

Echo and Abdominal Ultrasound Findings among Type 1 DM (T1DM) Adolescent in Correlation with HBA1C Level and Duration of Diabetes

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Background: Diabetes Mellitus (DM) is one of the leading causes of heart failure in current practice, independent of other traditional risk factors for cardiovascular disease and heart failure. Approximately 35,000 children and adolescents in Saudi Arabia suffer from Type 1 Diabetes Mellitus (T1DM).

Objective: To evaluate echocardiography and abdominal ultrasound findings among T1DM adolescent associated with DM duration and hemoglobin A1C (HbA1C) level.

Setting: Aseer Central Hospital, Saudi Arabia.

Design: A Retrospective Study.

Method: Thirty patients who had ECHO, abdominal ultrasound, and thyroid ultrasound between January 2019 and June 2019 were reviewed. Data was entered in SPSS software for analysis.

Result: Thirty patients were reviewed. Twenty-one (70%) were female. Male Mean±SD age was 12.5±3.16 and female was 14±2.9. Sixteen (43%) patients had ECHO for hypertrophied dilated cardiomyopathy (HCMP) and out of those 16, 4 (13%) patients had positive HCMP.

Conclusion: High incidence of thyroid disorder associated with T1DM indicates that antibodies are formed against thyroid tissue. We did not find any significant association between abdominal ultrasound and ECHO of HCMP compared to HBA1C and duration of diabetes.