الدراسات العليا

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Title of Thesis: Prediction of Pediatric Immune Thrombocytopenia Course Using Apoptotic Markers

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ABSTRACT

Background: Pediatric Immune thrombocytopenia (ITP) is an immune-mediated acquired disease of children, characterized by a transient or persistent decrease of platelet count. Based on the duration of thrombocytopenia, ITP can also be classified as “acute” which resolves before 6 months, versus “chronic” ITP which lasts more than 6 months- 12 months.

Apoptosis is a process of programmed cell death that occurs in multicellular organisms and encompasses highly

complicated mechanisms, involving an energy-dependent cascade of molecular events. Several studies have addressed the role of apoptosis in ITP patients, platelet apoptosis may stem from autoantibodies directed against surface platelets' proteins.

Aim of work: We aimed to assess platelet apoptosis in pediatric patients with ITP via detection of insulin growth factor binding protein type 2(IGFBP-2) using the ELISA technique and to correlate it with the clinical outcomes of the disease.

Patients and Methods: This study is a case-control study that was conducted in Fayoum governorate, a total number of 70 children were included in the study (40 children with newly diagnosed ITP, and 30 healthy control children without ITP). All Cases and control were subjected at presentation to thorough history, physical examination, and investigations including IGFBP2 level measurement. Our ITP cases were followed up to 6 months.

Results: There were increased levels of IGFBP2 in non-chronic Pediatric ITP cases more than in chronic ITP cases.

Conclusion: The outcome of pediatric ITP cases could be predicted using IGFBP2.

Key words: Pediatric Immune Thrombocytopenia, apoptosis, ITP outcome.