The Role of Myeloid Suppressor Cells in the Processes of Formation of Immune Tolerance During Pregnancy

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Myeloid-derived suppressor cells (MDSC) are one of the main cell populations involved in the regulation of the immune response by suppressing it in pathologies, as well as during pregnancy. Taking into account the multidirectionality of MDSC in the implementation of its immunosuppressive functions, the article collects the available data on the impact of MDSC on various components of innate and adaptive immunity. This review presents an analysis of current studies on the mechanisms of suppression of the immune response of MDSCs, as well as an assessment of the role of MDSCs in maintaining immune tolerance during pregnancy. In particular, the study provides data on MDSC in various pathological conditions during pregnancy, analyses of MDSC in peripheral and umbilical cord blood, and the correlation between these cells and the immune status.

Keywords: autoimmune disorders, pregnancy, immune tolerance, immunosupression, myeloid-derived suppressor cells, preeclampsia, *in vitro* fertilization