

O228

Abstract (oral session)

The change and significance of immune function in patients with pulmonary tuberculosis complicated by COPD

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Objective: To explore the change and its significance of immune function in patients with pulmonary tuberculosis complicated by COPD. **Methods:** The immune function of 118 cases of pulmonary tuberculosis with COPD (study group) hospitalized in January, 2008 to January, 2011 were detected, and to compare the results with 120 cases of patients with pulmonary tuberculosis (control group of TB), and with 110 cases of healthy people (control group of healthy people) who were in the hospital during the same period. The expression Percentages of NK cells and T lymphocyte subsets in peripheral whole blood samples were detected by flow cytometry double-labeled antibody. The levels of IgM, IgG, IgA were measured by immunoturbidimetry. The levels of sIL-2R, TNF-alpha, IL-6, IFN-gamma were measured using the sandwich ABC-ELISA method in all patients. **Results:** The percentages of NK cells, CD4 and CD4/CD8 ratio in the study group and in the control group of TB were lower than those in the control group of healthy people ($P<0.01$). The level of CD8 was higher in the study group than those in the control group of healthy people ($P<0.001$). The level of CD4 and CD4/CD8 ratio in the study group were lower than those in the control group of TB ($P<0.001$). The levels of IgM, IgG, IgA in the study group were lower than those in the control group of healthy people ($P<0.05$). There were no significant differences between the study group and the control group of TB on the levels of IgG, IgA ($P>0.05$). There were no significant differences between the control group of TB and the control group of healthy people on the levels of IgG, IgM ($P>0.05$). The levels of sIL-2R, TNF-alpha, IL-6, IFN-gamma in the study group and in the control group of TB were higher than those in healthy people ($P<0.05$). The level of sIL-2R, IFN-gamma in the study group were higher than those in the control group of TB ($P<0.05$). There were no significant differences between the study group and the control group of TB on the level of TNF-alpha, IL-6. **Conclusion** The patients with pulmonary tuberculosis were mainly impaired in cellular immunity, humoral immune damage also play a role. The patients with pulmonary tuberculosis complicated by COPD were impaired both in cellular immunity and in humoral immunity, and its extent of immune impairment is more serious than that of the patients with pulmonary tuberculosis.