

## Neurology & Brain Injury 2019 - Prevalence of epilepsy in children with IDDM and relation to anti GAD65 antibodies

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### Abstract

Insulin dependent diabetes mellitus (IDDM) is a common condition in children and adolescents worldwide and so is epilepsy. Recently, there were increasing reports suggesting a potential association between IDDM and the occurrence of epilepsy. Their association might represent simply a chance to relate their underlying mechanisms. However, the cause-effect relationship is not well defined. IDDM pediatric patients have characteristic clinical and biochemical features, including the positivity of glutamic acid decarboxylase antibodies (anti-GAD 65). Literature from other countries has shown the increased prevalence of seizure disorders in this group of patients. However, despite the high prevalence of this disease in Saudi Arabia, no studies have investigated this relationship. Moreover, literature lacks studies investigating IDDM characteristics contributing to this relationship, including anti-GAD 65. In this study, we are aiming to determine the prevalence of epilepsy among IDDM children age <15 years old, and compare the positivity of anti-GAD 65 amongst them. Hence, we tried to establish the presence or absence of a relation between epilepsy in children with diabetes and presence of positive GAD65 Antibodies. This is a retrospective cross-sectional study, involving patients??? Survey and files review. We randomly recruited around 300 pediatric patients (age <14) with IDDM from our cohort at pediatric endocrinology clinic of King Fahad Medical City (KFMC). A questionnaire was given to caregivers to determine any history of seizure disorders, followed by retrospective review of patients??? Files for anti-GAD 65 positivity. In this talk, we present our results and review literatures in this issue.

### Biography :

Adel Mahmoud is a Senior Consultant Pediatric Neurologist. He is the Director of the Ketogenic Diet Program in Pediatric Neurology Department at National Neuroscience Institute, King Fahad Medical City, Riyadh, KSA. He has obtained a Fellowship of Pediatric Neurology from Hospital for Sick Children, Toronto, Canada in 2002; and Membership of Royal College. He also received Diploma in Child Health of Ireland; and Arab Board of Pediatrics, 1996, Damascus, Syria, 1995; and received Master's in Pediatrics, Cairo, Egypt, 1990. For the last 13 years, he is working at King Fahad Medical City. The center includes both residency and fellowship programs for Pediatric Neurology. More than 15 candidates have been graduated and sent abroad. He is a Supervisor of British Pediatric Neurology Association course that runs in Riyadh, KSA. Many graduates got certified under his supervision. He has more than 30 study and case report articles and has been a Speaker in many national and international meetings. He runs a ketogenic diet program including two Dieticians, a Clinical Pharmacist, a Social Worker and a Coordinator.

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