

PANCREATIC STELLATE CELLS

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ABSTRACT

In the human body, the stellate cells consist of vitamin-A storing cells in the various organs. One of these cells located in the pancreas. Pancreatic stellate cells are found in the periacinar, periductal and perivascular regions of exocrine pancreas. There are two forms of these cells to be quiescent and active. Stellate cells are quiescent in normal pancreas, and can be identified with the vitamin-A containing lipid droplets in the cytoplasm. Quiescent pancreatic stellate cells maintain normal tissue architecture by regulating of synthesis and degradation of the extracellular matrix proteins. In response to pancreatic damage, quiescent stellate cells transform into active state, myofibroblast-like phenotype, which lose their vitamin-A stores. It is known that pancreatic stellate cell responsible for the development of fibrosis in pancreas diseases such as chronic pancreatitis and pancreatic cancer. Understanding the process of pancreatic stellate cell activation suggests new drugs for the treatment and prevention of these diseases.

Keywords: Stellate cell, Pancreas, fibrosis.

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