nationally will help to further understand the increased need in a COVID-19 world.

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P109

INFECTION CONTROL POLICIES DURING THE COVID-19 PANDEMIC WERE EFFECTIVE IN LIMITING MORBIDITY AND MORTALITY ASSOCIATED WITH NOSOCOMIAL VIRAL TRANSMISSION AT A LARGE NHS RESPIRATORY DEPARTMENT

¹H Aung, ¹K Kyaw, ²RC Free, ¹J Blount, ¹D Jenkins, ¹J Tang, ¹SP Range, ²P Haldar, ¹G Woltmann. ¹University Hospitals of Leicester, Leicester, UK; ²University of Leicester, Leicester, UK

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Introduction Prevention of nosocomial transmission was a priority for NHS hospital teams during the SARS-COV-2 pandemic. However, infection control policies were developed in the face of uncertainty about duration of infectivity, routes of transmission, and safety of shared admission spaces. We retrospectively reviewed all hospital admissions to the University Hospitals of Leicester (UHL) respiratory department, which managed more than 30% of UHL patients with a diagnosis of COVID-19 between March 2020 and March 2021 to determine the proportion of cases with laboratory evidence of healthcare associated infection (HCAI) and mortality within 28 days of PCR conversion

Methods This was a retrospective cohort study performed using a bespoke database collating COVID-19 throat swab (TS) PCR results for UHL (COVTRACK). Nosocomial transmission was identified by demonstrating PCR conversions during admission and categorized into definite (conversion time > 14 days) or probable (conversion time 8–14 days). In depth records based analysis was undertaken for patients admitted to respiratory medicine (RM) and deceased within 28 days after conversion.

Results Out of 10485 patients admitted to the Respiratory Department at UHL, 2054 (19.6%) were COVID-19 spell positive, including 57 with probable (41) or definite HCAI (16). 23 patients (7 with definite HCAI) died within 28 days of PCR conversion (0.22%, of total admitted, 1.1% of COVID19 positive), with 21 (91%) deaths in the 2nd wave. Compared with non-COVID admissions not acquiring nosocomial infection, HCAI was significantly associated with older age (mean difference (95%CI) 11.5 (7.5–15.5) years), length of stay (median LOS 18 Vs 1 day) and multiple ward occupancy (median 3 vs 1 ward); all analyses $p < 0.001$.

Discussion Our analysis suggests HCAI with SARS-COV-2 contributed a very small fraction of COVID-19 related morbidity and mortality at our department and in the majority the trajectory of care was not changed. Despite the high numbers of highly infectious cases during the 1st and 2nd wave, we successfully implemented a suite of infection control measures that effectively mitigated risk. High throughput in admission areas, multiple ward moves, and prolonged hospital stay were significant risk factors associated with HCAI.

P110

ASSESSING COVID VACCINE RELATED SIDE-EFFECTS PROFILE AND SUBSEQUENT STAFF SICKNESS BURDEN IN HEALTHCARE WORKERS

¹R Muthusami, ¹S Adeyeye, ¹B Mwale, ¹S Rhammaz, ²M Du Rand, ¹A Johnson, ¹I Du Rand. ¹Hereford County Hospital, Hereford, UK; ²Luton School, Hereford, UK

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Introduction The COVID19 national immunisation campaign is well underway across the United Kingdom. A large study reported, side-effects from COVID vaccines are moderately frequent, commonly mild and short-lived in a community setting.¹

Objectives To examine the side-effects and staff sickness profile from COVID vaccination in healthcare workers and whether the second COVID vaccine dose (VAX2) led to worsening side-effects or sickness burden, compared to the first dose (VAX1).

Methods Self-reported questionnaire survey to 1500 consecutive healthcare workers (working for 1 NHS Trust) receiving VAX2 at a single central vaccination site from 29/03/2021 to 23/04/2021. VAX1 data was collected at the appointment and VAX2 data asked to be returned via internal mail 7 days later. Responders were asked to grade symptoms (asymptomatic, mild, moderate or severe) & step scores of 0, 1, 2 & 3 allocated correspondingly to estimate side-effect severity changes following VAX2. Data for baseline demographics & sickness burden collected.

Results The response rate for VAX1 was 81% (1213) & VAX2 was 31% (464). Matched data was available for 30% (444). There was 81% female preponderance. Median age was 51 (Range 19–74, IQR 18). Most commonly reported side-effect was injection site pain (83%) followed by fatigue (46%), muscle pain (45%), headache (41%), injection site swelling (32%), injection site redness (27%), joint pain (26%), chills (21%) & fever (17%). The frequency of side-effects was similar with no significant severity change after VAX2. Mean duration of side-effects was alike (2.2 days). 3.6% and 5.6% of responders took time (mean) off work for 3.6 and 1.4 days following VAX1 & VAX2 respectively.

Conclusions Our study demonstrated healthcare workers had moderately frequent side-effects, with no significant exacerbation after VAX2. The side-effects burden was short-lived with minimal impact on workforce during resource constrained times, which suggests future booster doses in healthcare workers should remain safe and can be pursued.

Abstract P110 Figure 1

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P111 THE IMPACT OF COVID-19 ON A TERTIARY INTERVENTIONAL BRONCHOSCOPY SERVICE

¹A Bhamani, ²R Khan, ¹R Shea, ¹R Thakrar, ¹S Janes, ¹N Navani. ¹University College London Hospitals NHS Foundation Trust, London, UK; ²University College London Medical School, London, UK

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Introduction Malignant central airway obstruction (MCAO) is a life-threatening complication of lung cancer requiring urgent therapeutic bronchoscopy to alleviate symptoms. Delayed diagnosis contributes to increased mortality in this patient group. The COVID-19 pandemic has resulted in lack of access to timely diagnostic investigations and patient reluctance to seek help. Furthermore, the overlapping symptoms of COVID-19 make recognition of MCAO difficult. We aimed to evaluate the impact of the pandemic on urgent referrals to our tertiary interventional bronchoscopy service.

Methods We collected data on patients with MCAO who underwent urgent interventional bronchoscopy between April 2019 and April 2021. All individuals requiring emergency inpatient transfer or emergent bronchoscopy were included. Treatment modalities included laser ablation, non-thermal techniques, mechanical debulking, and airway stent placement.

Results Forty-two interventional bronchoscopy procedures were carried out between April 2019 and March 2020. There was an 85% increase in patients needing urgent bronchoscopy in the year that followed the first national lockdown, with 78 procedures undertaken between April 2020 and March 2021. There were more emergency inpatient transfers (n=48, 61.5%) compared to the year before (n=22, 52%) and more patients required airway stenting (n=31, 39.7% compared to n=10, 23.8%). The busiest periods were

June – August 2020 and February – April 2021, with the peak number of therapeutic bronchoscopies undertaken following the first and second wave of the pandemic, respectively (figure 1).

Conclusions The data shows the impact of the pandemic on our tertiary service with an increase in referrals over the year following the first lockdown. More patients required emergency inpatient transfers and a higher proportion required airway stents reflecting more advanced and symptomatic disease. Unsurprisingly, the busiest months followed the national peaks of COVID-19 cases. The public health messaging required to control the pandemic, although necessary, coupled with an overlap of symptoms has resulted in an increase in presentations of life-threatening MCAO. This highlights the importance of early detection of lung cancer and recognition of symptoms of central airway obstruction.

P112 THE IMPACT OF COVID-19 PANDEMIC ON LUNG CANCER DIAGNOSIS AND TREATMENT AT ST GEORGE'S HOSPITAL

D Jajbhay, J Arberry, J Gates, J Panguiton, E Yarham, YE Ong, A Draper. *St George's Hospital, London, UK*

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Introduction The Covid-19 pandemic resulted in a reduction in provision of cancer services. A comparison of frequency, staging and treatment of lung cancers was undertaken for two consecutive years at our institution.

Methods Electronic records and databases were interrogated; patients from our local MDT who were treated for lung cancer were identified. Two yearly groups were created from April 2019 pre-pandemic (2019) and April 2020 during the pandemic (2020). Diagnoses, staging, therapies, and treatment times were examined. Data was assimilated and analysed using STATA 17. Categorical variables were compared using Chi-squared test and numerical variables by Mann-Whitney test. P values of <0.05 were considered significant.

Abstract P111 Figure 1 Monthly percentage change in referrals during pandemic from pre-pandemic year. National trend in COVID-19 cases in background for comparison