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NUCLEAR ULTRASTRUCTURE OF HUMAN MESENCHYMAL STEM CELLS DURING DIFFERENTIATION

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General characteristics of nuclear ultrastructure of human non-differentiated mesenchymal stem cells (MSCs) and MSCs during their adipogenic, chondrogenic and osteogenic differentiation are presented. The most pronounced ultrastructural changes in induced MSCs concerned the shape of the nucleus and the morphology of the chromatin compartment, whereas no noticeable morphological changes in the interchromatin space were observed.

Key words: cell nucleus, human mesenchymal stem cells, differentiation