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# Proceedings

## PS01.03 | ePoster Session I

# Apoptotic Activity of Cells of Thymus and Spleen in Children Born To Women Who Led an Unhealthy Lifestyle

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*Introduction/ Background*

The health of children largely depends on the health of parents and their lifestyle.

*Aims*

The purpose – to identify the apoptotic activity of cells of thymus and spleen in children born to women who led unhealthy lifestyle.

*Methods*

The material of the study was the tissue of thymus and spleen of children born to women who led a sedentary lifestyle, smoked, drank alcohol and ate foods containing tartrazine. Investigated material was divided into three groups: I – cases of stillbirth (n=14); II – cases of autopsy of children who died before the age of 6 months (n=38); III – cases of autopsy of children who died at the age from 6 months to 1 year of life (n=15). The cells in apoptotic state were detected using monoclonal antibodies to CD 95 in the fluorescent microscope «Axioscop-40». Immunohistochemical investigation was performed using the indirect Koons method in modification of M. Brosman (1979). Mean values of indicators in groups were compared using a nonparametric U-criteria Mann-Whitney.

*Results*

In thymus of children was observed a significant (p=0,000345) increasing the number of cells in apoptotic state in group II (35,61±0,701) in comparison with the group I (31,29±0,794) and in group III (42,13±1,073) in comparison with the group II (p=0,000014). In spleen was found a significant (p=0,010395) increasing the number of cells expressing receptor for CD 95 in group II (19,89±1,055) in comparison with group I (14,50±1,550) and in group III (26,73±1,469) in comparison with group II (p=0,001693).

*Conclusion:* Unhealthy mother lifestyle (sedentary lifestyle, smoking, drinking alcohol and eating foods containing tartrazine) leads to increasing apoptotic activity in organs of immune system (thymus and spleen) of children with the increasing of their age.