## PNEUMOCONIOSIS: MODERN APPROACH TO THE PROBLEM

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**Introduction.** In 1866 F.A. Zenker introduced a term «pneumoconiosis» (from Gr. pneumon-lung, conia – dust) it is chronic lung disease which is caused by continuous breathing in industrial dust pneumoconiosis are among the most wide spread professional diseases. Pneumoconiosis is most likely diagnosed with the coal workers of asbestos, machine-building, glass and some other industries. Foreign authors reveal some correlation between the disease and working experience: if working experience is less than 20 years, silicosis appears in 3 % of cases, if the experience in approximately 25 years, the disease will be detected amount 12 % and among people with the working experience of 30 years and more, the disease is to trouble 17 % of cases.

Because of that **the aim of our work** was analyses published data and a studying the importance of presented nosological unity in the field of professional pathology.

**Materials and methods.** Studying all possible published resources including the internet resources.

Results and their discussion. Busing on the published data it has been detected that according to MKB (1976) there were distinguished 6 groups of pneumoconiosis by etiological principle: silicosis, silicatosis, heavy metal conioses, carboconioses, pneumoconiosis caused by mixed dust. Pathogenesis of the development of the most widespread out of all the pneumoconiosis is silicosis caused by breathing in dust (which contains silica), its entering airways and directly teeth ridge. Dust particles are captured with teeth ridge macrophage which enables fibroblasts with excessive collagen formed and pneumoconiosis development. Thus, a nodal bilateral process is developing. A main part in pathogenesis is played by in immunity system problems: a lot of macrophages dies, enabling T-killers which contribute to fibrosis development. The clinical symptoms of pneumoconiosis are non-common: dyspnea, coughing, chest ache, there is no changes in blood analysis. That is why WHO recommends the workers who experience dust effect to have X-ray examination aiming at early diagnosis of pathological lung process. There is no specific therapy for pneumoconiosis. The disease prevention is first and foremost connected with working conditions improvement, technical modernization of industrial processes to reduce dust concentration in working area, improvement of means of individual protection of respiratory system.

**Conclusions.** The published data analysis has shown the relevancy of the problem of pneumoconiosis development among professional diseases.