DIAGNOSES ESTABLISHED BY MICROSCOPIC EXAMINATION OF LUNG TISSUE SPECIMENS COLLECTED DURING FORENSIC AUTOPSIES AT MEDICAL UNIVERSITY OF WROCLAW IN 2011

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Introduction: During autopsies, it is mandatory to check lungs, and very often they undergo microscopic examination, too. The examination aims at in depth analysis of macroscopically visible changes. Big number of examined cases allowed it to estimate health condition of current Polish population, especially the most common kinds of lung pathologies. Morphologic description of diagnosed specimens allowed it to depict the crucial features of given pathologic changes. **Material and methods:** Analysis was performed of microscopic lung specimens examination at the Department of Forensic Medicine Department of Medical University of Wroclaw in 2011. Statistical data were enriched with morphologic description of the lung changes accompanying various diagnosed pathologies. **Results:** Out of the total of 833 cases of forensic autopsies, the examination was performed only in 579 cases. The most common established diagnoses were hyperemia and edema. Among pathologic diagnoses dominated various kinds of inflammations and emphysema. There was a high rate of cases diagnosed with tuberculosis that were established in approximately 2% of cases. A lot of diagnosed changes were connected with prior trauma, intra-alveolar bleedings and fat embolism included. There was a high rate of lung fibrosis and cancer. In most cases there were visible morphologic changes of the lungs. **Conclusions:** Finding the microscopic changes resulting from processes and changes appearing in lungs in different pathologic states allows physicians to better recognize the core of the illnesses they fight in their clinical practice, their rate of occurrence. The forensic pathologists benefit from it because it facilitates finding out the cause of death, especially by confirming the trauma-related death. The results of the analysis point out at the high importance of microscopic examination of tissues as enabling the establishing of final diagnosis by autopsy - that is in practice often cancelled in Poland with the intention to cut costs. The high clinical importance of pneumonia was confirmed. Although for many years the tuberculosis vaccinations in Poland are being performed, the incidence of this illness stays quite high. This constitutes a high risk of exposition of medical personnel to infection, especially those performing forensic autopsies, which in turn confirms that it is proper to treat tuberculosis as medical personnel profession-related disease.