

616.24-001+616-092.4

© , 2012.

... , ... , ... , ... , ... (... - ...), « ... ».

THE EXPERIMENTAL MODEL OF ACUTE LUNG INJURY

A.V. Kubishkin, N.Yu. Novikov, . . Birkun, E.N. Nesterov

SUMMARY

The experimental model of an acute lung injury can be generated by endotracheal instillation to white non-breeding rats a suspension $5 \cdot 10^{11}$ microbe's bodies of pathogenic staphylococci that leads to an appearance of the acute inflammatory and destructive processes in their air-blood barrier. Ultramicroscopic changes like a combination and simultaneous progress of an inflammation, destruction and active regeneration in the alveolar epithelium, capillary endothelium and the interstitium have been detected. Destructive and inflammatory changes have had an identical course, similar dynamics and severity in the alveolar and interstitial parts of air-blood barrier during the experiment.

. . . i , M. . i , . . . , . . .

$5 \cdot 10^{11}$

()

()

Stafilococcus aureus 0,5

10^9

1 -

209 ,

()

1- , 3- 6-

10%

1 1 0,5 .

5-7 ,

[1,2,4].

[3].

CX-41,

Olympus

Olympus C5050Z

DP-Soft 3.1.

2,5%

-7(.),

(.1). 6-

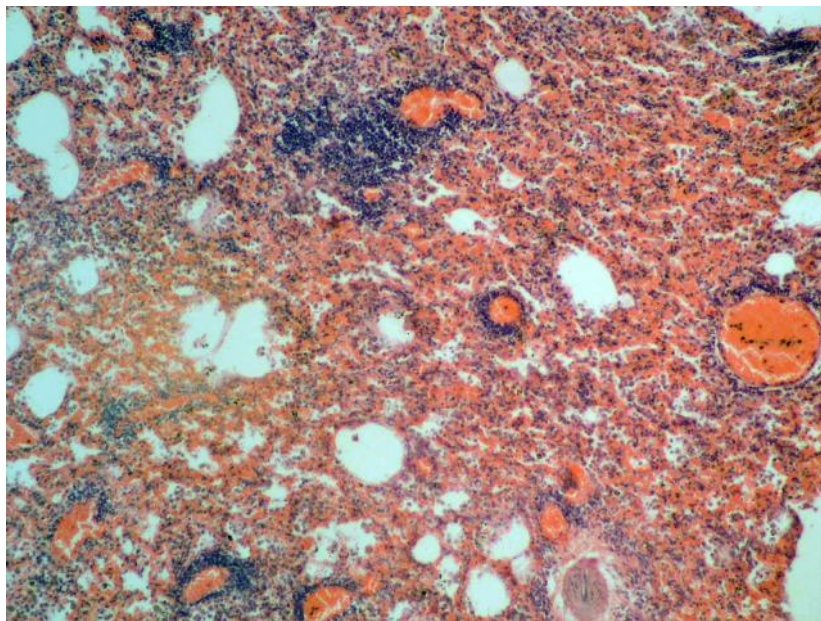
-100(.) JEM 1010 (JEOL).

1-

1-

3-

3- 6-

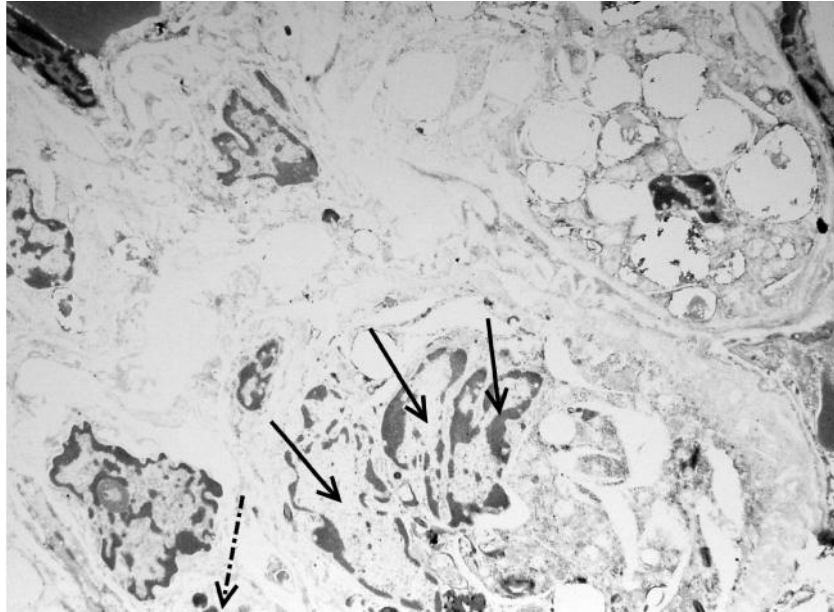


.1.

. 40.

6-

(.2).



2. (). ().
2000.

10⁹ 0,5 ()
1- , 3- 6-
6-

1.

2. Bastarache J. A. Development of animal models for the acute respiratory distress syndrome /Julie A. Bastarache, Timothy S. Blackwell // Disease Models & Mechanisms. -2009. - 2 (5-6). -P. 218-223.

3. Dhanireddy S. Mechanical ventilation induces inflammation, lung injury, and extra-pulmonary organ dysfunction in experimental pneumonia / S. Dhanireddy, W. A. Altemeier, G. Matute-Bello et al. // Lab. Invest. - 2006. - 86. - . 790-799.

4. Proudfoot A. G. Human models of acute lung injury /Danny F. McAuley, Mark J. D. Griffiths, Matthew Hind// Disease Models & Mechanisms. – 2011. - .4. –P. 145-153.