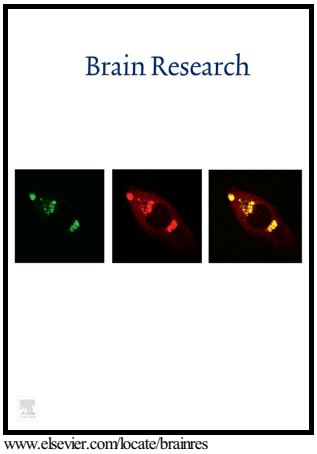

Impairment of neurovascular coupling in Type 1 Diabetes Mellitus in rats is prevented by pancreatic islet transplantation and reversed by a semi-selective PKC inhibitor

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Impairment of neurovascular coupling in Type 1 Diabetes Mellitus in rats is prevented by pancreatic islet transplantation and reversed by a semi-selective PKC inhibitor

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Abstract

Streptozotocin (STZ)-induced chronic hyperglycemia has a detrimental effect on neurovascular coupling, linked to increased PKC-mediated phosphorylation and PKC isoform expression changes. Here, we sought to determine whether: 1) selective PKC-α/β/γ inhibitor, GF109203X, could reverse the effects of chronic hyperglycemia on cerebrovascular reactivity; 2) pancreatic islet transplantation could prevent the development of cerebrovascular impairment seen in a rat model of Type 1 Diabetes.