Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Methods: HBV screening tests of all rituximab prescriptions across a six month period in 2020 were reviewed. Electronic records of patients with positive screening results were reviewed, to assess for appropriate management. A position statement was distributed trust-wide and guidance comments were added to positive HBV screening results by the virologists. We repeated the data collection in 2021.

Results: 645 rituximab prescriptions were identified: 258 in 2020 and 387 in 2021. 83% of patients were screened for anti-HBc in 2020, increasing to 92% in 2021. The 2020 audit identified five anti-HBc positive patients, (one also HBsAg positive). These were all deemed to be managed appropriately. 15 patients were identified as anti-HBc positive in 2021, of which three were HBsAg positive. 1/15 was managed incorrectly, and the clinical team was contacted.

Discussion: We demonstrated a significant improvement in screening, but there remains room for improvement, particularly in managing anti-HBc positive patients. To address this, a trust HBV screening guideline will be created based upon the 2022 UK Chemotherapy Board position statement on HBV screening and prophylaxis.

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23 Unusual cause of prolonged fever in a recent traveller despite appropriate antibiotic treatment
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Abstract
27 year old women presented with a one week history of ongoing fevers, rigors, nausea, headache and a cough. She had returned from India a month prior to admission. Background included migraine, IBS and partial sight secondary to retinitis pigmentosa. Gram stain of initial blood cultures grew gram negative bacilli and meropenem was started empirically. Urine cultures were negative. On day four of admission salmonella Para typhi was confirmed and she was switched from meropenem to ceftriaxone and moved over to our infectious diseases ward. A CT head was done in view of complaints of worsening headache, neck stiffness and pain, later followed by MRI head and neck which also noted no signs of CNS infection or cervical discitis. An echo was done to rule out endocarditis. Following a five day course of ceftriaxone and she was switched to ciprofloxacin as she was tolerating oral intake. Fever was still ongoing despite 7 days of appropriate treatment. On examination, it was found she had new flank tenderness and also ongoing mild cough. CT-CAP was done with suspicion of intraabdominal collection. CT CAP features were however in keeping with bilateral pyelonephritis. She was switched back to IV meropenem. Repeat urine and blood cultures did not reveal any new organism. Fevres began to settle with IV meropenem re-introduction and symptoms improved after two days of treatment. A PICC line was inserted and the patient was discharged with a two week course of IV ertapenem. Pyelonephritis is thought to be paratyphii bacteraemia.

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24 A fatal diagnosis in a Karachiite
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Abstract
A 22-year-old woman in Karachi, Pakistan presented with 2-day history of fever with vomiting and reduced responsiveness for 12 hours. There was no medical, travel or medication history. She received all routine childhood immunizations.

Examination revealed: temperature 39°C, blood pressure 110/70 mmHg, heart rate 115/min and respiratory rate 28/min, Glasgow coma scale 11 (E4V5M5) with generalized increased tone and nuchal rigidity, no rash and examination otherwise normal. Blood results: white cell count 12 × 10^9/L, normal renal and liver function, and HIV, malarial film, dengue antigen and serology negative.

Computed tomography brain: diffuse cerebral edema. Lumbar puncture opening pressure was 40cmH20. Cerebrospinal fluid results: glucose <5mg/dl (40–70), protein 271 mg/dl (15–40), WCC 9.65 × 10^3/μL (0–0.005) (77% neutrophils, 23% lymphocytes).

Empirical treatment for bacterial meningitis with ceftriaxone and vancomycin was commenced. The patient deteriorated rapidly with GCS drop to 9, requiring intubation.

Blood and CSF cultures and CSF multiplex PCR were all negative. A wet prep slide of CSF revealed the amoeboid trophozoite Naegleria fowleri giving the diagnosis of primary amoebic meningoencephalitis. Despite treatment as per protocol the patient died two days later. She did not have a history of swimming/bathing in freshwater. The patient was Muslim. Epidemiological studies have identified N. fowleri in mosquitos and domestic water supply in Karachi. Ablution (Wudhu) is an Islamic ritual before offering prayers, involving washing body parts including nasal passages, often by inhaling water forcefully up the nostrils. Wudhu is a unique source of transmission for N. fowleri in Pakistan.

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25 Establishing the Covid Medicine Delivery Unit: Activity and Outcomes across Humber Coast and Vale
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Abstract
Introduction: The Hull University Teaching Hospitals (HUTH) COVID Medicine Delivery Unit (CMDU) was established following NHSE guidance to offer antiviral drugs to vulnerable patients with COVID-19. Clinical trial data suggesting use of antivirals comes from the pre-vaccine era, it is unclear what the impact of vaccination will be on the real-world effectiveness of antivirals in vulnerable populations.

Methods: We reviewed electronic records and CMDU notes from referrals to the CMDU at HUTH between 16th December 2021 and 7th January 2022. COVID-19-related admission data for up to 2 weeks following CMDU referral was collected from regional hospitals. Index of Multiple deprivation (IMD) deciles were obtained from ONS data and patient postcode.

Results: Of 763 referrals, 301 were eligible for treatment and 142 received either sotrovimab or molnupiravir. Roll-out coincided with a surge of cases related to the omicron variant. COVID-19-related admission rate was 1.3%, much lower than reported in trials. Some patients ineligible for treatment had severe COVID-19 requiring admission. Hospitalisation and deaths were seen despite vaccination. None of the 81 patients treated with sotrovimab had COVID-19 related admissions. The mean age of patients admitted to hospital was much higher than...
those not admitted (74 vs 49 years), in keeping with UKHSA data. Referrals and treatment were well distributed across IMD Deciles.

**Conclusion:** COVID-19-related admission rates in treated and untreated groups were lower than seen in clinical trials, more work is required to establish which patients should continue to benefit from this service given current variants and high levels of vaccination.

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**26 The Join Well Study: Chronic Strongyloides stercoralis infection in Fijian migrants to the United Kingdom serving in the Armed Forces**

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**Abstract**

**Background:** *Strongyloides stercoralis* infects over 300 million people globally. Infection is often asymptomatic, but fatal hyperinfection syndrome can occur in the immunocompromised.

There are few data on strongyloidiasis in Fiji. Following several cases of incidental serological diagnosis in Fijian-born UK Armed Forces personnel, a prospective cohort study was undertaken to investigate the prevalence of infection.

**Methods:** Fijian-born UK military personnel provided written informed consent for collection of baseline demographic data and screening tests: FBC for eosinophilia; serum for *S. stercoralis* IgG ELISA; stool for FEA concentration and microscopy, charcoal culture, and multiplex protozoa/helminth PCR. Subjects with any positive test result were offered follow up for assessment and treatment.

**Results:** 167 participants were recruited between September 2021 and March 2022. Median age was 37 (IQR 27.5-43.5) years and median time in the UK 15 years (IQR 4-19). Eosinophilia (> 0.5 x 109) was present in 53/152 (34.9%). Serology was positive in 67/162 (41.4%). Both these tests were positive in 38/152 (25%). *S. stercoralis* was detected in stool by at least one method in 9/71 (12.7%). Overall, 18.1-31.9% of participants were estimated as having probable chronic strongyloidiasis.

**Discussion:** Using robust methodology, this study has shown an unexpectedly high prevalence of chronic strongyloidiasis in Fijian migrants, most of whom were asymptomatic. The possibility of strongyloidiasis should be considered in migrants with established or planned immunosuppression. The findings have led to an active response by the Defence Medical Services, including distribution of a Patient Safety Notice and institution of a Strongyloides Working Group.

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**27 Lessons Learned from COVID Outbreaks in Prisons in the North East of England, 2020**

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**Abstract**

**Introduction:** The UK criminal justice system faced unprecedented challenges during the COVID-19 pandemic, with vulnerable prison residents at risk of infection and outbreaks causing considerable pressures. We assess the impact of COVID-19 outbreaks in North East England’s prisons during 2020, to inform future outbreak control.

**Methods:** Descriptive epidemiology was performed using standardised data collected on all regional prisons (n = 7) during 2020. Cases were defined as staff or residents positive for SARS-CoV-2 by PCR. Qualitative data from written questionnaires and semi-structured interviews of Outbreak Control Team (OCT) members and OCT minutes were coded by themes.

**Results:** Fourteen outbreaks from seven prisons occurred in 2020 (median size: 44 cases, IQR: 16.5-188; median duration: 94 days, IQR: 64-102 days), with 1862 cases reported (59.6% residents (median attack rate 2.9%, IQR 0.5-14.8%) and 40.4% staff (median attack rate 6.3%, IQR 2.9-21.5%)). Data from 34 questionnaires (45.9% response rate), 12 semi-structured interviews and 107 OCT minutes were analysed. Ongoing transmission was influenced by movement within the system, lack of social distancing and symptom concealment. Prison type and layout influenced the success of control measures. The impact on wellbeing of regime restrictions was a substantial challenge, although reductions in violence and self-harm were reported. Prison staff felt well supported during outbreaks and strong cross-sector relationships were key to the success of OCTs.

**Conclusions:** The prison environment, resident characteristics and pressures within the wider system presented unique challenges for controlling transmission. Learning identified from these outbreaks can be used to minimise the impact of future outbreaks in prisons.

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**28 Experiences of using Paxlovid to treat clinically extremely vulnerable non-hospitalised patients with COVID-19**

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