SARS-CoV-2 screening for asymptomatic health care workers in UK stem cell transplant units

Following the onset of the COVID-19 pandemic in early 2020, a range of risk factors have been identified underpinning the severity of infection observed in some patients following SARS-CoV-2 infection.[1] These include obesity, advancing age, co-morbidities such as diabetes, hypertension and cardiovascular disease and more recent publications have also reported a significantly increased mortality in patients with underlying haematological malignancy.[2] A greater risk may be anticipated in stem cell transplant recipients due to significant additional treatment-related immunosuppression although the magnitude of the additional risk from the transplant procedure *versus* that from the underlying diagnosis and patient-related factors is uncertain.[3] A recent prospective study of the outcome for 272 HSCT recipients that tested positive for SARS-CoV-2 in European transplant centres reported a mortality rate of 30% and 25·3% for allogeneic and autologous HSCT recipients respectively,[4] emphasising the high mortality risk to HSCT recipients from this virus. A number of international guidelines have been published detailing steps to reduce the risk of viral transmission in this group including delay or deferral of non-essential procedures, screening patients and donors for infection before transplantation and during admission, the use of personal protective equipment (PPE) and distancing during hospitalisation and follow-up.[5,6] Current UK guidance also recommends routinely testing asymptomatic staff,[7,8] although the extent to which this has been undertaken or is feasible in UK stem cell transplant centres is not known.

Data were collected from 42 out of 53 stem cell transplant centres in the UK and Ireland in September 2020 regarding current testing practice and the results are summarised in Table I. 57% of centres (24 of 42) are routinely testing asymptomatic staff with higher rates reported in those undertaking allogeneic transplantation compared to autologous-only centres or paediatric units (69% vs. 54% vs. 16% respectively). Among the centres performing routine testing, 83% employed weekly polymerase chain reaction (PCR) testing of nose and/or throat swabs. Testing was voluntary in most centres and focussed predominantly on patient-facing ward staff although practice between units varied considerably ranging from only sampling a limited number of staff, to routinely testing of all staff working in clinical areas. Of the centres that are not testing asymptomatic health care workers, a number of barriers to implementation were reported including staff compliance, logistics issues around monitoring of results due to workforce mobility around the hospital, local/regional testing strategies, laboratory capacity and a low rate of positive test results. The reasons for the lower rate of testing in autologous transplant units and paediatric centres may reflect a perceived lower risk in these patients compared to allogeneic transplant recipients.

The full impact of COVID-19 on stem cell transplantation is unknown although based on data collected by the British Society of Bone Marrow Transplantation and Cellular Therapy (BSBMTCT) registry, activity in UK centres declined

Table I. Implementation of SARS-CoV-2 testing in UK Stem Cell Transplant Units.

	Number of centres providing data	Routine testing	Testing start date	Testing frequency
Adult and paediatric centres — allogeneic and autologous	23/26	16/23	April 2020 - 2/16 May 2020 - 2/16 June 2020 - 5/16 July 2020 - 4/16 August 2020 - 2/16 Not given - 1/16	Weekly PCR — 14/16 Two-weekly PCR — 1/16 Within trial only — 1/16
Adult centres — autologous only	13/19	7/13	May 2020 - 2/7 June 2020 - 4/7 July 2020 - 1/7	Weekly PCR — 5/7 1–2-weekly PCR (risk-adjusted*) — 1/7 Antibody testing — 1/7
Paediatric centres — allogeneic and autologous	6/8	1/6	June 2020 (two centres due to start September 2020)	Weekly PCR — 1/1

*Patient-facing weekly; non-patient-facing two-weekly.

significantly during the initial part of the pandemic and has yet to recover to the pre-COVID-19 levels. Maintaining capacity to treat patients with high-risk haematological malignancies is essential requiring adherence to guidelines designed to reduce the spread of infection and create a safe environment for treating a vulnerable patient population. The utility of staff screening is uncertain and is currently being studied prospectively as part of the SIREN study which aims to assess the incidence of COVID-19 in healthcare workers and to determine the extent to which anti-SARS-Cov-2 antibodies provide protective immunity.[9] However, until such time as the results of this and other trials are available, screening asymptomatic healthcare workers in transplant units represents a potentially effective means to reduce the risk of viral transmission between patients and staff.[10] The results of this survey highlight significant inconsistency in testing strategies employed between UK transplant centres and a number of barriers to implementation were identified including capacity and local policies which could be overcome with adherence to national and international guidance and prioritisation of test availability in this patient group.

Author contributions

AJCB designed the study and wrote the manuscript, all authors contributed to data collection and analysis and reviewed the final manuscript.

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Outcomes and management of patients with mantle cell lymphoma after progression on brexucabtagene autoleucel therapy

Development of anti-CD19 chimeric antigen receptor T cells (CAR-T) therapies, such as brexucabtagene autoleucel (BA), is a major advance in the management of patients with relapsed refractory mantle cell lymphoma (MCL). BA is now approved by the United States Food and Drug Administration (FDA) for treating these patients. BA demonstrated an impressive 93% response rate in patients with highly refractory MCL.[1] As the management and characteristics of patients with MCL after progression on BA are unknown, we describe the outcome and management of six