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Title: Diagnostic and prognostic value of CD4, CD8, CD4/CD8 definition in blood at pneumonia of various etiology

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Body: Aim: to define diagnostic value of CD4, CD8, CD4/CD8 at community-acquired pneumonia (CAP) considering etiology and prognosis. Materials and methods: 20 patients with pneumonia, general clinical researches, calculation of subpopulations of lymphocytes CD4, CD8 and CD4 /CD8 by cytoflowmetre. Results: 4 groups of patients with CAP (I – viral (n=6), II – bacterial (n=6)), III –pneumonia accompanying with HIV (n=5), IV – healthy population (n=8). Groups are comparable on sex, age, terms from the beginning of disease. In clinical picture at patients with bacterial CAP (II group) symptoms of general intoxication, general and local inflammation prevailed. While for patients of I, III, IV groups the expressed dyspnea, SaO₂<90 %, resistance to traditional antibiotic therapy, polyorganic insufficiency, revealing of atypical agents, disseminational, interstitial character of inflammation are characteristic.

Level of lymphocytes and their subpopulations

Group (n)	CD4, mcl ⁻¹	CD8, mcl ⁻¹	CD4/CD8
I (6)	332,3±46,7*	255,5±33,8*	1,33±0,83*
II (6)	1020±132,7*	568±152,7*	1,75±0,32*
III (5)	42,6±11,6*	800,2±115*	0,053±0,014*
IV (8)	1293±375,9*	619,5±112,5	1,9±0,24*

*- pI-II-III-IV<0,05, I-gr I, II-gr II, III-gr III, IV-gr IV

Conclusion: 1)level of CD4, CD8, CD4/CD8 is fast and exact prognostic and differential criterion of pneumonia of various genesis, including at development of ARDS; 2)every virus pneumonia passes with the immunodeficiency phenomena; 3)at reduction of CD4 less than 200 mcl⁻¹ it is necessary to search the reason of serious immunodeficiency, to remember joining of secondary, atypical flora and to prescribe adequate therapy.

