contacts, migrants from high prevalence countries and those who are immunosuppressed. The risk of hepatotoxicity in treating LTBI is thought to be low but much of this evidence is in patients treated with 6 months of isoniazid (6H) rather than 3 months of rifampicin and isoniazid (3RH). Equally, other than age, there is limited data on other factors which may contribute to the risk of developing hepatotoxicity.

Methods A retrospective study was performed at our centre. We analysed all patients treated with chemoprophylaxis, regardless of indication, between 2009 and 2013. Demographic data, treatment regimens and adverse drug reactions, including hepatotoxicity, were recorded. Severe hepatotoxicity was defined as either a rise in ALT five times greater than the upper limit of normal, or as any change in liver function that required an interruption or alteration in treatment. Liver function tests (LFTs) were routinely measured at baseline and then again at two weeks.

Results 290 cases were identified. 84.5% of patients were treated with 3RH, 12.1% were treated with 6H. 2.1% experienced severe hepatotoxicity 2 weeks into treatment. None had symptoms which prompted blood tests prior to our standard 2 week LFTs. Gender, age, documented co-existing liver disease, regimen choice, concomitant use of hepatotoxic drugs and reason for giving chemoprophylaxis were not significantly associated with an increased risk of hepatotoxicity. LTBI treatment was case managed by TB nurses with 91.7% of patients successfully completing treatment. There was no significant difference in treatment completion or adherence rates in those who developed hepatotoxicity compared with those who did not.

Conclusions Our review demonstrates a low incidence of hepatotoxicity associated with treatment of LTBI and highlights the difficulty in predicting those in whom it will occur. If management of LTBI moves from primary to secondary care it will remain important to perform LFTs at two weeks.

Cystic fibrosis

P193 LONGITUDINAL ASSOCIATIONS BETWEEN FEV1 AND HBA1C IN A UK COHORT OF YOUNG PEOPLE WITH CYSTIC FIBROSIS

[1]L Selby, [2]T Rootsey, [3]R Williams, [4]K Ong, [1]D McShane. *[1]Addenbrookes Hospital, Department of Paediatrics, Cambridge, UK; [2]University of Cambridge, School of Clinical Medicine, Cambridge, UK; [3]University of Cambridge, Department of Paediatrics, Cambridge, UK; [4]University of Cambridge MRC Epidemiology Unit, Cambridge, UK*

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Objectives To interrogate the UK national data set and explore longitudinal relationships between FEV1, HbA1c and OGTT parameters in young people with CF up to the age of 23 years.

Methods The UK CF data set (2007 to 2012) recording annual measurements of height, weight, BMI,% predicted FEV1 and FVC, HbA1c and 2 h glucose (2 hrGlu) (>10 years only) was interrogated. HbA1c values >6.5% and 5.7–6.5% were used to define 'undiagnosed' diabetes and a pre-diabetic state respectively in patients not labelled as having CFRD. Data from cases with known CFRD were censored. Longitudinal models analysed %FEV1 and %FVC as dependent variables and HbA1c or 2 hrGlu, BMI SDS and age as covariates in patients with HbA1c in the pre-diabetic range.

Results 2105 patients (1097 males), 87.9% with DF508 mutations, median (range) age 13.7 (5.6–22) years, mean (SD) BMI Z score -0.11+/-1.1, %FEV1 82.1+/-20.3 at first visit were included. Median range follow up was 3 (1–5) years. 2 hrGlu was available in a subgroup (n = 636). Median HbA1c (Table 1) but not 2 hrGlu (slope -0.1, p = 0.3), within the pre-diabetic range (5.7–6.5%) were inversely associated with %FEV1.

Abstract P193 Table 1 Longitudinal relationships between lung function and glycaemia

Dependent Variable	Slope (per% higher HbA1c)	P value	95% CI
%FEV1	-2.9	0.016	-5.1 to -0.5
%FVC	-2.1	0.08	-4.4 to +0.3

Conclusion In this large UK data set, longitudinal increases in HbA1c within the pre-diabetic range were associated with declining lung function. Our findings support the rationale for trials to invervene early to manage hyperglycaemia in young CF patients with pre-diabetes.

P194 PREVALENCE OF UNDIAGNOSED PRE-DIABETES AND DIABETES IN A UK COHORT OF YOUNG PEOPLE WITH CYSTIC FIBROSIS

[1]L Selby, [2]T Rootsey, [3]R Williams, [4]K Ong, [1]D McShane. *[1]Cambridge University Hospitals NHSFT, Cambridge, UK; [2]University of Cambridge, School of Clinical Medicine, Cambridge, UK; [3]University of Cambridge, Department of Paediatrics, Cambridge, UK; [4]University of Cambridge MRC Epidemiology Unit, Cambridge, UK*

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Background In children with cystic fibrosis (CF), cystic fibrosis related diabetes (CFRD) typically develops from adolescence onwards and coincides with deteriorating lung function. Currently, diagnosis of CFRD is based on WHO oral glucose tolerance test criteria rather than HbA1c (used as part of the diagnostic criteria for diabetes mellitus).

Objective To interrogate a national data set and determine prevalence of pre-diabetes and diabetes in patients not diagnosed with CFRD as based on HbA1c.

Methods A national CF data set (2007 to 2012) recording annual measurements of height, weight, BMI,%predicted FEV1 and FVC and HbA1c was interrogated. Young people up to the age of 23 years were included. HbA1c values between 5.7–6.5% and >6.5% were used to diagnose pre-diabetes and diabetes respectively in patients not labelled as having CFRD. Prevalence of pre-diabetes, diabetes and%FEV1 were determined by age group using the first visit values for each individual.

Results 3759 patients (1627 males, 87.5% with DF508 mutations), median (range) age 14.5 years (4.5–23 years), BMI Z score -0.17 (-5.7 +/- 3.6) were included. Prevalences of known CFRD, pre-diabetes and undiagnosed diabetes are shown in Table 1. In cross sectional analyses adjusted for gender, age,

Abstract P194 Table 1 Prevalence of known CFRD, and undiagnosed pre-diabetes and diabetes by age group

N = 3759 all patients first encounter	5–10 years n = 801	10–16 years n = 1121	16–23 years n = 1837
FEV1 mean +/- SD	89.8+/- 17.0	80.9+/-18.9	70.5+/-24.1
BMI SDS mean +/- SD	+0.05+/-1.0	-0.11+/-1.1	-0.45+/-1.2
Undiagnosed CFRD n (%)	16 (2)	122 (10.9)	485 (26.4)
Undiagnosed pre-diabetes (HbA1c 5.7–6.5%) n (%)	300 (38.2)	445 (44.5)	617 (45.6)
Undiagnosed diabetes (HbA1c >6.5%) n (%)	14 (1.8)	58 (5.8)	89 (6.6)