

**REVIEW on PhD Thesis
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**RESEARCH ON THE BIOCHEMICAL AND LABORATORY
ANALYSIS CHANGES IN NEWBORN BABIES
WITH ESOPHAGEAL ATRESIA**

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Abstract. Objective. The main objective of this research theme was to determine the biochemical and laboratory analyzes changes in newborns with esophageal atresia.

Material and methods. For wet biochemistry analyzes assessing apparatus was used Hitachi 717 and 917. To obtain results for the dry biochemistry has been used Ektachem-Vitros 250 analyzer, and for determining the blood counts and the Sysmex SF-3000 systems were used, and D-Cell 60. For protein electrophoresis, electrophoresis system was used. In the study were evaluated in terms of analytical results (biochemical lab) 15 patients born with esophageal atresia. Add to this a total of 30 cases of healthy newborns, considered the control group. For the both group laboratory analyzes were collected immediately after their birth specifying that the lot of cases maneuver was performed prior to surgery malformation correction to detect and correct the presence of amendments parameters examined.

Results. In all cases studied in 15 cases with esophageal atresia, 14 cases had lower values of protein level, 6 patients was low blood sugar, 7 patients newborns had low lipemia, direct bilirubin and total bilirubin was increased to a total of 13 patients, 5 patients had higher values of the blood urea and TGP's, 11 patients had hypocalcemia. The purpose of this paper is to emphasize that a correct diagnosis and early performed immediately after birth, followed by metabolic imbalances of electrolyte and acid-base imbalances, correcting hypoxia and establishment of specialized surgical treatment cases with good prognosis ensure patient survival with a normal life later.

Key words: Esophageal atresia, lower tracheoesophageal fistula, upper cul de sac, hypoglycemia, hypoproteinemia.