

Immunohistochemical localization of advanced glycosylation end products (AGEs) in tissues from STZ-induced diabetic rats

蘇順景

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摘要

Abstract

Advanced glycosylation end products (AGEs) accumulate on long-lived extracellular matrix proteins and have been implicated in the micro- and macrovascular complications of diabetes mellitus. Within the arterial wall, AGE-modified proteins increase vascular permeability, inactivate nitric oxide activity, and induce the release of growth-promoting cytokines. Recently developed anti-AGE antibodies were used in an immunohistochemical analysis of coronary arteries obtained from type II diabetic and nondiabetic patients. High levels of AGE reactivity were observed within the atherosclerotic plaque present in vessels from selected patients with diabetes. Considered together with the pathological effects of AGEs on vascular wall homeostasis, these data support the role of advanced glycosylation in the rapidly progressive atherosclerosis associated with diabetes mellitus.