

COMPARATIVE HISTOLOGY AND PHYSIOLOGY OF THE RESPIRATORY EPITHELIAL CILIATED APPARATUS

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SUMMARY

One of the main objectives of rhinopathology treatment is to repair and restore the function of the morphological structures of the nasal cavity and paranasal sinuses ciliated epithelium, since the ultrastructural abnormalities are a key step in the pathogenesis of rhinosinusitises. However, medications used for treatment sometimes have an inhibitory effect on the ciliary motion and can exacerbate the damage of the ciliated epithelium. It is possible to achieve the anticipated effect of the drugs, primarily, if there is a fundamental knowledge of physiology and organization of the ciliated apparatus structures. Obviously, the development of new methods and treatment regimens should be focused on evidence-based experimental models in vivo. Decrease of the error rate during the extrapolation of the experimental results in the clinic depends on the quality characteristics of the model based on the data of a comparative histological and physiological investigation.

in vivo.

[11, 15, 30, 36, 38].

[3, 14,

16, 20].

[28, 30, 33, 34, 37, 38].

[4, 6, 7, 8].

[7].

[21, 23, 27, 29, 32].

[8].

[27, 32].

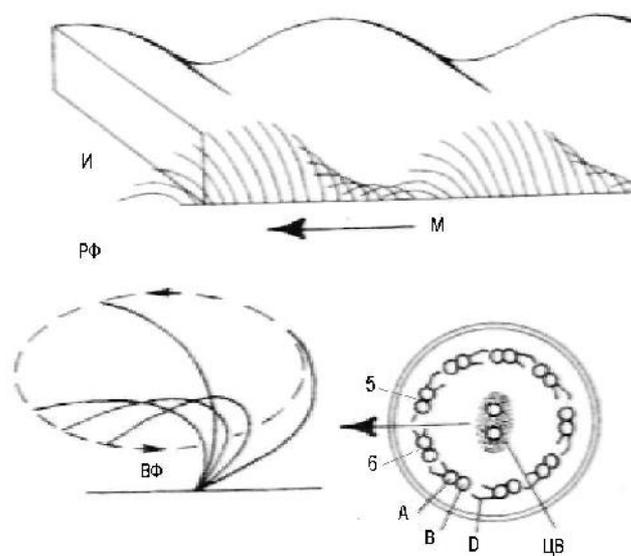
[7, 17, 21].

50

200 (0,15-0,3) 5-8

[2, 7, 12].

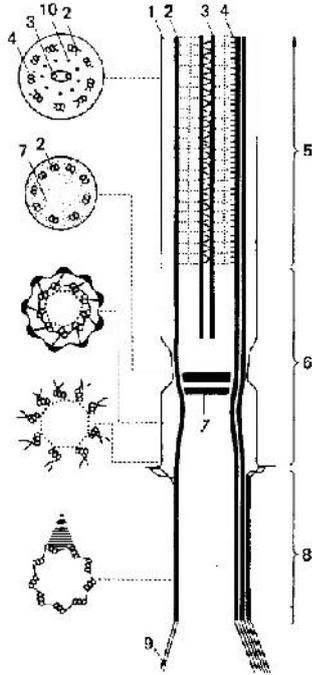
(.1).



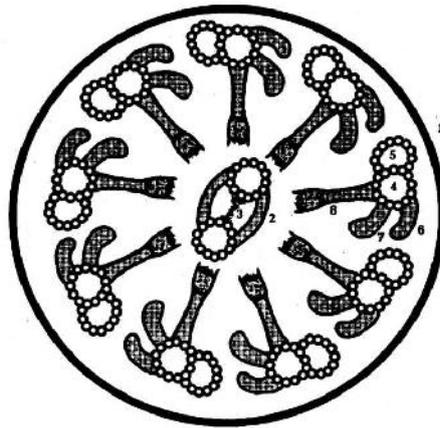
.1.

; 5- 6- (., 2001).

); (), () [5, 9, 19, 21].



. 2.
 1 - ; 2 - ; 3 - ; 4 - ; 5 - ; 6 - ; 7 - ; 8 - ; 9 - ; 10 -
 (Gibbons).



. 3.
 1 - ; 2 - ; 3 - ; 4 - ; 5 - ; 6 - ; 7 - ; 8 - ; 9 - ; 10 -
 (4-5)
 10-25
 (40 000).
 « »

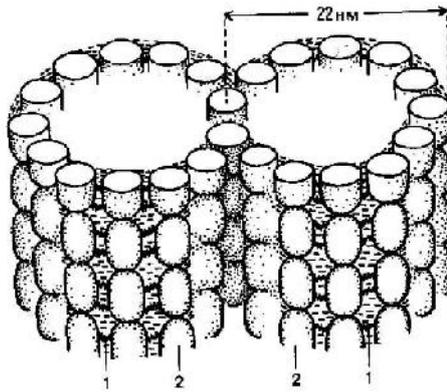
Mg⁺²

Ca⁺²

24

22, 25].

(. 3) [10, 18, 21,



. 4.

: 1-

; 2 - «

»

[8, 9, 17].

[24, 26].

invitro

[7, 9, 23, 32, 35].

([9, 25].

).

[15, 20, 29].

300 ,

» [21].

(,),

[8, 27, 32, 35].

[7].

a a

« » ; [1, 21, 26].

23%) (1 - 6%). (70 - 80%). (13 -

().

8% [26, 35].

[8, 12, 24].

[31, 36].

[8].

, 1982. - 240 .

6. . . . / . . . -

[35]. , (, , / . . . , 2003. - 104 .

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8. . . . // . . . 1957. 2. - 100-110.

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invivo, . . . , 1990. - 144 .

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