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PARVALBUMIN AND β -III-TUBULIN EXPRESSION IN CELLS OF THE SUBVENTRICULAR ZONE DURING THE NEONATAL PERIOD OF RATS

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The study aimed to reveal the calcium-binding protein parvalbumin and β -III-tubulin, a marker of neuronal differentiation of stem cells, in cells of the subventricular zone during the neonatal period of rats at 5th and 10th days after birth. The subventricular zone is shown to contain cells expressing β -III-tubulin, which are represented by one morphological cell type and are immature differentiating neuroblasts of the Type A. The number of these cells remains constant during the neonatal period and is more than 30% of the total number of cells in the subventricular zone. A significant part of differentiating neuroblasts was also shown to express parvalbumin. The number of these cells also remains constant throughout the entire neonatal period and is more than 20% of the total cell population present in the subventricular zone.

Keywords: subventricular zone, parvalbumin, β -III-tubulin, neuroblasts, neonatal period