Cystic Fibrosis Related Diabetes

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BACKGROUND

Cystic Fibrosis-related Diabetes (CFRD) is the most common co-morbidity in association with cystic fibrosis. Cystic fibrosis related diabetes is predominantly an insulin deficiency state it shares features of both Type 1 and Type 2 diabetes, yet there are important differences, which necessitate a unique approach to diagnosis and management. Development of Cystic fibrosis related diabetes is associated with a worse lung function, poorer nutritional status, and more chest infections. Guidelines recommend that we should start screening CF patients after age of 10 to prevent lower morbidity and mortality in this population. In our cohort we have 300 patient with CF, we reviewed their charts to identify the prevalence of CFRD and to assess if doctors are screening them for CFRD.

METHODS

This is a retrospective study, we reviewed the medical files of all patient diagnosed with CF at KFSHRC Cystic fibrosis patients

RESULTS

At KFSH & RC 300 Cystic fibrosis patients were reviewed including 173 females (58%), and 127 males (42%). 35 (12%) patients had CFRD, 12 males (9%), 23 females (13%). 12% developed CFRD before age of 10 years, 64% had developed CFRD before the age of 15 years. Oral Glucose Tolerance test was performed as a screening test in patients above the age of 10 years. The majority of tests were done in the years of 2014 and 2015 including in only 26 patients (8.6%) patients. 9 (34%) patients had CFRD, 9 (34%) had impaired glucose tolerance, 8 (31%) had normal glucose tolerance.

CONCLUSIONS

CFRD appeared to be more common in females than males. The onset of CFRD is very early in the studied population. Physicians just started performing Oral Glucose tolerance test (OGTT) to screen Cystic fibrosis patients and only small number of patients were screened. One third of the population screened had CFRD. More studies need to be done to identify the incidence and the prevalence of CFRD among CF patients in Saudi population.

REFERENCE