

عنوان مقاله:

Effect of Ganoderma lucidum hydroalcoholic extract on insulin release in rat-isolated pancreatic islets

محل انتشار:

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خلاصه مقاله:

Objective: Ganoderma Lucidum (G. Lucidum) has been suggested to increase serum insulin level. This study was undertaken to investigate its direct effect on the islets of Langerhans. Material and Methods: Male albino Wistar rats were anesthetized and the islets were isolated after digestion of the pancreas with collagenase. The islets were incubated for 60 min in Krebs bicarbonate buffer containing 3 or 10 mM glucose in the presence of hydroalcoholic extract of G. Lucidum (1 mg/ml), 3-isobutyl-1-methylxanthine (IBMX, 100 μ M) or vehicle. Results: Exposure of islets to the extract increased insulin secretion at basal (3 mM) glucose concentration. Increase of glucose concentration to 10 mM resulted in a significant increase in the rate of insulin secretion. While the IBMX could augment insulin release evoked by 10 mM glucose, the extract failed to modify it. Conclusion: Our results demonstrate that G. lucidum acts directly on the Langerhans islets to increase basal insulin release.

کلمات کلیدی:

Ganoderma lucidum, Insulin, Isolated islets, Rat

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