NHS
Blood and Transplant

6 April 2020

COVID-19 and information for hospital transfusion laboratories - 6.4.20

This is the 2nd of two resources prepared by the NBTC's lab managers' group with input from TP and NHSBT colleagues. This information is for guidance only and local factors influencing practice need to be taken into account.

We have also provided a document on tips to help support with important inventory decisions provided by Matthew Bend, Blood Stock Management Scheme Manager.

Frequently Asked Questions

1) My staff are concerned about processing Kleihauer samples on COVID-19 positive samples

As with previous guidance you should have a risk assessment in place. The process of making a blood film for Kleihauer testing may require the use of a microbiological safety cabinet (MSC). Once fixed in alcohol, the risk from the virus will be negligible.

2) Can a blood component be returned from a clinical area to the transfusion laboratory?

1. Blood components should only go to the clinical area and the patient bedside when the transfusion is ready to begin
2. If a unit of blood has been out of controlled storage for more than the locally agreed time, the transfusion laboratory should be contacted if the transfusion is no longer required
3. Patients who are COVID-19 positive and are in closed off areas for infection control purposes:
    a. Blood components can be returned safely from clinical areas who have COVID-19 infected patients with no special precautions. Please discuss with local infection control teams to confirm policies. There is no evidence that SARS-CoV-2 can permeate the blood bag
    b. Blood component use for confirmed COVID-19 patients who are acutely unwell is generally low, except those receiving ECMO, who also have a greater need for platelets/plasma. Consider the need to reduce stock in remote fridges in these areas
4. Patients in usual hospital conditions i.e. not in isolation - please follow local guidance about personal protection

3) We've been asked to allow sample labelling away from the patient's bedside in areas treating COVID-19 positive patients. What should we do?
It is important that standard protocols for sample labelling remain in place when treating patients with COVID-19. As such it is remains important that samples continue to be labelled correctly using positive patient identification at the patient's bedside.

4) We use a tag and label system for traceability and the laboratory staff are concerned about handling tags from COVID-19 'hot' areas.
The COVID-19 virus may persist on surfaces for 24-72 hours. As such you should seek advice from local infection control on the safe handling of blood transfusion traceability tags which may be contaminated. Options such as the scanning and electronic transfer of the tags, or viral inactivation using exposure to UV light have been implemented in some hospitals.

5) We are concerned about ensuring traceability of blood products in areas treating COVID-19 positive patients
It is recognised that it is not possible for transfusion staff to enter 'hot' clinical areas without appropriate PPE, as such it may be necessary to have a change in procedures to handle these units so that the fate can be confirmed at a later time.

6) It is difficult to access the fridge for routine maintenance as it is in a COVID-19 'hot' area
Consider whether the fridge can be moved. If this is not possible risk assess reducing the frequency of visits, particularly where strong remote monitoring services are in place. Ensure any staff attending the fridge are fitted with appropriate PPE and are trained for donning and doffing (this may need to be arranged through clinical teams)**.**

7) The fridge in ITU has just failed – what should I do?
As long as the red cell units were removed in line with usual cold chain restraints and in line with local infection control then these units will remain suitable for re-use.

You may not be able to have an engineer visit the fridge in a 'hot' clinical area and as such it may be necessary to either move the fridge to allow an engineer visit (with appropriate precautions/advice from the infection control team) or take the fridge out of service until such time as it is possible for an engineer to attend.

8) I'm worried that we seem to be wasting a lot of red cells
With the cancellation of routine elective surgery in NHS hospitals, a lot of laboratories are seeing a reduction in demand although this may fluctuate depending on critical care requirements. A regular review of ongoing requirements and adjustment of red cell stock is recommended during this time. This should be done in conjunction with information provided by your trust with regards ongoing and planned theatre and haematology activity, and expansion of other clinical areas. An initial increase in red cell wastage is likely but this should reduce once stock levels are brought into line with new requirement levels.

You may also want to consider shutting 1 or more satellite fridges if they are in areas which have been clinically re-assigned and no longer require frequent or emergency red cell units. This may also allow you to reduce the number of O D negative units in remote fridges as

emergency stock. If you are changing the location and numbers of O D negative units, this needs to be communicated to clinical teams.

9) Should I be continuing to support my local private laboratory?
Many private laboratories are now supporting urgent NHS surgery. Good communication is essential between the laboratories to ensure all clinical needs are supported as needed. If you are considering withdrawing transfusion support it is critical that there is discussion with the relevant laboratory, clinical and management teams prior to a change being made.

10) Clinical areas are asking for advice on changing protocols to limit outpatient encounters
In current circumstances using protocols and tools which encourage social distancing is essential, for example extending the validity of G&S samples. Any changes to protocols, should be considered by the Hospital Transfusion Team and discussed with the involved clinical team. Not all proposed changes will be acceptable but the use of risk assessments and change control will ensure changes are safe and also recorded correctly.

Obstetric & Midwifery colleagues may wish to minimise the number of visits for anti-D quantitation during the current Covid-19 pandemic

If anti-D <0.2 IU/ml, to avoid unnecessary repeat visits for quantitation, we would advise:

1. Make all efforts to establish whether the patient has received anti-D in the last 12 weeks; if so, continue to give anti-D prophylaxis as normally indicated. then:

a) was there a negative antibody screen immediately before the 1st dose of anti-D was given? If so - the anti-D detected in this sample is due to prophylactic anti-D injections and no repeat testing is required.

b) If not, then could be immune - suggest reduced frequency of monitoring to 4 weekly if >28 weeks' gestation and 6 weekly if <28 weeks' gestation.

2. If cannot establish whether patient has had anti-D, monitor as above - and continue to give anti-D prophylaxis as normally indicated.

Prepared by Julie Staves and Kerry Dowling on behalf of the NBTC Transfusion Laboratory Manager working group. 6th April 2020

(Acknowledgements: Mark Williams, Fiona Regan, Louise Sherliker, Matthew Bend, Samantha Conran, Suzy Morton, Andy Charlton, Shubha Allard)