



Loirengotracheitis and Colibacteriosis of Poultry Pathomorphological Diagnosis

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Abstract: The co-occurrence of lorengotracheitis and colibacteriosis in one organism, as well as the pathomorphological changes it underwent, are highlighted in this article.

Keywords: Poultry, lorengotracheitis, pathomorphology, diagnosis, dystrophy, neurotic processes, inflammation, splenitis.

Introduction. The decision of the President of the Republic of Uzbekistan dated June 14, 2021 No. PQ-5146 "Additional measures aimed at the development of poultry farming and strengthening of the network feed base" increases the number of poultry in state, farmers, and private farms, increases their productivity, raises healthy chicks in the development and efficiency of poultry farming, depends on factors such as their proper care, protection from various diseases, and increases the number of chickens in state, farmers, and farmers' markets.

A unique position is given to poultry in the agriculture sector of our nation's economy, and the growth of this industry is highly valued. The growth and economic viability of poultry farming, the primary sector of animal husbandry, depends on a number of variables, including an increase in the quantity of poultry on public, farmer, and private farms, an increase in their productivity, the acquisition of healthy chicks, proper care of the chicks, and protection from various diseases. The raising of chickens is seriously threatened by several bird illnesses. One of the main issues in poultry farming is infectious diseases, such as infectious laryngotracheitis in poultry. The occurrence of this disease in cases of infection in bird bodies complicates the issue further. Lack of biological and chemical medications further exacerbates the issue and adds to the rapid development of illnesses in the field of veterinary care.

The economics of many poultry producers is suffering greatly due to the disease's prevalence in poultry, especially among hens. This condition The mortality rate of birds with the aforementioned sickness in poultry is between 80 and 85 percent. The care of sick birds and the efforts to contain the disease cost a lot of money. Chickens that recover from the illness develop slower than their peers and end up spreading the pathogen. For the diagnosis, management, and prevention of this disease, unique complete methodologies and instruments have not been created. because right now. In our nation, poultry farming is given a lot of attention. There are no sophisticated modern methods for preventing or treating these ailments. Utilizing biopreparations made abroad requires a lot of time and money.

One of the urgent tasks of the present is to ascertain the extent of the spread of infectious laryngotracheitis of birds, the causes of this disease, its epizootic status, to develop a method of precise disease diagnosis, and to study the pathomorphological changes of this disease in order to address the aforementioned issues.

The organs of 350 head of poultry brought from the poultry farms of our republic and dissected in the farms were examined pathologically, bacteriologically, and virologically in order to study the patho-anatomical changes of mixed infectious diseases in natural conditions. 125 lambs perished

from a combination of infectious illnesses. These birds were divided into several groups (see table 1) based on the changes in their internal organs and the nature of their diseases.

Table 1. Spread of mixed infectious diseases among poultry in natural conditions

Groups	Types of diseases	Total number of birds inspected
I	Лоренготрахеит	75
II	Colibacteriosis	150
III	In mixed cases (laryngotracheitis and colibacteriosis)	125
TOTAL:		350

The kind and virulence of the pathogens, as well as the age of the birds, are the key determinants of the severity of pathologoanatomical alterations and the specificity of a certain illness. When the corpses of the first batch of sick and deceased hens were dissected under natural circumstances, distinctive pathologoanatomical modifications were seen.

These birds have extremely thin bodies, dotted hemorrhages on all mucous and serous membranes, an accumulation of foamy fluid in the nasal and oral cavities, and hyperemic conjunctiva. The feathers are ruffled, and the area around the cloacal opening is filthy with yellow excrement.

On inspection, blood vessels were filled with blood, blood accumulated in certain areas, the subcutaneous tissue was reddish, and the muscles and fat tissue had thinned and atrophy. The glandular stomach had collected more than 150 ml of yellow-red fluid. The muscular stomach and intestines have some enlarged regions where gas has built up. The cuticular layer of some chickens' muscular stomachs is easily moved, reddened, and displays various hemorrhages in addition to the opening of the submucosa layer. The spleen has a slight enlargement, dotted and spotty hemorrhages around the edges, a pale consistency, a dark-mottled color, a lot of grain separation, and some tender and swollen areas, particularly in the front.

When cut, the structure of the liver is confused, it is swollen, mushy, and the borders are rounded. In some birds, there are yellow-brown, seeping necrotic foci that extend deep into the parenchyma. The kidneys are enlarged, the veins show signs of blood stagnation, point burns are apparent on the surface, they swell when cut, and the distinction between the shell and brain portions is not clear.

The endocardium has point hemorrhages, the myocardium muscle is pale, and the ventricles are filled with blood that has a dark hue.

Blood vessels are immobile, the capsule has point hemorrhages, and foamy exudate has accumulated in the bronchi. The lungs are also enlarged. In other areas, pleuropneumonia and necrotizing pneumonia occurred.

In comparison to the first group of colibacteriosis-infected chicken, the second group exhibits much reduced mortality and distinct pathologoanatomical alterations. The hens in this group frequently have chronic illness, which results in stunting, shriveled feathers, some of them shedding, and persistent diarrhea. These clinical signs caused weight loss and even death in some chickens.

When the skin was separated, the lower portions of the neck and under the wings were bleeding, and an accumulation of yellow mucus was seen. When the blood vessels under the skin were dissected, they were all filled with blood.

There are many patchy hemorrhages in the mucous, serous, and mucous membranes, and the blood is purple in hue. Atrophied body muscles are visible. Around and inside the glandular stomach, a yellowish exudate accumulated, and the gastrointestinal system of some hens exhibited multiple point and spot hemorrhages. The spleen is somewhat enlarged, and the sliced pulp is dark crimson and highly segregated. On the surface, there are tiny point hemorrhages.

There are many necrotic foci in the hepatocides of some livers, and it was observed that the necrotic foci had deeply penetrated into the parenchyma. The liver is enlarged, the blood vessels are filled

with blood, the consistency is pale, and there are numerous necrotic foci in the liver. The kidneys are enlarged, pale, blood vessel stagnation is present, and there are 2-3 cm infarct-like necrotic foci under the capsule in certain areas. Birds aged 3 to 4 months frequently have this disease. In the hyperemic condition, the parenchyma of the kidneys is enlarged and the border between the shell and the brain is unknown. The myocardium appears pale, frequently like cooked flesh, with visible and tiny blood vessels that are stagnant. In the endocardium of certain hens, dotted and spotted hemorrhages were particularly prevalent. The alveoli and bronchi were found to be filled with a mucous organic liquid, the lungs were swollen, and the blood vessels were filled with blood.

The intestines began to fill with a foul-smelling liquid mass and gas, and their walls began to shrink. The mucous membranes also had many point and spot-like hemorrhages, and in some areas, ulcers and erosions developed.

Birds afflicted with combined laryngotracheitis and colibacteriosis in the third group are very thin, some have respiratory problems, some have chronic diarrhea, and all of them have raised body temperatures. At least two or three different pathogen kinds were discovered when such birds were dissected. However, only 125 of the 350 chicken carcasses that underwent pathological, bacterial, and immunological examination were found to have mixed laryngotracheitis and colibacteriosis diseases. It should be emphasized that most birds exhibit lorengrachyte-like alterations. For instance, only laryngotracheitis is characterized by the lungs' marbling, the nasal cavity's redness, the presence of point and spot hemorrhages, the spleen's enlargement, the presence of hemorrhagic inflammations, and frequently a septic condition. At the same time, however, Peyer's and solitary nodules are enlarged and necrotic, as well as the hemorrhagic intestinal inflammation typical of colibacteriosis. As a result, bacteriological and immunobiological tests (IFT) supported our diagnosis.

A pathologo-anatomical examination indicated hemodynamic and necrotic processes, as well as profound and permanent alterations in their body compared to individual disorders.

CONCLUSION. A total of 125 out of the 350 poultry that were examined had mixed infectious diseases, and the changes in their internal organs were entirely different from those of each individual disease, according to an analysis of pathogistological changes emerging in mixed infectious laryngotracheitis and colibacteriosis diseases found in natural conditions. Additionally, the body's response to mixed illnesses varies according to the age of the chickens. The investigations that have been done have shown that the disease in young chickens and chicks has a severe and complicated course. The type and quantity of pathogens affect how the body functions.

References.

1. Ниязов Ф.А., Ахмедов Б.Н. Ашуров С.А., Действие иммуностимулятора кавилона на цыплят // Ветеринария – М. 2001.-№9. – С.22-23.
2. Ахмедов Б.Н. Жўжа ўстиришининг асосий омиллари // Қашқадарё фермери газетаси. 27 – феврал.- 2009 йил.
3. Мавланов С.И., Ахмедов Б.Н. Қоракўлчиликда юкори самарадорликка эришмокчимиз // Қашқадарё газетаси. 8 – янв. -2010 йил.
4. Ахмедов Б.Н. Наслли ва соғлом жўжалар олишга эришиш нималарга боғлиқ // Қашқадарё газетаси 6 – апр. -2010 йил.
5. Б.Н. Ахмедов Ларинготрахеит қандай касаллик? // Қашқадарё газетаси. 8– октябр -2010 йил.