check has been made of a method for the earlier diagnosis of anthrax in small cattle. This method was proposed by one of the authors of the article, N. Davydov.

Here there is somewhat of a change in the sequence of operations in the processing of the cattle (relative to the generally accepted technological system); after bleeding the head is left with the carcass, then the rear legs are cleaned in the usual order and the carcass is transferred to the dressing conveyor. Then the hide is removed from the inner side of the shank and the abdominal and groin sectors cleaned.

After the cleaning is completed, veterinary-sanitary examination is begun.

After this the doctor or technician cuts the abdominal wall, digressing 8-10 cm from the leading edge of the pubis. The cut should not be large, 12-15 cm, permitting the hand to be inserted into the abdominal cavity in order to extract the spleen, located in the left subcostal region between the rumen and the diaphragm. Several seconds are required

for this easy operation. In addition to the spleen, also available for examination are the surface inguinal suprarenal (?), and patellar lymph nodes, the intestinal loops and the head (external examination).

In the event of detecting pathologo-anatomical changes in the spleen, lymph nodes or intestines, the non-neutralized carcass with the hide and the head is removed from the conveyor (and still better, transferred to a specially erected sector) for further investigation and the carrying out of the necessary measures. If the preliminary conclusion is confirmed only one carcass has to be destroyed.

After the preliminary veterinary-sanitary examination the subsequent course of the technological process is such: Separation of the head, removal of the hide, extraction of the viscera, sanitary-veterinary examination of them, and so forth, as specified in the technological instructions and rules for examination.

A check showed that during the processing of small cattle it is superfluous to number the carcasses, organs, heads and hides, contact between anthrax infected carcasses and other healthy carcasses is excluded, and on the bleeding line only the blood and fetlock joints of the rear extremities are utilized or destroyed. Personal responsibility for the meat products is established and an anthrax infected carcass passes through the hands of a minimum number of workers.

For carrying out the preliminary examination it is only necessary to replace the worker, engaged in numbering the carcasses, heads, internal organs and hides on the conveyor, with a veterinary technician.

In the end of 1963 the Directorate of the Meat and Dairy Industry for the Central Asian Council of the National Economy conducted a seminar (preparatory) for the heads in the OPVK (Division of Industrial Veterinary Control) and veterinarians from meat processing plants in the Central Asian Republics.

All the participants in the seminar, having checked the described method of diagnosis on small cattle at meat plants, approved of it.