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# Hypoglycemic attacks in children with I.D.D.M (Frequency, predisposing factors and sequalae on intellectual functions and school achievement)



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By

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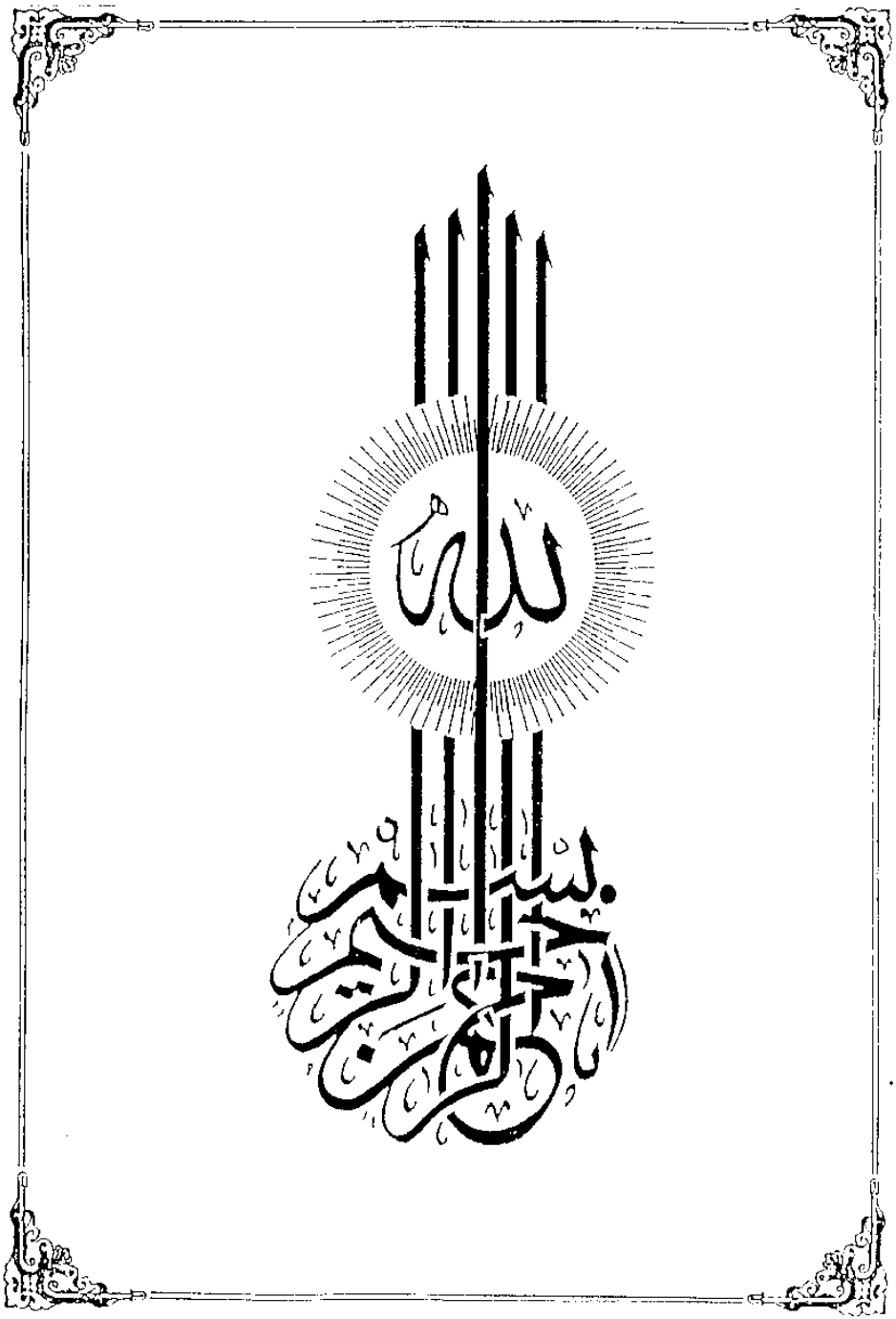

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# List of contents

# List of tables:

# List of figures

# Introduction and aim of work

# Introduction

Hypoglycemia is the most common endocrine medical emergency in patients with diabetes mellitus as a result of hypoglycemic therapy ***(Service, 1995).***

Mild, occasional hypoglycemia is one of the prices to be paid for the achievement of good metabolic control ***(Bell and Cutter, 1994).*** Severe hypoglycemia, defined by the occurence of coma, convulsions, or both, is a major complication of insulin dependent diabetes mellitus. It has potentially serious consequences as brain damage and even death ***(Cox et al., 1994).***

Recurrent or prolonged hypoglycemia may result in mental retardation and seizures. Such hypoglycemia is an important treatable cause of retardation ***(Franchi, 1986).***

In addition to recurrent morbidity and some mortality, hypoglycemia engenders both fear and guilt and is the limiting factor in attempts to achieve euglycemia in IDDM ***(Clarke et al., 1991).***

Frequency and risk factors of severe hypoglycemia is underestimated in clinical practice ***(Bell and Cutter, 1994).*** A few studies mostly of adults, have suggested that in 30% to 40% of

patients with IDDM severe hypoglycemia may occur at some stage *(Gale, 1986).*

However, little information is available concerning such episodes in children with IDDM *(Daneman et al., 1989).*

Cognitive dysfunction is increasingly recognized as a possible complication of insulin-dependent diabetes mellitus (IDDM) *(Christopher et al., 1992).*

However, it was not possible to test whether severe hypoglycemia was the major cause of cognitive deficit, unrelated to diabetes *(Deary et al., 1993).*

# Aim of the work:

The aim of this work is to study the hypoglycemic attacks in children with insulin-dependent diabetes mellitus in an effort to:

1. Define the frequency of this problem in children with IDDM.

2. To evaluate factors associated with the occurrence of hypoglycemic episodes (age, sex, age of onset of the disease, duration of the disease, type and dose of insulin therapy, metabolic control, and the precipitating factors "missed meals, over-dosage, exercise, stress, infection").

3. To study the effect of hypoglycemic attacks on intellectual function and school achievement in the diabetic children.

# Literature review