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.

might trigger IBS.[5] Emotional state and stressful events might be related to health-care seeking behaviour in IBS.[6,7]

While anxiety and depression are important in all chronic diseases, including IBS and IBD, this is not an immediate consideration in assessing a patient for a probable new diagnosis of IBD (unlike established IBD). Symptoms of IBS often begin during times of emotional stress.[8] We did not propose to evaluate emotional state alone, but also faecal calprotectin, blood test, and clinical symptoms, to decide who should undergo colonoscopy.

Ruling out a diagnosis for the purpose of prioritising colonoscopy is not the same as establishing a diagnosis.[9] The term "probable IBS" was included as a triaging decision during this period and eventually the patient will be reviewed in clinic to establish a positive diagnosis and recommend a management plan upon resumption of near-normal service. At this stage we are in full agreement with the comments made by Ruddy and colleagues. Our algorithm does not attribute any pathogenetic interpretation of the emotional state.

We declare no competing interests.

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See Online for appendix

COVID-19 in liver transplant recipients: preliminary data from the ELITA/ELTR registry

Whether liver transplant recipients are at a particularly high risk for critical COVID-19 needs clarification. To date, data are scarce[1–4] and results conflicting.

On March 30, 2020, the European Liver and Intestine Transplantation Association (ELITA) sent out a call to establish a COVID-19 registry for liver transplant recipients to 149 liver transplant centres affiliated to the European Liver Transplant Registry (ELTR) located in 30 European countries. 114 (77%) centres responded to the call, with 56 (49%) of these having observed cases of COVID-19 in their liver transplant recipients. We report data from the first 103 COVID-19 cases observed between March 1, and April 24, 2020, mainly from centres located in specific areas of Italy, Spain, and France. The cutoff for follow-up for this analysis was April 24, 2020. Eight patients have also been included in the COVID-Hep registry but were not among the cases reported by Webb and colleagues.[3]

76 (74%) recipients were male and 27 (26%) were female. The median age was age 65 years (range 11–82). Around half of patients had hypertension and two-fifths had diabetes (appendix). 13 (13%) patients had a history of tobacco smoking. 86 (85%) of 101 patients with available data were receiving tacrolimus as their primary immunosuppressant. Severe acute respiratory syndrome coronavirus 2 infection was confirmed by RT-PCR of respiratory swabs in 100 (97%) of 103 cases. The most common presenting symptoms were fever, cough, and shortness of breath (appendix). 20 (19%) patients without clinically significant respiratory symptoms were monitored at home, 68 (66%) were admitted to a general ward, and 15 (15%) were admitted to intensive care units. 64 (62%) hospitalised patients had radiological findings that were consistent with viral pneumonia. 68 (66%) patients required respiratory support, including oxygen supplementation (40 [59%] patients), non-invasive ventilation (15 [22%] patients), and mechanical ventilation (ten [15%] patients). The most frequent treatments for COVID-19 are reported in the appendix.

At a median follow-up of 18 days (range 1–121), 16 (16%) liver transplant recipients, including four (44%) of the nine patients on mechanical ventilation, had died. Mortality was observed only in patients aged 60 years or older (16 [22%, 95% CI 13–33] of 73 patients *vs* none [0%, 0–13] of 27 patients younger than 60 years), and was more common in male recipients than in female recipients (appendix). Although not statistically significant, more patients who were transplanted at least 2 years previously died than did those who received their transplant within the past 2 years (15 [18%, 95% CI 11–28] of 82 patients *vs* one [5%, 0–24] of 21 patients; appendix).

The results from the ELITA/ELTR COVID-19 registry suggest that mortality in liver transplant recipients might be higher in older recipients than in younger patients and could be worse in patients with longer

time since transplantation. Further research is needed to determine whether immunosuppression and immunosuppression-associated co-morbidities might play a role.

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Resuming liver transplantation amid the COVID-19 pandemic

The COVID-19 pandemic brought transplantation to a global standstill. Since February, 2020, healthcare providers implemented a radical and focused response to the pandemic, prioritising organisational readiness and resource re-allocation to meet the anticipated influx of patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Many services, including solid organ transplantation, were suspended as intensive care units (ICU) and anaesthetic resources were re-allocated.

The COVID-19 pandemic has altered the risk–benefit equation around liver transplantation, since the risk of infection in the perioperative period and consequences in an immunosuppressed recipient are of concern.[1] Major surgery reduces systemic immune competence and immediate postoperative ICU requirements carry a risk of nosocomial SARS-CoV-2 infection. A substantial rise in perioperative morbidity and mortality in patients infected with SARS-CoV-2 undergoing surgery has been reported.[2] Moreover, the need for immunosuppressive medications has been associated with increased severity of infection and death during previous coronavirus outbreaks.[3] The risk and implications of SARS-CoV-2 infection in liver transplant recipients is not yet clear.[4] Additionally, occult donor SARS-CoV-2 infection and transmission to the recipient via the graft is unquantified.

The Birmingham Liver Unit (Birmingham, UK) has one of the largest deceased-donor liver transplantation programmes in Europe, with 230 adult and 25–30 paediatric transplants per annum (average 4–5 transplants per week). At the peak of the pandemic, the West Midlands region, where our unit is based, was one of the worst affected regions in the UK, with 15632 (265 per 100000 population) confirmed cases by mid-May, 2020. Rapid community spread of SARS-CoV-2 meant demand for mechanical ventilation exceeded pre-pandemic supply.[5] Our institution re-allocated staff and mechanical ventilators to accommodate for around 150 ventilated patients with SARS-CoV-2 pneumonia, an increase of 200%. All liver transplant activity (except for extremely urgent cases) was temporarily suspended on March 27, 2020, because of a surge in hospital admissions, ICU bed shortage, and organ procurement restrictions implemented by the organ donation authority.[6] Emergency surgery was continued, with an individualised risk assessment approach. At the peak of the pandemic, the ICU had 97 patients within four dedicated SARS-CoV-2 units and 25 additional patients without SARS-CoV-2 in a COVID-19-free clean ICU. 204 patients with suspected or proven SARS-CoV-2 infection were treated in ICU between March 11 and May 13, 2020.

On April 6, 2020, following a detailed assessment of ICU and theatre resources, liver transplant activity was resumed in steps (appendix). A SARS-CoV-2-free pathway was established, including a physically separate clean ICU and hospital ward (step 1). To prevent SARS-CoV-2 infection, all wait-listed patients were instructed to strictly self-isolate (step 2). A rapid protocol for SARS-CoV-2 screening began as soon as an organ was available; the chosen recipient was screened via telephone for symptoms of COVID-19 and adequacy of self-isolation. On arrival at hospital, both nasopharyngeal SARS-CoV-2 RNA RT-PCR and screening

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