The Profile Of Anti-Glutamic Acid Decarboxylase Autoantibodies In Type 1 Diabetes Mellitus Children In Dr Soetomo Hospital Surabaya

Muhammad Faizi, Nur Rochmah, Agus Budiarto, Priya Arrachman
Department of Child Health, Faculty of Medicine, Airlangga University-
Dr. Soetomo Hospital Surabaya

Abstract

Background: Mostly, Type 1 diabetes mellitus (T1DM) is caused by pancreatic beta cell damage by autoimmune process so that the production of insulin is reduced. Autoantibodies related to T1DM are islet-cell antibodies (ICA), insulin autoantibodies (IAA), tyrosine phosphatase autoantibodies (IA-2A) and glutamic acid decarboxylase (GAD). The profile of anti-glutamic acid decarboxylase autoantibodies in type 1 diabetes mellitus children in Dr Soetomo Hospital Surabaya is still unknown.

Objective: To determine the profile of anti-glutamic acid decarboxylase autoantibodies in Type 1 Diabetes Mellitus children in Dr Soetomo Hospital Surabaya.

Methods: This cross sectional study evaluate children with T1DM in pediatric endocrinology outpatient clinic Dr.Soetomo Hospital on January-March 2017. We diagnosed T1DM based on consensus of Pediatric Endocrinology Working Group, Indonesian Pediatric Society. The presence of anti-GAD in serum was detected by anti-GAD65 commercial kit. Duration of illness referred to time from T1DM diagnosed until anti-GAD examination.

Results: There were 32 children with T1DM, 50% males. The mean age at diagnosis was 9.75 (SD 2.52, range 4-14) years. The median of duration of illness 3.5 (range 1-11) years. The anti-GAD was positive in 30(93.8%). Gender, age at diagnosis, **Conclusions**: anti-GAD test is positive in majority children with T1DM and still persist for long periods since T1DM diagnosed.

Keywords: type 1 diabetes mellitus, children, anti-GAD.

Recent publications:

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BIOGRAPHY



Muhammad Faizi. Lecturer of Department of Pediatrics, Faculty of Medicine, Airlangga University, Dr Soetomo Hospital. Surabaya. East Java. Indonesia. Email : dr.fayzi@gmail.com or muhammad_faizi@yahoo.com