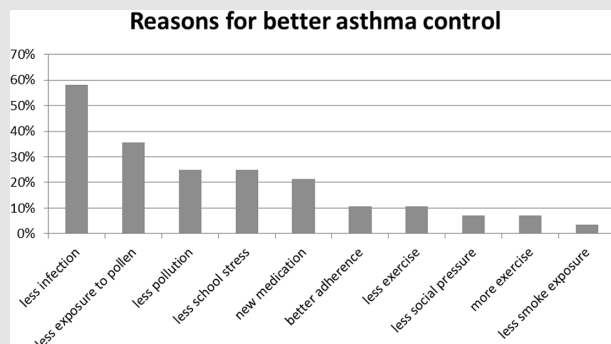


**Abstract P120 Table 1** Reasons for better asthma control

positive at the end of admission. One other asymptomatic patient was COVID-19 positive through screening. Only 11 (19%) reported being less likely to self-refer for symptoms with 6 (11%) more likely and 41 (70%) no difference. Twenty-three (40%) reported better asthma control, 10 (17%) worse asthma and 25 (43%) no different. Twenty-nine (50%) had an ACT  $\geq 20$  indicative of well controlled asthma. 47 (81%) were using the same or less relief medication, 40 (69%) were sleeping the same or better at night and 38 (66%) were the same or less anxious. Comparing asthma control to the same period in the previous year 28 (48%) reported better symptom control, 7 (12%) worse control and 23 (40%) no different.

Reasons reported for improved asthma are shown in table 1.

Reasons for the 7 with worse control included increased seasonal allergic rhinitis 3 (43%) and more indoor aeroallergen exposure 3 (43%).

Thirty-one families (53%) preferred video link (attend anywhere) consultations and 11 (19%) expressed a preference for face to face appointments.

**Conclusion** Overall severe asthmatics have experienced better symptom control during shielding. Reasons are multiple although decreased infections were identified as a cause by the majority of families. Ongoing care using video link consultations would be acceptable for the majority of families attending our service.

## **P121 RAISED BLOOD EOSINOPHIL COUNT AS A PREDICTOR OF SEVERE ASTHMA EXACERBATION**

M Nayyar, S Scott, M Ahmad. *Countess of Chester, Chester, UK*

10.1136/thorax-2020-BTSabstracts.266

**Introduction and Objectives** Asthma is a condition that involves airway inflammation leading to variable bronchial constriction. It is well-established that blood eosinophil counts are often raised in patients with asthma and correlate with increased bronchial hyperreactivity.<sup>1</sup> However, blood eosinophils are not currently recommended for monitoring asthma in adults.<sup>2</sup> Many patients admitted to hospital have undergone a full blood count in the year prior to their index attack and this is an easy opportunity to assess their risk of exacerbation and intervene.

**Methods** We elected to review patients admitted to hospital at the Countess of Chester Hospital NHS Foundation Trust over a 12-month period. We investigated whether a full blood count was available and also, if there was evidence of raised

blood eosinophil counts. We also recorded information on treatment and length of stay.

**Results** 197 patients were included, 58 female and 139 male, with a mean age of 50 years (range 12–13). A total of 135 (68.5%) patients had FBC recorded in the 12 months prior to admission. 87 (64.44%) of these had an eosinophil count of  $\geq 0.3$  at least once in the 12 month period. 70 (35.5%) patients had an eosinophil count of  $\geq 0.3$  on admission. The average eosinophil count over the 12 months prior to admission was 0.36 (range 0–3.1). Patients with an eosinophil count of  $\geq 0.3$  were more likely to be using LABA+ICS combination than their counterparts (51.43% vs 44.09%). No significant difference was noted with other therapies.

**Conclusion** A high proportion of patients admitted to hospital had a historical FBC available. Two-thirds had recorded an eosinophil count of  $\geq 0.3$  in the 12 months leading up to admission suggesting an increased risk of a severe asthma exacerbation. There is an opportunity to intervene to prevent future exacerbations. An incidental raised blood eosinophil count in asthmatics should be regarded as a red flag for future asthma attacks.

## **REFERENCES**

1. Price DB, Rigazio A, Campbell JD, *et al.* Blood eosinophil count and prospective annual asthma disease burden: a UK cohort study. *Lancet Respir Med.* 2015 Nov;**3**(11):849–58.
2. British guideline on the management of asthma 2019. *SIGN*; BTS.

## **Chronic suppurative lung disease in adults and children**

### **P122 THE IMPACT OF COVID-19 SHIELDING ON THE WELLBEING, MENTAL HEALTH AND TREATMENT ADHERENCE OF ADULTS WITH CYSTIC FIBROSIS (CF)**

K Westcott, F Wilkins, M Chancellor, A Anderson, S Doe, C Echevarria, SJ Bourke. *Adult Cystic Fibrosis Centre, Royal Victoria Infirmary, Newcastle upon Tyne, UK*

10.1136/thorax-2020-BTSabstracts.267

**Background** People with CF were considered to be extremely vulnerable to COVID-19 and were advised on 23rd March 2020 to 'shield' (stay at home; no outside contacts).

**Methods** In July an e-mail survey was sent to 137 CF adults to determine how strictly they had shielded, how they had coped and the effect on wellbeing and mental health (GAD-7 & PHQ-9). Treatment adherence (measured with 'chipped nebulisers'- CFHealthHub) and levels of anxiety and depression pre- and during shielding were compared in a subgroup that consented to being identified. Changes were compared with the Wilcoxon rank test.

**Results** 63 (46%) responded; 19 replied anonymously and 44 (25 men) gave their identity. Mean age (range) was 32.7 (17.5–64) years, FEV<sub>1</sub> 2.1 (0.57–4.86) L, BMI 22.8 (16.4–28.6) kg/m<sup>2</sup> and 33 were on CFTR modulator treatment. Fifty-nine (94%) reported adherence to shielding 'all the time'/'often'. Most (76%) found this difficult, reporting a negative impact on exercise, social support, independence, sleep and daily routines. Most were not concerned about shielding being relaxed but 44% worried that others might not adhere to social distancing with risks of COVID-19 infection (43%). Adherence rates during COVID were available in 42 patients, with a median of 91% (interquartile range 84% to 100%). In

28 patients, pre-COVID adherence results were available, with a median difference of 0 (IQR -4 to 8). In 41 patients with complete data, there was a significant difference in the median pre-COVID versus during-COVID anxiety score (pre= 2, IQR 0.5–6 compared to during =5, IQR 1–11;  $p=0.002$ ). ‘Clinically significant’ (mild-severe) anxiety rose from 27% pre-COVID to 54% during COVID. In 43 patients with complete data there was no difference in median pre-COVID versus during-COVID depression scores (pre= 3, IQR 1–10 compared to during= 3, IQR 2–12;  $p=0.09$ ).

**Conclusions** These CF patients showed high compliance with shielding, and high rates of adherence with medication, and none developed COVID-19. They coped well, with low depression scores, but negative impacts were reported on exercise, social support, and daily routines. Anxiety levels significantly increased during shielding, and 7 patients requested a psychology consultation from this survey.

# **P123 REMOTE DELIVERY OF CARE TO PEOPLE WITH CYSTIC FIBROSIS DURING COVID-19 SHIELDING IS NOT DETRIMENTAL TO PATIENT OUTCOMES**

MD Waller, A Tomuta, P Macedo, R Heise, H Parkinson, A Thurlow, T Mathieson, C Long, C Elston, F Perrin. *Adult Cystic Fibrosis Unit, King's College Hospital NHS Foundation Trust, London, UK*

10.1136/thorax-2020-BTSAbstracts.268

**Introduction and Objectives** Intensive surveillance of lung function (FEV<sub>1</sub>), body weight and airway microbiology is central to good cystic fibrosis (CF) care. National standards recommend people with CF (pwCF) are reviewed at least three monthly by specialist multidisciplinary teams. COVID-19 ‘shielding’ precautions, set to protect clinically extremely vulnerable people, terminated all but essential face-to-face clinical contact for over four months. Many pwCF remain apprehensive as restrictions ease. The King's Adult CF Unit delivers care to 250 pwCF across south-east England. We discuss the immediate service changes in response to COVID-19, and the effect on patient outcomes of limited clinician review.

**Methods** At the start of shielding the entire patient cohort was reviewed and grouped as stable or of concern. Telephone

and/or video clinics were implemented, and patients identified as high risk were prioritised for remote self-monitoring (FEV<sub>1</sub> with Bluetooth home spirometers, weight, postal sputum samples). Home visits or ward reviews, by specialist nurses or physiotherapists, were arranged if clinically essential. We undertook a cohort review of consecutive patients emerging from shielding to compare clinical parameters before and after lockdown.

**Results** Since shielding ended, 24 consecutive patients (see table 1) have been reviewed, at a median (IQR) of 167 (155, 180) days after pre-COVID assessments. At review, 2 patients had a clinically significant fall in lung function (10%), however no statistical difference in FEV<sub>1</sub>, weight or BMI ( $n=21$ ) was seen overall following shielding when compared to measurements immediately (29 (21, 46) days) before lockdown (ppFEV<sub>1</sub>0.0 (-0.1, 0.1), BMI 0.5 (-1.0, 1.6)). 11 (45.8%) patients sent sputum samples, 1 identified a clinically insignificant new microorganism. 13 (54%) patients required treatment for pulmonary exacerbations, 8 (33.3%) with intravenous, 5 (20.8%) with oral antibiotics.

**Conclusions** Unpredicted changes to CF care delivery at our centre was not detrimental to patient outcomes. In this cohort, key CF clinical indices remained stable over a short period of shielding, supporting safe remote delivery of care. Modulator therapies likely contributed to the stability in lung function seen.

# **P124 DELIVERING BRONCHIECTASIS PHYSIOTHERAPY CLINICS REMOTELY: PATIENT PERCEPTIONS AND FUTURE PREFERENCES**

P McCallion, J Davison, A DeSoyza, K Hester. *Newcastle Upon Tyne Hospitals NHS Foundation Trust, Newcastle Upon Tyne, UK*

10.1136/thorax-2020-BTSAbstracts.269

**Background/Aims** National guidelines recommend that patients with bronchiectasis should be reviewed by specialist physiotherapists (Polverino *et al.*, 2017). These appointments should involve teaching of individualised airway clearance techniques, promotion of exercise and education to optimise self-management. During the covid pandemic, face to face appointments were cancelled. Ways of conducting effective physiotherapy consultations remotely were required. We used telephone and video respiratory physiotherapy consultations. We assessed patient satisfaction with remote consultations and views on future modes of clinic delivery.

**Methods** All patients contacted for a predetermined physiotherapy clinic between 21/4/20 and 29/6/20 were asked questions regarding their consultation and preferences (Table 1). Telephone and video calls were carried out by PM. Data was collected via follow up phone calls using a pre-selected questionnaire or postal questionnaire. Data was recorded and analysed using Excel plus thematic analysis for free text responses.

**Results** Thirty telephone and 35 virtual consultations were offered. 12 virtual consultations were converted to telephone due to lack of internet access. Thirty-nine (60%) were new referrals, 26 (40%) were reviews. Median age was 65 (range 21–91). Median telephone call duration was 29 minutes (range 15–40). Beyond covid-19 restrictions, twenty-four (37%) preferred a virtual appointment; twenty-two (34%) telephone, four (6%) face to face consultation and fifteen (23%) had no preference.

**Abstract P123 Table 1** Baseline characteristics and lung function pre- and post- shielding. Data presented as mean  $\pm$  SD, or median (IQR). \*At start of shielding

Age, years*	28 (22, 30)	
Male, n (%)	10 (41.7)	
CFTR modulator therapy, n (%)*		
Ivacaftor	1 (4.2)	
Lumacaftor/ivacaftor	1 (4.2)	
Tezacaftor/ivacaftor	10 (41.7)	
Best measurements in last year		
FEV <sub>1</sub> percent predicted,%	70.8 (23.4)	
Body mass index (kg/m <sup>2</sup> )	28.0 (3.6)	
Patients identified as 'high risk'*, n (%)	5 (20.8)	
Pre- and post- shielding		
FEV <sub>1</sub> percent predicted,%	67.2 (27.3)	66.9 (26.3)
Weight, kg (n=21)	66.0 (15.1)	66.9 (12.9)
Body mass index, kg/m <sup>2</sup> (n=21)	23.3 (3.8)	24.0 (3.5)