Islet Amyloid Polypeptide In Patients With NIDDM

Thesis

Submitted for partial fulfillment of
The M.Sc. Degree of **Internal Medicine**

By

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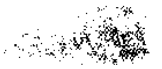

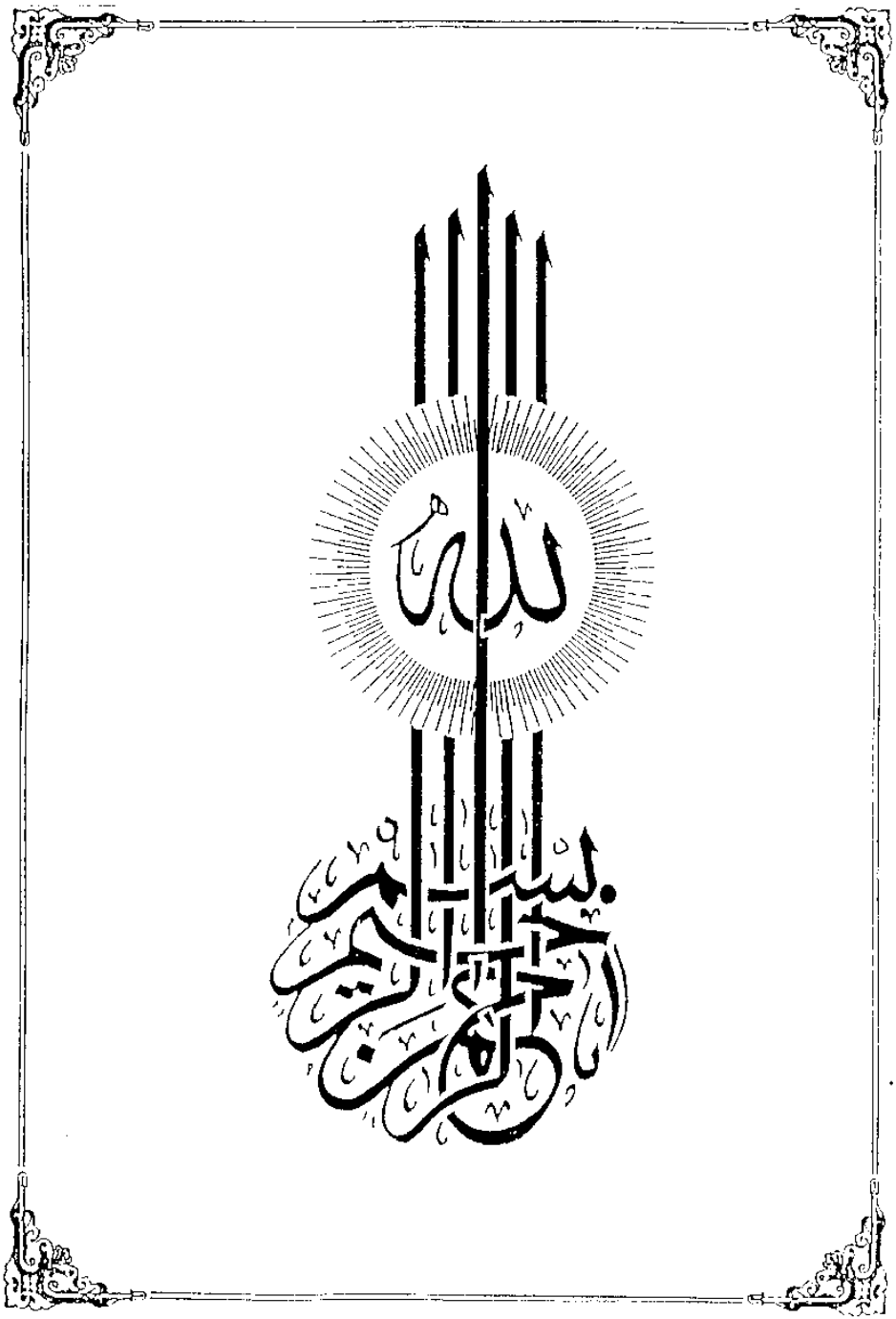

بسم الله الرحمن الرحيم

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Introduction :-

Amylin is a recently discovered 37 amino acid polypeptide, also called islet amyloid polypeptide (IAPP), or diabetes-associated peptide (DAP) ***(Edwards et al., 1992).***

Islet amyloid polypeptide (amylin) is the major protein component of amyloid deposits in pancreatic islets of type II (non-insulin dependent) diabetic patients. It is co-produced and co-secreted with insulin from islet beta-cells. It can act as a hormone in regulation of carbohydrate metabolism and is implicated in the pathogenesis of islet amyloid formation and of type II diabetes mellitus ***(Hoppener et al., 1994).***

Amylin impairs beta cell function during type II diabetes by damaging and covering beta cells through polymerization of amylin, also it antagonizes the insulin action on glucose metabolism by increased hepatic glucose production and by decreasing muscle, but not adipocyte glucose uptake ***(Koopmans et al., 1992)***

Aim of Work :-

The aim of this work is to study amylin in type II diabetics and whether the abnormal secretion of this polypeptide is involved in the development of insulin resistance and impaired insulin secretion in type II diabetes.

Review of Literature