

mark on two consecutive beeps. The test takes on average 25 minutes to complete.

Results Data was available on 277 children with negative bronchial reactivity. The M:F was 1.27:1. The mean age was 10 years old (range 5–15). The number of patients per age in years ranged from 14 to 33 (mean 25). The line of best fit indicates that the mean exercise distance reached in meters was given by the formula $Y = (54.7 \times \text{Age}) + 404$. The study noted that the main reasons for test cessation related to fatigue and shortness of breath.

Abstract GP282 Table 1

Age at Time of Test	Mean		
	Distance (m)	Number	Standard Deviation
4	550.00	2	282.84
5	575.22	23	213.09
6	722.42	33	166.79
7	864.14	29	187.76
8	853.87	31	214.14
9	976.96	23	270.55
10	924.19	31	248.46
11	992.40	25	228.42
12	1053.04	23	213.55
13	1130.63	32	316.43
14	1115.71	14	232.01
15	1211.54	13	274.28
16	1220.00	2	395.98
Grand Total	924.70	281	288.36

Conclusions This study defines normative data for children's exercise capacity as measured by the MST. It provides a frame of reference for parents in discussing their child's exercise tolerance and the modified formula is easy to use (distance travelled = $55 \times \text{Age} + 400\text{m}$).

GP283

CLINICAL AND RADIOLOGICAL EVALUATION OF PATIENTS WITH POSTINFECTIOUS BRONCHIOLITIS OBLITERANS

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Introduction Postinfectious bronchiolitis obliterans is characterized by persistent symptoms and signs of obstructive pulmonary disease following acute bronchial injury. It usually occurs with persistent wheezing and cough as a result of severe viral infections. The aim of this study was to investigate the socio-

demographic characteristics, treatment status, and clinical response of our cases of postinfectious bronchiolitis obliterans. **Methods** The records of 102 patients with postinfectious bronchiolitis obliterans who were followed-up in our clinic were retrospectively reviewed. Sociodemographic characteristics, treatments, pre-treatment and post-treatment complaints, pulmonary function tests, clinical status, radiological changes were evaluated.

Results 68.6% (n = 70) of our patients were male. The mean age of the patients at the time of the study was 88.8 ± 53.5 months, and the age of diagnosis was 34.3 ± 36.4 months. The mean period from the first complaints to the date of diagnosis was 22.8 ± 33.8 months. 59% (57) of the patients had a history of smoking in one of their parents. In 62.7% of the cases, the first lower respiratory tract infection was bronchopneumonia and 36.3% was in the acute bronchiolitis. Before the diagnosis, 35 patients had intensive care hospitalization (34.3%). Persistent cough (90.2%), wheezing (96.1%), shortness of breath (91.2%) and purulent cough (75%) were the most frequent findings. When treatments of the patients were evaluated; inhaled corticosteroids were 92.2%, 6 months azithromycin 69.6%, 6 months oral steroid 61.8%. 11 patients (10.8%) needed oxygen and 10 patients (9.8%) required Bilevel Positive Airway Pressure (BPAP) support. Before and after treatment of 49 patients, lung CTs were evaluated by radiologist and modified Bhalla scores were calculated. Pre-treatment mosaicism and peribronchial thickening were detected in all patients. There were bronchiectasis 67.3%, atelectasis 91.8%, hyperinflation 81.6%, air trapping 98% of patients. Post-treatment radiological evaluation revealed mosaicism 93.9%, peribronchial thickening 100%, bronchiectasis 51%, atelectasis 65.3%, hyperinflation 69.4%, air trapping 87.8%. The mean Bhalla score was 9.1 ± 4.1 before the treatment and it was found to be 6.8 ± 4.6 after treatment.

Discussion and Conclusion Postinfectious bronchiolitis obliterans is a rare condition with obstruction findings. It occurs as a result of immune mechanisms after severe lung infection, especially at a young age. In this study, we aimed to present sociodemographic characteristics, clinical features and especially response to long-term steroid and azithromycin treatment in patients with bronchiolitis obliterans.

GP284

THE EFFECTS OF IVACAFTOR ON PANCREATIC FUNCTION IN PAEDIATRIC PATIENTS WITH CYSTIC FIBROSIS GATING MUTATIONS

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Objectives To examine the effects of Ivacaftor on growth and pancreatic function in patients attending the Paediatric Cystic Fibrosis (CF) Centre at Cork University Hospital.

Methods A retrospective, convenience sampled cohort analysis was conducted in patients aged 2 to 17 with genetically confirmed CF (N=28, 15 male, 13 female). Subjects who received Ivacaftor over a 1 year period had an oral dose of either 75 or 150 mg twice daily depending on weight. Patients were excluded if concurrently taking Lumacaftor. The primary end points were estimated mean change from baseline through one year in pancrealipase (Creon) consumption per day and body mass index (BMI). Secondary end points included the changes in mean percent of predicted forced