

## PATHOMORPHOLOGY OF ADRENAL GLANDS AFTER ACUTE AND CHRONIC FORMS OF HYPOXIA IN THE CONTEXT OF PERINATAL DEATH

Mavlyan-Khodjaeva A.R

Allaberganov D. Sh

*Tashkent State Medical University Department of Pathological Anatomy, Tashkent, Uzbekistan*

### INTRODUCTION

Various causes of perinatal lethality differ by severity and duration of stress reaction. Hence, adrenal glands show different histopathological patterns depending on mechanisms of thanatogenesis and may be a key to understanding perinatal death.

Methods. We analyzed anamnesis and autopsy materials of 25 infants with chronic or acute hypoxia. We assessed the structure of main morphofunctional zones of adrenal glands and recorded characteristic changes.

Results. Causes of perinatal death were asphyxia, congenital anomalies, lung disorders, infectious diseases and complications of pregnancy and labor. Key factors of thanatogenesis were chronic intrauterine hypoxia (52%) and acute intranatal hypoxia (48%).

Pathomorphological examination in fetuses from mothers with chronic intrauterine hypoxia revealed sclerotic processes and hyperplasia of fascicular zone. In chronic hypoxia, adrenal capsule hemorrhage occurred in 76,9% of cases, in acute hypoxia – in 41,7%. In the first group, hemorrhages affected all cortical zones and medullary substance. Lipid depletion was seen in all chronic hypoxia cases and in half of acute hypoxia cases.

Thus, adrenal gland reaction is a differential marker between chronic hypoxia (placental insufficiency, intrauterine infection) and acute hypoxia as a complication of labor.

Conclusion. Although microscopical findings in chronic and acute hypoxia are not specific, their frequency and severity allow conclusions about the nature of thanatogenesis. In chronic hypoxia, adrenal glands showed sclerosis, hyperplasia of zona fasciculata, capsule and parenchymal hemorrhages, and lipid depletion. In acute hypoxia, capsule hemorrhages and partial lipid depletion predominated.

Hence, adrenal glands serve as a key marker for differential diagnosis of chronic intrauterine pathology and exclusively intranatal pathology.

Keywords: adrenal glands, perinatal death, pathomorphology.