

## **Abstract**

Microchimerism is defined as the presence of small amount of genetically distinct cells in one individual. It most often arises during pregnancy and breastfeeding. It can also arise from blood transfusion or organ transplantation. During pregnancy there occurs a bidirectional migration of cells through the placenta between the mother and the fetus. Cells which are transferred during pregnancy and breastfeeding can persist in the offspring until adulthood. During breastfeeding, a big number of immune cells is transferred to the offspring via mother's milk. These cells protect the offspring against pathogens and are involved in modulation of its immune system. Fetal cells persist in mother organism even decades after giving birth and can have long-lasting effect on mother's health condition. These fetal cells can help to regenerate mother's damaged tissues, but they can also contribute to the development of serious autoimmune diseases.