of the disease. There was significant negative correlation between CARS and Z Head circumference and significant positive correlation between CARS and Z BMI. Also, significant negative correlation between the Gilliam score and Z Head circumference and positive correlation between Gillian and Z BMI.

Conclusion: There is a growth aberration in our sample of Egyptian children with ASD. Especially, a growing rate of obesity that warrant a nutritional program to be a part of the routine care of our ASD children.

Insulin resistance among hepatitis C infected thalassemic children and survivors of childhood malignancy
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Background/Aim: Hepatitis C virus appears to contribute, directly or indirectly, to the development of Insulin Resistance (IR). The presence of IR in the setting of hepatitis C infection plays a role in the progression of HCV-related liver disease and may be associated with suboptimal responses to antiviral therapy. The aim of this work was to find possible relation between the occurrence of insulin resistance in hepatitis C virus infected children who were either thalassemics or survivors of childhood malignancy.

Methods: 60 hepatitis C virus infected children (30 thalassemic and 30 childhood malignancy survivors) and 30 controls (mean age: 11.88 ± 3.43 yrs; range 3-19 yrs; male predominance: 60%) were recruited from Pediatric hematology and oncology clinics, Children’s Hospital, Ain Shams University. All underwent ALT, AST, Alkaline phosphatase, Serum Bilirubin, FT and Serum albumin, Fasting blood glucose, Fasting Insulin, Serum ferritin, HCV antibody, HCV-RNA (by PCR), Homeostasis model assessment (HOMA) of insulin resistance.

Results: There was significant difference between patients and controls as regard fasting glucose, fasting insulin (p <0.0001), HOMA (p<0.0001), and HOMA IR (p<0.001). There was no significant difference between male and female thalassemic patients except for serum ferritin level which was significantly higher among female patients (2450.87 ± 1990.33 versus 1023.91 ± 1453.52ng/mL (p <0.001)). There was positive correlation between serum ferritin among all patients with total bilirubin, platelets, ALT and ALP. There was positive correlation between fasting insulin among patients with weight and between fasting insulin and HOMA. There was no significant difference as regard the previous items between the two subgroups of patient involved in the study. HOMA IR was significantly higher among female survivors of childhood malignancy (p<0.05). HOMA IR was found normal among all controls (100%) and in 48 patients (80%), moderate HOMA IR was present in 12 patients (20%) no severe HOMA IR was present in patients enrolled in this study.

Conclusions: Hepatitis C virus appears to contribute to the development of IR among hepatitis C infected children.

Assessment of liver disease progression among survivors of childhood malignancy
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Background/Aim: Egyptian children undergoing chemotherapy are at a high risk for HCV infection due to immunosuppression and multiple blood transfusions. The aim of this prospective study was to evaluate the feasibility of liver stiffness measurement and to compare Fibroscan to AST to platelet ratio index (API) and FIB-4 (combining platelets, ALT, AST and age) in diagnosis of advanced fibrosis in adolescent cancer survivors with chronic HCV.

Methods: Fifty one cancer survivors (mean age: 13.41 ± 4.14 yrs; range 14-19 yrs; male predominance: 76.5%) with chronic HCV were prospectively recruited from the National Cancer Institute. All underwent non-invasive tests for fibrosis: Fibroscan, API and FIB-4 score, in addition to ALT, ALP, serum bilirubin, albumin, PT, ferritin, ultrasound and liver biopsy when necessary (n = 6).

Results: Patients were grouped according to Fibroscan liver stiffness into 2 groups; group 1: patients with fibrosis stage F0-F2 (no significant fibrosis; 80.4%) and group 2: patients with fibrosis stage F3-F4 (significant fibrosis and cirrhosis; 19.6%). There was a highly significant difference between the 2 groups regarding API (p = 0.001). In addition to a significant difference regarding the FIB-4 score (p = 0.03), ALT (p = 0.01) and platelet count (p = 0.01). Liver stiffness showed positive correlation with duration of chemotherapy, height, ALT, ALP, ferritin, API and FIB-4 score (r = 0.37, 0.31, 0.28, 0.45, 0.52, 0.32 and 0.40 respectively). The AUROC curves for API and FIB-4 for prediction of significant fibrosis (F3-F4) was 0.85 and 0.712, respectively. As far as API is concerned, a cut off value of 0.86 was selected for the best prediction of mild and severe fibrosis (sensitivity: 80%, specificity: 90.2%, PPV: 66.7% and NPV: 94.9%). The best predictive cut off value for FIB-4 was 0.52 (sensitivity: 70%, specificity: 85.4%, PPV: 53.8% and NPV: 92.1%). API was more accurate than FIB4 in detection of significant fibrosis.

Conclusions: The Results indicate that liver stiffness measurement by Fibroscan is feasible for identifying the stage of hepatic fibrosis in Pediatric cancer survivors with chronic HCV. API is more preferred than FIB4 in detecting significant fibrosis in resource limited countries.

Asthma biomarkers and psychological profile of asthmatic children and their caregivers; is there a link?
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Parental psychosocial status has been linked to pediatric bronchial asthma. Parental stress was found to be associated with poor pulmonary functions of their asthmatic children and increased frequency of their hospitalizations with increased