



**THE RESULTS OF THE STUDY OF THE MACRO AND
MICROSCOPIC STRUCTURE OF THE ESOPHAGUS AND ITS
STRUCTURAL CHANGES ARE THE MECHANISM OF COMPLEX
PATHOLOGICAL PROCESSES OCCURRING IN THE BODY IN
THE CASE OF PULMONARY FIBROSIS.**

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Abstract. This article is devoted to the study of changes in digestive function in people with pulmonary fibrosis. In addition, in this work, residual changes in the morphology of the esophagus caused by stressful situations were studied, that is, morphological changes in the esophageal wall at different stages of pulmonary fibrosis.

Keywords: pulmonary fibrosis, esophageal wall, histological, morphometric, histochemical and immunocytochemical methods.

With esophageal – halcum, a wedge consisting of a muscle connecting the Cardial part of the stomach is calculated, in older people it is 25-30cm in length in men and 23-24cm in women, while wall thickness on average comes from 3-4mm. Access to qizilungach is on average 14-15cm when Kismi yukori is calculated from the margin of the Kurak teeth.

The caterpillar is anatomically composed of three sections:

1. The upper buine sphere is the 5-6sm, a kism that runs from the entrance kism of the qizilungach to its posterior chest interval.
2. The midbrain area is up to -17cm, and is the range of the rubella along the ribcage to the diaphragm.
3. The lower abdominal area is 2-4cm, the area of the rubella that protrudes from the diaphragm and connects to the Cardial cyse.

The pupa begins at the lower edge of the annular mountain of the halcum, that is, at the border of the vertebra VI Buin. The pupa passes into the stomach from the front to the VII pupa in the area of the thoracic spine, from the orca side to the border of the XI pectoral spine. In its yunalish, the esophagus is flanked by a number of members:

- By the front: Yukorida-with trachea in the groin;
 - Below-with the back surface of the right compartment of the heart;
 - At the end – with the back of the left piece of the liver after leaving the diaphragm;
 - By orca: Yukorida-with buine and upper thoracic vertebrae;
 - Below-the rubella IV moves away in the thoracic spine and on its right side the vine veins (v.azygos) and with a chest aorta on the left side;
- In this yunalish, the rubella crosses the right bronchial artery, several intercostal arteries and veins.

- From the right side: above-the right piece of the calcaneal gland;
- In the middle-with trachea and tracheobronchial lymph nodes;
- From the left side: from above with the left piece of the capillary gland;
- In the middle-with mediastenal pleura;
- Below-with the bottom of the stomach;

After pupation, the left errant nerve, arranged in the front wall, passes to the right errant nerve, arranged in the back wall. The abdominal part of the rubella is surrounded by the peritoneum.

There is a physiological narrowing (*angustiae*) in the hymenium 3:

1. In the initial part of the esophagus, that is, in the area of the lower edge of the ring – shaped trough-the esophageal mouth is considered.

2. In the land of the cekirdak, divided into two bronchi, the area intersected by the rubella.

3. In the part of the rubella that goes from the diaphragm to the abdominal cavity (a tugri comes to the Cardial jam).

The wall of kyzylungach consists of 4 floors:

1. Scilly floor;

2. The floor of the mucus (where the glands are located) ;

3. Muscle floor:

4. Tashki floor consisting of connective tissue;

The muscle floor forms the basis of the reddening wall and consists of two floors: 1. Muscle floor that goes the length of the pelvis;

2. Inner circular muscle floor;

Among them is a thin connective tuqima, in which blood vessels and nerves are located. The longitudinal muscles are two barovar thin, about thick, from the muscles in which the circumference is located. The initial part of the muscles of the rubella is the transverse muscles, and in the lower parts it consists of smooth muscles.

Kyzylungach contains the following boylams:

1. Rubella-bronchial boylam-it connects the front left wall of the kizilungach with the base of the ung Bronx;

2. Esophagus – aortal boylam-connects the orca left wall of the esophagus with the aorta ravogi;

3. The Morozov-Savvin boylami connects the distal part of the esophagus with the diaphragm.

The esophagus receives blood from several vessels and forms a good anastomosis among themselves.

1. In the upper part – the fibers of the oymrovosti artery, the upper ribs, through the thoracic arteries and the thyroid artery;

2. In the middle part – a number of ribs, with fibers of the thoracic arteries, bronchial artery and the reddened fiber of the aorta;

3. In the lower cyst-with the lower diaphragm artery and the left artery of the stomach;

Venous blood flow from the rubella to the inferior ventricular vein, pericardial vein, Orcus intervertebral and diaphragm veins orcal venous blood vv. it is poured into the upper umbilical vein through the azygos and hemiazygos. These veins do not have valves, and these veins are associated with the esophagus and gate veins. In order to correctly understand the essence of esophageal diseases, it is necessary to have a clear idea of the structural and functional structure of the floors of the esophageal wall in general pathologically, the specific mechanisms of its formation.

The condition of the esophageal mucosa in the dynamics of the ulcerative process has not been sufficiently studied. At the same time, an integral assessment of the changes that

occur in the floors of the esophageal wall is important, which should be carried out using new methodological approaches [t.K.Gaskina, V.N. Gorchakov 2009]. The effect of various stages of pulmonary fibrosis on esophageal morphology and its function has not yet been fully studied.

This requires further research to identify morphological changes in esophageal walls caused by pathology in the lungs (Burnham E. L., Janssen W. C 2014). This study focuses on studying changes in digestive function in people with pulmonary fibrosis. In addition, in this work, residual changes in esophageal morphology caused by stressful situations, that is, morphological changes in the esophageal wall at different stages of pulmonary fibrosis, were studied (Wang d., Hu B., Hu C. 2020).

Using histological, morphometric, histochemical and immunohistochemical methods, the effect of cytotoxic treatment on the structural and functional properties of the esophageal mucosal epithelium was studied in mice along with the return of changes triggered by the cytotoxic drug. Four injections of cyclophosphamide into the abdominal cavity (400 mg / kg of body weight) led to morphofunctional changes such as thickening of the epithelial layer, an increase in the ratio of its cornea and its relaxation, disruption of the cornification process, hyperkeratosis, cell vacuolism.

In the basal layer layer, interstitial edema, nuclear hypertrophy and parakeratosis were observed. Mitotic activity and NADH-diaphorase activity decreased significantly, cyclophosphamide did not significantly affect the concentration of total proteins. 15 days after discontinuing cytostatic treatment, most of the indices did not return to normal values, indicating deep disorders in the esophageal epithelium.

For an experimental scientific study, 150 rats of the male sex, 3-12 months of age, weighing 200-500 GR in the male genus grown under standard vivarium conditions, were selected. Laboratory animals were kept in the vivarium of the Bukhara State Medical Institute. Rats were cared for in special rooms according to the requirements for rooms where experimental animals were kept (room temperature 20-24°C, humidity 60%, lighting 12 hours).

The animals were given enough water and fed a balanced diet. When preparing and conducting experimental research, it was taken into account that proper care and feeding of laboratory animals is of great importance. Violation of the regime and diet, non-compliance with hygienic measures during feeding leads to a weakening of the animal's body. Increases their susceptibility to various infectious and somatic diseases. The appearance of these diseases during the experiment can lead to a violation of the results of the study and, as a result, to incorrect conclusions.

120 experimental groups participated in the study. 30 control rats were placed in an experimental group with a special density of 0.34 m³ (0.7x0.4x1.2 m) chamber size. There is a special fan chamber in the Ushbu, which ensures accurate air circulation. Rat toxin NO₂ and the ozonized gas chamber are targeted at the ratish fibrosis model, and "nitric oxide and fibrosis" are targeted at the ratish experimental model.

To bring the toxic substance to the permissible norm (the one-time amount in the air is 0.4 mg/m³), exactly 30-40 mg/m³ (I.N. The method proposed by Danilov and hamuallif, 2009) involved two oxides of nitrogen formed by the reaction of nitric acid with zinc.

The preparation of histological preparations consisted of 4 stages and was carried out in traditional ways. For the preparation of preparations, a mechanical rotation Microtome (China) of the yd-315 brand was used, the prepared cuts were painted with hematoxylin and

eosin. To do this, the cuts were soaked in a solution of hematoxylin for 3-5 minutes, and then washed using water.

After the nuclei were stained purple (observed under a microscope), they were stained in eosin solution for 0.5-1.5 minutes, rinsed in distilled water, and level-increasing alcohols (70° to 100°) were used for dehydration. The alcohol was placed consecutively on three parts of the O-xylol to be removed from the incision and infused in Canadian balm.

Information about macroscopic and microscopic changes in esophageal parenchyma caused against the background of pulmonary fibrosis makes it possible to obtain autonomous information when choosing the amount of pomegranate danagi oil and taking control of its pharmacodynamics, knowing the mechanisms of their interaction, when creating the correct tactical treatment criteria.

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