Methods Retrospective analysis using patients' records. 7 patients with CFRD were compared to matched CF controls using mean z-scores for weight, BMI and FEV1.
Results Records of 59 children (23 males) were analysed, 21 children between 5–10 years and 38 >10 years. In the younger group, 80% (n = 17) had both HbA1c and random glucose tested as per our guidelines. Of 38 patients aged >10 years, 78% (n = 30) were screened by OGTT of whom 16% (n = 5) had the standard test. Table 1 summarises the results and shows the degree of glucose impairment on OGTT and the related grade of cystic fibrosis insulin deficiency (CFID).

Abstract P232 Table 1 The degree of cystic fibrosis insulin deficiency (CFID) in patients (>10 years) undergoing the extended OGTT

N (%)	Result	Glucose in mmol/L	
		Peak	2 hour
6 (20)	Normal	-	-
11 (36)	CFID1	≥8.2	<11.1
6 (20)	CFID2	≥11.1	<11.1
7 (23)	CFID3	<7	≥11.1
0 (0)	CFID4	≥7 with fasting hyperglycaemia	

The mean weight and BMI z scores for those with CFRD compared to controls were -0.64 vs -0.02(p = 0.005) and -1.26 vs -0.03(P = 0.0001). There was a lower trend in FEV1 in CFRD, 1.87l (73.06%) vs 2.35l (89.03%). 3 patients with CFID3 and 1 with CFID1 later commenced insulin based on clinical grounds.
Conclusions Adherence to screening guidelines needs to be improved. Patients with CFRD have a significant declining trend in weight, BMI and FEV1 compared to controls. Some patients with CFID were commenced insulin on clinical grounds rather than results of extended OGTT. Whether treatment at earlier stages of CFID will slow down the rate of decline needs to be explored, but we have reverted back to the standard OGTT for the present.

P233 COUGH SWABS SHOULD NOT BE USED TO EXCLUDE NON-TUBERCULOUS MYCOBACTERIAL (NTM) INFECTION IN ADULTS WITH CYSTIC FIBROSIS

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Introduction and objectives People with cystic fibrosis (CF) are prone to airway infection with non-tuberculous mycobacteria (NTM) including *M. abscessus*, *M. avium* and *M. intracellulare*. Routine NTM screening is recommended for all patients at least once a year.[1] In patients not able to produce sputum, cough swabs are often sent for NTM analysis. Anecdotally, we observed that several patients cared for in our centre had cultured NTM in sputum having previously been culture-negative from cough swabs. The objective of this observational study was to examine the diagnostic yield of cough swabs and sputum samples from CF adults with known NTM infection.
Methods We identified all CF patients being cared for in our large regional adult CF centre that had cultured any NTM species from cough swabs or sputum samples and are currently attending our NTM clinic. Demographics, clinical parameters and microbiology results were recorded and analysed.
Results 26 patients (19 male) were included: median age 24 years, 92% chronically infected with *P. aeruginosa*, 100% pancreatic insufficient, 62% CF-related diabetes, 27% ABPA. 381 sputum samples and 55 cough swabs were analysed. 251 (66%) sputum samples and 4 (7%) cough swabs cultured NTM (see Table 1). In the 4 cough swabs that cultured NTM, sputum samples also cultured the same species.
Conclusions Cough swabs have a very low diagnostic yield and their use did not contribute to identification of NTM infection in our adult CF patient population. We have therefore stopped sending cough swabs for NTM culture in our centre and our data suggests that cough swabs should not be used to screen for these organisms.

REFERENCE

1 *Mycobacterium abscessus* Suggestions for infection prevention and control. CF Trust, 2013

P234 PREVALENCE OF NON-PULMONARY COMPLICATIONS FOLLOWING LUNG TRANSPLANTATION IN ADULT PATIENTS WITH CYSTIC FIBROSIS (CF)

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Background Lung transplantation is currently the most effective means of improving quality of life and survival in patients with end stage CF. Improvements in surgical technique, lung preservation, immune suppression and infection management have improved short and long term mortality and morbidity.

The number of significant medical complications encounter following lung transplantation can have significant impact on long term management of CF.
Aim To identify the frequency of medical complications that occur in a large cohort of post-transplant CF patients.
Method Retrospective review of electronic records to assess complications in all patients with CF who underwent Lung transplantation between September 1992 and June 2015.
Results 54 patients underwent lung transplantation (heart/lung -3, lung/liver -1) at different transplant centres, (female-35, male-19 current median age 36 years (range,22–66), current 10, 15 and 20 year survival rates are 43%, 22% and 7% respectively (median 87 months). Complications are shown in Table 1.

9 (17%) post-transplant patients died (median survival 77 months). Of these, 3 (33%) died secondary to malignancy.
Conclusion In addition to organ rejection and infective causes common systemic complications included hypertensive disease (50%), gastro-oesophageal reflux disease (30%), chronic kidney disease (26%), and osteoporosis (19%). It is notable that one third of patient mortality was due to malignancy. As patient survival improves we may need to consider increased screening of these high risk patients. Frequent monitoring and excellent collaboration between transplant and CF centres may lead to earlier detection and treatment of these complications.