

The findings indicate that the hierarchy of mesenchymal cells (MDC, pericytes, T cells) and immunoglobulins (IgM, IgG) that accompanies differentiation of epithelial cells from immature to mature and aged phenotype is highly likely to result in novel therapies for tissue dysfunctions characterized by permanent tissue immaturity (muscular dystrophy) or accelerated aging (degenerative diseases).

The association of mesenchymal cells with immunoglobulins has been studied for decades. The importance of mesenchymal cells in immune functions has been demonstrated by a number of studies. It has been shown that mesenchymal cells are involved in the synthesis, degradation and transport of various immunoglobulins, including IgM, IgG, IgA, IgM, IgA, IgG, IgG, IgM, IgG, IgG, IgG, IgG, IgG, IgG, IgG, IgG, IgG, IgG, IgG, IgG. Over a period of two decades, there has been heightened interest in the role of highly specialized mesenchymal cells, including fibroblast-derived vascular pericytes, monocyte-based cells (MDC), and lymphocytes, in stimulating the proliferation, differentiation, and aging of tissue-specific cells in different epithelial, parenchymal or muscle tissues. Alexis Carrel's research over seven decades ago provided evidence that leukocyte extracts could promote the production of growth-inducing substances from these cells to specific factors. Our research indicates that the role of mesenchymal cells in maintaining homeostasis of normal tissues (and cancer) is not well understood. The nature of interactions between mesenchymal and tissue-specific cells may vary depending on the type of tissue, as might occur during a critical period of development where cell growth and death seems to be relatively rapid. During the final stage of cell differentiation, cells break down DNA and die. Apoptosis is an active process, and it is caused by p53, which prevents cell growth and activates and represses gene transcription. The proapoptotic function of phosphorylation is regulated by genes that expressly regulate ras proto-oncogene. Mutated cellular cells with defective RNA expression display a defect in the signal transduction pathway regulating p53 (bax) or anti-apoptosis. The cross-sectional analysis of human ectocervix reveals how the connections between mesenchymal and epithelial cells differ from one another. Despite their differences from immature counterparts, the data presented indicate that mesenchymal cells and immunoglobulins are highly differentiated and associated with aging.

Remarkable conclusions Our findings suggest that the hierarchy of mesenchymal cells (MDC, pericytes, T cells) and immunoglobulins (IgM, IgG) accompanies differentiation of epithelial cells from immature to mature and aged. Although not exclusively immune, these interactions (Fig. 6) reflect a more general mechanism of immune-compromised immune responses in which immune systems regulate epithelium differentiation, as seen in our research on how they influence immune system regulation.