THE USE OF SELECTED BIOMARKERS IN ESTABLISHING DIAGNOSIS OF EXUDATIVE TUBERCULOUS PLEURITIS.

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The aim of the study was evaluation the usefulness of biological markers in the differential diagnosis of tuberculous pleurisy.

Methods:The study was prospective, non-randomized. It consisted of 203 inpatients (117 M and 86 W with median age 65 years) with pleural fluid of unknown aetiology detected by CXR or CT of the chest. The entire group was divided into 5 subgroups : tuberculous effusion - 44 fluids (21.7%, 33 M and 11W); malignant effusion - 88 fluids (43.3%, 37M and 51W); parapneumonic effusion/ empyema - 35 fluids (17.2%, 24M and 11; transudate fluid - 30 fluids (14.8%, 19M and 11W); and 6 other fluids. The following biomarkers were evaluated : ADA, INF-γ, IL-2, IL-2sRα, IL-12 p40, IL-18, IL-23, IP-10, Fas-ligand, MDC, TNF-α in created four diagnostic schemes. Scheme A - tuberculous fluids compared with all other fluids; B - tuberculous effusions compared with other exudative fluids; C - tuberculous effusions compared with malignant effusions; D - tuberculous effusions compared with parapneumonic effusions. The univariate analysis were conducted.

Results and Conclusions : The best biomarker in every scheme was INF-γ with sensitivity 97% and specificity of 98% (PPV of ≥ 95% and a NPV ≤ 98% for the threshold concentration of IFN-γ 118.7 [pg / ml] with the AUC of 0.99. Next in order were cytokine IP-10, FAS ligand and ADA